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"Cuando yo me reajusté…": Vulnerability to Poverty in a Context of Regional Economic Restructuring in Urban Mexico. Three Case Studies.

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by

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Dedication

A mi madre

Concepción García

porque eres el mejor ejemplo de fortaleza, cariño y valentía que he tenido.

A mis hermanas y hermanos

Sivi, Elsa, Mary, Paty, Godo, Fego, Conchis y Javi

porque ustedes son los compañeros de toda la vida más solidarios y amorosos que pude tener.

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"Cuando yo me reajusté…": Vulnerability to Poverty in a Context of Regional Economic Restructuring in Urban Mexico. Three Case Studies.

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In this dissertation I focus on vulnerability to poverty in Mexico, defined in terms of the factors that put households and their members at risk of living in poverty. To explore the impact of macroeconomic change on the household economy, my dissertation examines the interplay of three different levels of analysis: 1) changes in the national labor market derived from Mexico's participation in the global economy and economic restructuring that begun during the 1980s; 2) local impacts of such transformations on both the industrial structure and characteristics of the labor force in a comparative perspective, with focus on three urban economies: Monclova, Coahuila, Aguascalientes in the state of Aguascalientes, and Mexico City; 3) the household level, in which the combined

effect of the context and the available resources will determine its possibilities to avoid poverty.

I develop a methodological strategy, which combines quantitative and qualitative analysis. The former has two main components: a cross-sectional approach in which I construct logistic regression models to measure the effect household assets on the likelihood of living in poverty. Additionally, a longitudinal dimension is assessed on panel information through growth-curve models that disentangle the effect of such factors over the gap between the household income and the poverty threshold. The quantitative analysis is complemented by an ethnographic approximation that I carried out in the cities of Monclova and Aguascalientes. In-depth interviews concentrating on the life history of male manual workers and their spouses are the means to grasp the intra-household burden and how the family has faced economic shocks during the last decades in those cities.

I assessed urban poverty based on labor income. Household vulnerability to poverty can be caused by three main sets of factors: the economic dependency ratio; external, macroeconomic changes; or a combination of both. The latter condition is more prevalent. I found that workforce and education are the two core resources that households have to protect from the risk of living in poverty. The other household assets –housing and social networks- have a protective nature for families and allow them to mobilize core resources. For poorer households, the relative dynamism of the local labor market does not make a difference since they face a situation of increasing and continuing disadvantage.

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Chapter 1: Introduction

This research focuses on social vulnerability in Mexico, defined in terms of the factors that put households and their members at risk of becoming poor. The study of poverty in Mexico and Latin America dates from at least the 1960s. Thus the topic on which I am going to focus in this research is not a new one. However, poverty remains an important issue in Mexico that requires a fresh analysis because of the changes in the factors that generate poverty.

1.1 The Changing Nature of Social Vulnerability in Urban Mexico

The notion of social vulnerability implies not a fixed state but a process (Moser 1998). Thus, I will focus on the mechanisms that lead households to live in poverty, that is, the factors that create the risk of falling below the poverty line. Since it is not a static situation, social vulnerability implies that there are, as well, protective factors that will prevent poverty.

The Mexican economic context of recent decades differs considerably from that of the mid-Twentieth Century. Since the 1980s, Mexico's increasing involvement in the international economy has meant changes in the industrial structure, in labor relations, and in the nature and extent of State intervention in society and economy. In this research I will explore the impact of macroeconomic change on the household economy. To that end, my dissertation examines the interplay of three different levels of analysis: 1) the changes in the national labor market resulting from Mexico's participation in the global economy and the

economic restructuring that begun during the 1980s; 2) the local impacts of the economic transformations on both the industrial structure and on the characteristics of the labor force, using a comparative perspective which focuses on three contrasting urban economies: Mexico City, Monclova in the state of Coahuila and Aguascalientes in the state of Aguascalientes; 3) the household level, concentrating on the life history of male manual workers and their spouses in order to grasp the intra-household challenges and how the family has faced economic instability during the last decades, focusing on Monclova and Aguascalientes.

These levels of analysis involve intertwined relationships that intervene in the generation and persistence of poverty. In the subsequent chapters I will try to uncover how these relationships work.

1.2 SIGNIFICANCE AND OBJECTIVES OF THE STUDY

With this research I primarily aim to contribute to the understanding of the causes of urban poverty in the context of economic restructuring in Mexico, as well as of the role played by agency in coping with household poverty. I will assess the risk of facing poverty and the margin left for households in coping with poverty in different urban contexts in Mexico.

As has been pointed out (Rodgers 1978; Griffin and Khan 1978; Merrick 2001), the explanation of poverty requires comprehensive models that embrace the importance of the macro, meso, and individual levels. While I recognize the

need for complex models to account for poverty, my own contribution focuses on the meso level -- the role played by households.

The precedent for this research has been a series of studies carried out in Mexico on poverty and on household dynamics. The latter has shed light on the economic importance of the household as the unit of analysis in studies of poverty. The household is the locus of production and reproduction of the workforce, and defines not only the volume but the "quality" of the labor supply. In this area of research there have also been important contributions to the understanding of the strategies followed by households in coping with poverty. One of the most important features of the domestic unit is that of mediator between the macro structure and individuals (García, Muñoz, and Oliveira 1982; Selby, Murphy, and Lorenzen 1990; Roberts 1991a; González de la Rocha 1994 and 2000).

The recent literature about poverty in Mexico has mainly described trends, focusing on the definition and assessment of poverty rather than with its causes. There has been an endless debate on the definition of the basic consumption basket, on the selection of the reference groups to assess the cost of the basket, on the adequacy of methods (e.g. poverty line, basic needs, or another) to estimate poverty; as well as on the accuracy of the sources of information (see for instance Escobar 1996; Boltvinik 1999; and Hernández Laos 2000). However, the mechanisms that determine the generation and persistence of poverty as well as the consequences of poverty for people's life chances have not been analyzed thoroughly.

In this research I will address the following specific questions: First, what is the role played by the household as mediator between the macro structure and the individual in urban Mexico during economic restructuring? The increasing Mexican participation in the international economy has brought some changes in productive organization and in institutions. The shift towards an export-oriented economy in Mexico started during the 1980s with strong government policies supporting the leading industrial sectors, the privatization of state-owned enterprises, the drastic reduction of social expenditures –the so-called "withdrawal of the State- and the promotion of the free-market practices (Roberts 1991b). This redefinition of labor demand and of the participation of the State have meant that households are more exposed to market forces and hence less protected by policies that counterbalance the deficiency of their own resources (Roberts 1991a). Thus I will address how households have managed to adapt to these new external circumstances.

Second, what types of resources do households possess and how does each of these intervene in the prevention of social vulnerability? The point of departure in this research is that agency matters. That is, poor households and those vulnerable to poverty are by no means composed of passive individuals. They hold tangible and non-material resources that they utilize to "adjust" themselves to external pressures (González de la Rocha 2000). Moser (1998) suggested the diversity of these resources: labor, human capital, housing, social networks and household relationships. I will assess the interplay between internal household dynamics and structural pressures, whose outcome is the particular way in which

resources are utilized. I will explore the availability of these resources. To what extent can households mobilize them as needed or desired? What is the timing for using available resources? And what are the possible consequences of mobilizing specific resources? I will argue that not all resources are equally important in preventing poverty.

Third, what is the meaning of vulnerability to poverty in contrasting urban contexts in Mexico? I aim to address whether location makes a difference to the risk of facing poverty and to the feasibility of using household resources in three urban areas: Mexico City, Monclova, and Aguascalientes. They were chosen due to their dissimilarities in their historical trajectories and in their current industrial structures. They have played different roles during the implementation of the two main models of industrialization: the import substituting and export-oriented models.

1.3 DATA AND METHODS

In order to approach the research questions stated above, I develop a methodological strategy that combines quantitative and qualitative analysis. Behind the combination of both methodologies is the recognition of the complexity of assessing the changing factors that create vulnerability to poverty. Each methodology pursues different and complementary objectives. That is, by using representative data sets I seek to gauge the trends of poverty in the three urban areas, as well as to assess the specific impact of socio-economic variables in both cross-sectional and longitudinal analyses. On the other hand, the

qualitative approach, based on in-depth interviews with working-class couples, allows me to assess household trajectories, couples' interpretations regarding the economic difficulties faced by their households and the way in which they have handled those situations. Since both sources of information (representative surveys and ethnographic data) have inherent limitations in providing evidence on the diverse dimensions of the phenomena under study, the main goal in combining them has been to enrich the analysis of social vulnerability.

1.3.1 The Quantitative Analysis

Though I also utilize population censuses, my quantitative analysis mostly relies on the Mexican National Urban Employment Survey (Encuesta Nacional de Empleo Urbano-ENEU), carried out quarterly since 1987. This core data source is conducted by the national census bureau (National Institute of Geography, Statistics, and Informatics – INEGI in Spanish) and provides a valuable perspective on the employment changes in Mexican urban areas during the last 15 years. The ENEU is carried out following a multistage and stratified sample design. It includes information regarding the demographic, economic, and social characteristics of the non-institutionalized population. The ENEU collects information on all members of the selected household, though the target interviewees regarding employment issues are those individuals aged 12 years old and above (INEGI 1998). In relation to employment, the ENEU offers a broad survey: the level of employment, unemployment, and underemployment; occupations, sectoral division, and income; conditions of employment, fringe

benefits, and working hours. Although ENEU began in 1987, I was only able to utilize it from 1993 onwards. The reason is that initially the survey included the 16 most important cities in the country, which included neither Aguascalientes nor Monclova. Nonetheless, the information starting in 1993 is sufficient to grasp the different dimensions of poverty and vulnerability to poverty during the 1990s.

The Assessment of Poverty. Chapter 3 and the Appendix point out that due to the lack of an official definition of the poverty threshold and the disagreement of scholars with government estimates, there is considerable variation in assessments (see in the Appendix section A.1.1). The poverty line utilized in this research needs two nuances. First, regarding the source of information. I do not utilize the source of information typically used in Mexico to measure poverty, the Household Income and Expenditure Survey (ENIGH in Spanish), because it is not representative at the level of urban areas and I am focusing on three specific cities. Also, given the centrality of employment in the determination of the well-being of most of the Mexican urban population, I relied on the ENEU because it thoroughly surveys labor market issues. The second "warning" is in relation to the "level" of the poverty line that I have constructed. The ENEU does not provide information about other sources of income but employment. Thus the poverty threshold is based on the labor income of household members. Additionally I took as reference a poverty line assessed by INEGI-CEPAL in 1992, which has been criticized because of its low level –i.e. an individual would need a higher income level to really avoid poverty.[1] I adjusted that "official" assessment by the

[1] See Boltvinik 1999 and Appendix (section A.1.1)

demographic structure of the household. The outcome has been a conservative estimation of poverty. Despite this moderate poverty threshold, I still show very high levels of poverty in urban areas (see Chapters 3 and 4).[2]

The Cross-sectional Analysis. One of its components is the descriptive survey of household resources, emphasizing labor availability in poor and non-poor households. The other component is a series of logistic regression models through which I assess the effect of a range of socio-economic and demographic variables on the probability that a household is poor.

The Longitudinal Analysis. The ENEU allows the researcher to construct five-wave panel data sets. This survey is carried out quarterly. Every quarter one fifth of the sample is replaced, so that the new selected cases plus the remaining 80% constitute five independent panels. Each household is followed up during five consecutive quarters, which allows the researcher to construct longitudinal data sets of one year. Using longitudinal information I construct growth-curve models.

In the descriptive survey the three case studies –Mexico City, Monclova, and Aguascalientes- are treated separately. In the series of logistic regression and growth-curve models the city is included as another variable.

[2] I will discuss the advantages and disadvantages of this measure in the conclusions of the dissertation.

1.3.2 The Qualitative Approach

Though large representative data sets are essential to obtain estimates of the broader picture, they have inherent limitations to grasp other relevant dimensions, for instance, the perceptions of actors. Recognizing that quantitative and qualitative information are not substitutes of each other, but complementary, I decided to combine both types of techniques in this research.

The aim of my ethnographic approach was to gather information on the social vulnerability that workers and their families experience on a daily basis. Due to time and financial constraints, I selected only two cities to carry out fieldwork. Preliminary quantitative analyses (Roberts and Saraví 1999; Rojas-García 2002) suggested that Mexico City, Aguascalientes, and Monclova were contrasting cases in the current industrial mosaic of urban Mexico. Since Mexico City has been much more frequently studied[3], I decided to carry out fieldwork in the cities of Monclova and Aguascalientes. Both Aguascalientes and Monclova are medium-size cities that specialize in manufacturing. Although the preliminary information was very suggestive about the differences between the two selected cities –mainly regarding the industrial structure-, only by staying *in situ* was I able to grasp the economic and cultural contrasts represented by Monclova in the Mexican northern state of Coahuila and Aguascalientes at the Bajío region. Each city is a prototypical case of the industrialization model of different epochs in Mexico, as Chapter 3 will show.

[3] Mexico City is a case that has been more frequently studied from both the quantitative and qualitative perspectives (see for instance García, Muñoz, and Oliveira; 1982; Benería and Roldán 1987; Selby, Murphy, and Lorenzen 1990; Cerrutti, 1997; Schteingart 1999; Lindón 1999; Garza 2000).

I carried out the fieldwork during June-October of 2000. Two months were devoted to each case. Since Aguascalientes is the capital city of the state, I was able to combine an archival search with the interviews, but in the case of Monclova, I spent two weeks in Saltillo, the capital city of Coahuila state to gather documents about Monclova.

The qualitative component of this research relies on 40 in-depth interviews (20 couples) carried out in each city.[4] My strategy consisted in interviewing both the "female head" – the adult female responsible for organizing the household- and the "male head" to be able to reconstruct the family history from both male and female perspectives and thus better understand household dynamics.[5] The interviews focused on the interplay of four trajectories –family, labor, education, and migration- in order to grasp the household rearrangements that have had to be made during the household cycle, and the way assets have been utilized in order to handle economic difficulties. I conducted and tape-recorded all the interviews.

In order to gather the female's and male's interpretations of the household economy and of the importance of employment, I focused on complete domestic units –namely, those with both female and male "heads".[6] The domestic units that

[4] I actually interviewed 24 couples in each city, but due to diverse reasons (i.e. technical failures at the time of recording; one member of the couple accepted to participate in the study and was interviewed, but the other person did not accept, and so on), some interviews were nullified and the final number was rounded up to 20 couples in Aguascalientes and 20 more in Monclova. In Chapter 8, I will provide a table (Table 8.1) with characteristics of each couple that summarize the universe of cases that I will be working with.

[5] My plan was to interview the couple separately, so they would not influence each other's answers. However, this was not possible in all cases. Nonetheless, a joint interview also revealed some interesting aspects of the household's functioning.

[6] Thus I fail to give account of the dynamics of other types of households such as single-parent households and "emergent" living arrangements –i.e. single-person, not family-related, or couple-alone units (since all the couples interviewed have children).

I surveyed are either nuclear or extended families (see Table 8.1). Another characteristic common to my interviewees is that all are members of working-class households. They correspond to the profile depicted by Selby, Murphy, and Lorenzen (1990): they are not part of the upper or middle class, and all work for a living (either as wage-workers or self-employed). They are, in sum, "ordinary" people. Therefore the selection of cases was guided by two basic criteria: the household structure (complete) and the head's occupation (working-class, excluding bureaucrats and professionals).[7] Additionally, I tried to diversify the age of the couples within a range of 20 years of age to 60 years to capture different experiences according to the stage in their family life cycle.[8]

Though the sample technique that was utilized in Aguascalientes and Monclova was the snowball, the procedure to approach my potential interviewees was different in both cities. In Monclova I was able to rely on a facilitator who was very helpful in contacting prospective participants, because of her knowledge of the community. There I concentrated only on two neighborhoods, which contrasted in the way they were founded and in the type of official support that they received for obtaining housing. They also contrasted in types of employment

[7] Though it might be argued that not all working-class households are poor –- and they are not -- and in consequence the selection of my cases was too heterogeneous, the preliminary quantitative analysis (developed before carrying out the fieldwork) suggested an association between manual occupational classes and the risk of poverty. On the other hand, what led me to make these decisions about the criteria for selecting my potential interviewees was the difficulty of assessing household poverty before approaching it. With the information my interviewees provided about their economic situation I have been able to classify them based on their "relative deprivation level", as will be shown in Chapter 8.

[8] The mean age of my interviewees in Monclova was 41.8 years and 34.2 years for those in Aguascalientes (see Table 8.1). Although some of the interviewees were in the dispersion phase, most were either at the expansion or consolidation stages of the family life cycle.

with one neighborhood mostly occupied by current or ex AHMSA[9] workers; and the other founded by squatters, who were mostly not AHMSA-related workers. In general, it was more difficult to carry out the fieldwork in Aguascalientes than in Monclova. Though I tried, I could not get the support of a facilitator for the whole period I needed, so I had to rely on different facilitators and different ways of identifying my would-be interviewees. I resorted to a direct search, to neighborhood organizations, to contacts through the state University, and to a union leader.[10] It took longer to start my interviews and I had to interview in several neighborhoods due to the greater difficulty in finding potential interviewees. Despite that, in both cities I was able to diversify my sample, as I show in Table 8.1.

Once I had introduced myself, explained the reason and objectives of my research and the potential interviewee had accepted to participate in the study,[11] I applied the three instruments for gathering information that I include in the Appendix (section A.2). First I filled out the form A.2.1, about housing

[9] Altos Hornos de Mexico, S.A. (AHMSA) is the name of the main enterprise in the Monclova region. See Chapter 3.

[10] A "facilitator" during my fieldwork was a person who could connect me with the community where I would look for my potential interviewees. In Monclova my facilitator was the first woman I interviewed, who happened to know very well the neighborhood (*colonia*) where I started and willing to explore other neighborhoods. She showed her commitment in the search of potential interviewees by constantly asking: "how many more do *we* need?" In Aguascalientes I had several facilitators, not as committed as that lady in Monclova, but very helpful as well. The main task of my facilitators was to figure out who could be suitable participants (I explained to them the profile of the couples I was looking for) and make and initial contact. Therefore, most (not all since I also searched potential interviewees by myself) of those couples knew I would reach them. I introduced myself and thoroughly explained the objectives of the research. If they accepted to participate, I carried out the interview. I asked my facilitators not to be present at the moment of the interview to keep confidentiality.

[11] All the interviewees participated in the study without payment. I paid the facilitators in both cities, but not the interviewees.

characteristics, and then I asked the questions from form A.2.2 regarding household structure. I made sure that the last item of A.2.1 regarding the total number of members coincided with the names in the list of form A.2.2. This question proved to be very useful in avoiding omitting any of the household members. The next step was to follow the guide of my semi-structured in-depth interview (that I also present in the Appendix).

The life trajectory of each head of household and their family was reconstructed based on questions on the four trajectories: family, labor, education, and migration. Additionally, I inquired about their housing history and about any economic difficulties that they faced on a regular basis as well as crises. The questions were open-ended and adapted to individual circumstances. The duration of each interview varied according to each individual's trajectory (thus in some cases --more commonly women-- they did not have any work or migration experience and had only studied a few years, and consequently the interview was shorter), and to his or her "inspiration". Each interview (individual, not the couple's) varied from 30 minutes to two hours.

I had the interviews electronically transcribed. Then I coded them manually. That is, I did not rely on any ethnographic software to analyze the narratives. I constructed categories following the topics I had included in the interview guide and coded each interview accordingly. This method implied going back and forth in the text, but allowed me to recreate the categories, since the text suggested categories that I had not anticipated. Having constructed a "cognitive map" my unit of analysis in the text was diverse: words or short

phrases[12], fragments, or the summary of specific stories. I utilized several of the techniques suggested by Ryan and Bernard (2000).

1.4 STRUCTURE OF THE DISSERTATION

This dissertation is organized in three parts. In the first part, I seek to situate the study. It includes Chapter 2, in which I outline the theoretical framework that helps to explain the mechanisms that generate and perpetuate poverty. I discuss the notions of the absoluteness and relativity of poverty, as well as the meaning of vulnerability to poverty. I will argue that the macro structure, namely, the State, the market, and the society, but also the household characteristics (demographic structure, stage in the life cycle, and power relations) primarily intervene in the availability of household resources and in the possibility of mobilizing them. I emphasize the differential importance of each resource and the limited margin of action left for households.

Chapter 3 is devoted to the temporal and geographical location of the study. I will highlight the main changes brought with the switch of industrialization model in Mexico, from the import-substituting to the export-oriented economy. I will survey the impact of economic liberalization on the social sphere, particularly regarding social inequality and poverty. In relation to the latter, I explain the construction of the poverty line that is used in this and subsequent chapters and I will also outline the trends in urban poverty during the

[12] For instance, when several of my interviewees in Monclova said "when I got readjusted" (or redundant) (*cuando yo me reajusté*), which suggested a social phenomenon behind that phrase.

1990s in Mexico. To situate the geographical locations of this study, I explore the participation of the different regions and cities of Mexico in the new economic scenario, paying particular attention to the role played by the three case studies.

Part II contains the quantitative analysis of vulnerability to poverty. In Chapter 4, I seek to identify those demographic components that help explain the risk of living in poverty and its reproduction. I will explore the household attributes that are associated with poverty –the household demographic structure, the education of its members and the possession of other resources, such as housing. My analysis focuses on the underlying demographic factors that locate families in differential positions while facing economic instability and which, in the long term, create structural conditions that do not allow the least favored to overcome poverty. This is a cross-sectional and descriptive survey.

Chapter 5 has a similar cross-sectional and descriptive orientation, but is devoted to labor, the core resource of poor households since it constitutes the main means of obtaining income. My objective is to examine the extent to which the household has available labor. I also explore the ways in which labor market dynamics determine the way the workforce can be mobilized by the domestic unit and, consequently, whether these dynamics allow the household to overcome or prevent poverty. I will survey the mechanisms through which the labor market determines a household's vulnerability to poverty, for instance through the types of occupations, income, job stability, or social protection.

Chapter 6 is the analytical component of the quantitative account. It has two main elements: a cross-sectional and a longitudinal one. The former is based

on a series of logistic regression models, which seek to assess a household's likelihood of living in poverty. The models take into account the attributes that the descriptive chapters suggest as the most important. The effect of such attributes is calculated for three periods in the 1990s. By using panel information, the longitudinal analysis is based on growth-curve models. In this case the response variable is continuous representing the distance between a household's income and the poverty threshold. The aim is to estimate the changing exposure over time of a household relative to the poverty line. The effect of diverse household attributes in that changing position is also assessed.

Part III consists of two chapters that include qualitative information, based on the narratives of working-class couples. In Chapter 7, I focus on the internal household dynamics – i.e. gendered perceptions of domestic chores, employment, and allocation of income-- that influence the employment of the members depending on their position within the domestic unit. I will also explore the couple's perceptions with respect economically difficult periods. These moments are related to either macro economic changes or intra-household dynamics, or to a combination of both.

The couple's perception of critical moments and of internal household relationships is examined in order to better understand the way resources are mobilized and when they are mobilized. This is the topic of Chapter 8. Trying to complement the information presented in the quantitative analysis, I look for the actors' perspective on the resources that they have and on the most efficient way to utilize those resources in order to adapt to economic hardship. In this chapter I

will argue that even though working-class households have resources, the margin left for them to utilize these resources is a narrow one. In particular, I emphasize the trade-offs that they are forced to make in managing their assets. In this chapter, I will also examine the heterogeneity of poverty within the working-class by suggesting a categorization of relative deprivation according to their living conditions.

Finally, in Chapter 9, I present the conclusions of this dissertation, emphasizing the main findings, some policy implications and suggested paths for future research that derive from this study.

PART I. SITUATING THE STUDY: THE THEORETICAL DISCUSSION AND THE CONTEXT

Chapter 2: A Theoretical Outline for Social Vulnerability or the Threat of Poverty

A comprehensive explanation of poverty should take into account factors that intervene in its generation and persistence, at different levels: societal, the intermediate level of the household and the individual (Rodgers 1978; Griffin and Khan 1978; Merrick 2001). Previous attempts to capture the complexity of the problem of poverty will serve as the base for this discussion. Thus, the outline I will present in this chapter is not completely new. It is rather a summary or a scheme that joints elements in a different way than they have been used elsewhere.

The aim of this chapter is to delineate the theoretical background that frames the present study and links the mechanisms that generate and perpetuate poverty. Recognizing the need of complex models in order to more broadly account for poverty, I seek to contribute to the understanding of the *meso* level, the role played by households.

In this chapter I will argue that not only the macro (or institutional) level, namely, the State, the market, and the society, but also household characteristics (demographic structure, stage in the life cycle, and power relations) intervene in the availability of household resources and the possibility of mobilizing them. I will emphasize the differential importance of each resource and the limited

margin of action left for households. I will initiate the chapter by discussing the unit of analysis as well as the notions of the absoluteness and relativity of poverty, and the meaning of vulnerability to poverty. Later, I will examine factors that at the household and the macro levels intervene in the existence and reproduction of poverty.

2.1 VULNERABILITY TO POVERTY AND THE UNIT OF ANALYSIS

The unit of analysis in this study will be the household. The conventional definition used by demographers is: "…an arrangement made by persons, individually or in groups, for providing themselves with food or other essentials for living […] the persons may pool their incomes and have a common budget to a greater or lesser extent; they may be related or unrelated persons or a combination of both…" (Quoted by Marquette 1984: 4). The difference between household and family is widely recognized and important. A family is established on relations of blood or marriage and goes beyond residential boundaries. It is essentially a normative arrangement. In this study I will focus on households.[13] In essence, a household is a social and economic unit that functions upon "[a specific] division of labor and the administration of resources and incomes…" (González de la Rocha 1994: 5). Two of the main functions that a household

[13] From now on I will use both terms indistinctly, but I will refer to household properly speaking. The term most commonly used will be household. Mainly in the chapters of the qualitative analysis the family term will be used frequently because all the households interviewed were blood-related and the normative expectations of family members were an important part of the interviews. As I will show in Chapter 4, in Mexico most of the urban households rely on family relationships.

fulfills are the primary socialization of its members (and hence an ideal means for the maintenance of dominant ideologies regarding gender and authority roles); it is as well a locus for the production and reproduction of the workforce (González de la Rocha 1986; Oliveira and Salles 1989). Margulis (1989) argues that in the Mexican context, where households are increasingly left to the mercy of the market, "the reproduction of the workforce is a *prerequisite* for the reproduction of the domestic unit" (p. 191).

Though the study of poverty at the individual level may bring out aspects that are obscured by analyzing the household as a unit (Lloyd 1995), I will focus on the household as *a group.* The rationale is that since the household is the arena where the sharing of income takes place, it is based on a relationship between consumers and producers (Thorner [1966] (1986) in allusion to Chayanov's theory of the peasant economy). Hence, the distribution of total revenues among household members will define the level of well-being of individuals within the household.

Poverty and vulnerability to poverty need to be distinguished conceptually. Poverty is a condition of scarcity. The poor are "those people whose consumption standards fall short of the norms…" (Sen 1981: 9). The consumption standards are based on income, on specific needs to be met, or on a combination of both (Boltvinik 1992). The poverty threshold can be established quantitatively, but the problems in assessing poverty start when trying to establish what the standards are.

Runciman (1966) developed the idea of relative deprivation[14], by which a reference group is used to define a "degree" of scarcity. Runciman suggested that depending on their membership group individuals will feel that they have the right to specific goods. Thus, the feeling of deprivation will be more or less exacerbated depending on what goods individuals receive relative to what their relevant reference groups receive . Townsend (1974) retook the concept of relative deprivation aiming to establish an "objective" reference, since, from his perspective, relative derivation was not a feeling but a condition. He argued that necessities change through time and place, therefore the threshold has to be evaluated and modified accordingly. Townsend maintains that there are two main requirements that a threshold has to fulfill: to guarantee an acceptable minimum level of material wellbeing (e.g. food and shelter), and to allow the individual to meet social expectations (style of living). Participation in the society in "acceptable" conditions was behind Townsend's idea of relative deprivation.[15] Taking the notion of relative deprivation to the extreme, Fiegehen, Lansley, and Smith (1977), considered that since increasing prosperity is the characteristic of contemporary society, by moving the criteria for defining a poverty threshold (since it changes over time), the outcome was that "poverty is obviously more likely to persist, since there will always be certain sections of society that are badly off…" (Quoted by Sen (1983:156)).

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[14] According to Townsend (1974: 25), the term "relative deprivation" was introduced by Stouffer (1949) in *The American Soldier*.

[15] Townsend was influenced by Marshall (1950)'s concept of social citizenship, that is, the individual has the right of being able to live to the acceptable standards of his or her society. As well, Townsend's conception of social participation is close to that of "integration" found in recent discussions of social exclusion (see Rodgers 1995).

Sen (1983), also elaborated on the concept of relative deprivation, but criticizing the definitions of Fiegehen, Lansley, and Smith (1977). Sen (1983) argues that relative definitions of poverty mean that poverty has no solution since those who are "worse off" will always exist. Sen further argues that emphasizing the relativity of poverty gives a misleading impression of the effects of a severe recession. From the relative perspective, recession would not change the picture of poverty even when the recession created more misery since standards would have dropped and similar proportions would be relatively poor.

Sen (1983) partially agrees with Townsend by calling attention to the difference between the absoluteness of poverty and the context related fixity of needs. If the level of poverty is relative to the amount of goods needed in a given context, then absolute deprivation could be defined in terms of severe scarcity, as in the case of famines (Sen 1981). However, the main difference between Townsend's and Sen's argument goes in another direction. Sen (1983) maintains that poverty has both a relative and an absolute dimension. The former has to do with *commodities*; the latter is associated to *capabilities*. The *fulfillment of human capabilities* is the absolute dimension of poverty, that is, beyond the utility of possessing a specific commodity, what matters is that such commodity will allow the individual to develop her or his potential. From Sen (1985)'s capability approach then, it is not food (or the utility of the food assessed by the happiness-satisfaction after eating) that matters, but meeting nutritional requirements; the goal is not to get a book, but knowledge, and so on. Thus, "[there are] varying commodity requirements of meeting the same absolute need…" (Sen 1983: 162).

In that way, the range of commodities possessed or required to meet a need varies, but the need does not.

For the purposes of this analysis of social vulnerability both the relative and the absolute dimensions suggested by Sen are relevant.[16] From the absolute dimension derives the claim that a person who lives in poverty is not able to meet a manifest need. There are diverse commodities that might help to meet those needs. Given the complexity of assessing the absolute dimension, I will retake the concept in the conclusions to the dissertation. In the meantime, I will use the relative dimension, associating it with the resources a person –or a household- has. In order to establish an operative definition of poverty, the relative dimension is useful in differentiating the poor and the non-poor based on a threshold that is the cutting point between them. The relative dimension also implies a varying intensity of deprivation, that is, different levels of deprivation.

Now I turn to the issue of vulnerability to poverty. In this research, social vulnerability is defined in terms of the factors that put households and their members at risk of becoming poor. Though the status of "poor" implies a situation, the vulnerability to that situation is a process. The notions of *risk* and *vulnerability* have been used most widely in studies of natural disasters. Vulnerability implies unsafe conditions that, combined with specific events (hazards), create the risk (Blaikie et al. 1994). In the case of poverty Blaikie and colleagues' definition is useful, and can be complemented with Filgueira (1998)'s notion of vulnerability:

[16] Another concept of this approach that is relevant for this research is *command* over resources, to which I will refer below.

> …a predisposition to descend from a given level of welfare owing to a negative configuration of attributes acting against the achievement of material (e.g. income, goods, patrimony) and symbolic (e.g. status, recognition, shared identities) returns. By extension, vulnerability is also a predisposition to *not* escape from negative conditions of welfare… (p. 125, emphasis in original).

In this research, urban households and their members will be considered vulnerable depending upon their characteristics (their resources). The risk of poverty will be generated by the interplay of those attributes with the macro structure. Triggering events (crises or shocks) that also create risk can occur within the household or outside the domestic unit.

2.2 AVAILABILITY AND MOBILIZATION OF ASSETS: THE MARGIN FOR AGENCY

Urban households and their members will be exposed to the risk of falling below the poverty line depending on the resources that they possess and the possibility of mobilizing them as necessary, in order to resist poverty. The two questions that arise are: what kinds of resources does a household have? And, what are the circumstances in which those resources can be efficiently managed?

Moser (1996 and 1998) points out that the resources available to a domestic unit have been mainly studied in rural areas where the material assets, such as land and labor, are clearly identifiable, as are triggering events, such as natural disasters. The author suggests a classification of resources –an assets

portfolio- for urban poor households that includes: labor force, human capital, productive assets, household relations and social capital. Moser suggests the "asset vulnerability approach" to analyze the resources that poor people have and their ability to deploy them in a changing context. Poverty, from this perspective, is not a fixed state. Rather people –who are considered active agents-- cross the threshold between poverty and non-poverty or even experience diverse intensities of poverty according to the assets that they are able to mobilize.

Moser (1996 and 1998) and González de la Rocha (2000) have argued that workforce is the most important resource that households possess. Given the centrality of work in obtaining household income, it is determinant of the domestic unit's reproduction (Margulis 1989). I will also stress the importance of human capital[17] in determining household well-being. Since it is an intrinsic individual characteristic, human capital is mobilized simultaneously with labor. This attribute is precisely the one that makes a difference to position in the labor market. I will argue in subsequent chapters that both the workforce and human capital are the *core resources* of the household.

Moser (1998) further argues that even though the family may possess material goods that can be productively utilized (such as motor vehicles, sewing machines, and the like), housing is the most important asset for poor families. I argue that unlike rural areas, where a piece of land is principally important as a

[17] Since human capital was originally conceived (Schultz 1960; Becker 1963), education was proposed as a key element to develop human capabilities, mainly those devoted to increase productivity and hence, economic well-being (Sen 1997). Subsequent studies have emphasized that human capital goes further than education and includes aspects such as intellectual capabilities, general and specific in-the-job training, health situation, willingness to face challenges, and culture (Canudas 2001).

productive resource, in the cities, a lot on which the house can be built is critical as a source of security which, eventually, can be utilized as a productive asset.

Another resource is social capital, which is tied to specific organizational forms and to specific purposes (Warren, Thompson, and Saegert 2001). Portes (1998: 6) states: "…social capital stands for the ability of actors to secure benefits by virtue of membership in social networks or other social structures." According to Moser (1998: 13) it includes reciprocal relationships (short-term and longer-term reciprocity) and social networks, often based on kin and place of origin. I shall demonstrate in the qualitative analysis that social capital is important to the extent that it allows the household to mobilize the core resources.

Additionally, Moser (1998) suggests that household relationships are another resource. Household relationships involve the composition, structure, and cohesion of the family. I would argue that household relationships are not a resource but the conditions, the frame within which all the members interact. Therefore, those relationships can either boost or damage the margin of action of the household members while they mobilize resources (I will elaborate this issue below).

In the subsequent chapters I will mostly rely on the "asset vulnerability approach" and in a further elaboration of this approach proposed by Filgueira (1998) and Kaztman (1999). They emphasize that household resources can be converted into assets *only if* such resources are boosted by the "structure of opportunities" constituted by the State, the market, and the society, that is, the

macro sphere.[18] This distinction with respect to Moser's perspective is crucial in the understanding of the margin of action left for household members in face of a challenging external environment.[19]

At this point, I would add that both the availability of resources and the possibility of utilizing them depend to some extent upon the household itself. This does not mean that household members can act on their own volition, but that the internal dynamics of the household intervene in the capacity of the unit to efficiently mobilize resources. This element complicates even more the analysis of the interplay between the household and the structure.

Before taking up the issue of agency, I will briefly give an account of the way in which household characteristics mediate the "effect" of the structure. I argue that there are three features that at the household level determine the availability of resources and the possibility of mobilizing them: demographic characteristics, stage in the life cycle, and power relations within the domestic unit.

Household demographics and the stage in the life cycle are closely related. Thus, the meaning of the size of the domestic unit, age and sex of all the members will vary depending upon how early or how advanced the household is in its life cycle. Though high fertility has been associated with poverty –at the household level or in aggregate measures—and to a generally reduced well-being (e.g. lower likelihood of attending school, poor health conditions), the evidence is not strong

[18] In the section below I discuss why I will rather use the term macro sphere than the "structure of opportunities" suggested by Filgueira (1998) and Kaztman (1999).
[19] Though from now on I utilize both terms "assets" and "resources", my interpretation relies on Filgueira (1998) and Kaztman (1999)'s nuances with respect the boosting of resources.

that large families lead to poverty when the life cycle is taken into account (Merrick 2001). Namely, at the expansion stage of the household the addition of new members implies an increase of the dependency ratio and, at a constant household income, well-being diminishes. But, as those members grow and become economically active, the equation producers-consumers reverses (according to Chayanov's proposal of (peasant) household economy (Thorner [1966] 1986); and Margulis 1989).

This description, however, would correspond to a "natural" transit through different stages of the life cycle and the consequent "maturation" of the workforce. Another scenario would arise if there were events that disrupt such a natural process of the household's aging. Moser (1998) suggests that households may face "shocks" or events that dislocate the household way of life –this idea also comes from studies in rural areas and is related to natural disasters. Elder and colleagues (1974, 1992a, and 1994), Conger et al. 1992, as well as McLoyd (1989) have argued that economic difficulties of families shape the path for individuals to follow.[20] Therefore the disruption of individual lives created by economic crises will vary depending upon the impact of the shock and the stage of the individual trajectory. Since the accumulation of resources is –to some extent—a matter of time, the presence of shocks may imply the utilization of certain assets that will eventually leave the family with no stocks or with "eroded" resources (in terms of González de la Rocha (2000)). In the process of adjustment to external pressures there can be some unforeseen negative side effects for

[20] Life cycle and life course are two analytical tools that allow us to grasp the adjustment of the natural cycle of families by its intersection with the social sphere (Elder 1994; Hareven [1982] (1993). I aim to understand this intersection, which will be further discussed below.

households that results from the utilization of their resources or "unintended consequences of action" in Giddens (1984)'s terms.

On the other hand, the link between household demographics and the life cycle is permeated by internal power relationships. It has been pointed out that a household is not a monolithic unit and hence, there is a hierarchy within it that defines the daily functioning of the household (Benería 1979; González de la Rocha 1986 and 1994; Casique 2001). This hierarchy is based on gender and age relationships.

In a context of strong patriarchal family relationships, as is that of Mexico, control over resources is mediated by the internal balance of power. Moser (1998) argues: "Within households, asymmetries in rights and obligations on the basis of gender and age translate into differences in the ability to cope with economic difficulties…" (p. 4). While households face economic hardship the inequality within the domestic unit might even be exacerbated due to the unequal distribution of the economic burden, which rests to a great extent on women's shoulders and operates through the modification of the traditional gender division of labor.

Household dynamics partially determine the way in which the members of the domestic unit respond to external challenges. These are the means to carry out "private adjustments" (in the words of González de la Rocha 2000) to those external pressures by implementing different strategies.[21] According to the

[21] The heuristic potential of the concept of "household strategy" for the Latin American context has been largely discussed (see for instance, Arguello 1981; Torrado 1981; Schmink 1984; Roberts 1991a). Particularly for the link between different types of strategies and household assets see González de la Rocha 2000).

strength of household resources, two types of strategies can be distinguished: reproduction strategies that ensure the long-term reproduction and well-being of the household; and survival or coping strategies in the case of short-term response to shocks or crises (González de la Rocha 2000: 10). These strategies are not arbitrary; rather they follow a sequence that depends on the specific problem to be faced, on how eroded (or intact) the available resources are, and on the extent to which they can be used (Corbett 1988)[22].

In sum, household characteristics determine the availability and utilization of resources, but at the same time the set of these characteristics is a result of the way assets are used. The other element that completes this panorama is the intervention of the macro structure (or institutional level) on a household's strength or weakness in face of the risk of poverty.

2.3 THE MACRO DETERMINANTS OF POVERTY

Next, I return to the discussion of the margin of action that household members have. The household's internal dynamics and the possession of specific resources that I have sketched in the previous subsection --given by the demographic characteristics, the stage in the life cycle, and power relationships-- are socially bounded, ordered by time and space (Giddens 1984). Thus the margin of action that households have while facing economic instability is also determined by the macro (institutional) structure. Filgueira (1998) and Kaztman

[22] Even when Corbett (1988) develop this idea of the sequence to carry out specific strategies for a different context (African rural areas), her argument is also applicable to the way Mexican urban households utilize their resources.

(1999) call it the "structure of opportunities" and argue that it comprises the market, the State, and the society. Though I take the same components, I choose not to call it a structure of opportunities because this term is a euphemism for a system that does not provide real opportunities for accessing social well-being. Namely, echoing Giddens (1984: 14) "having some margin of action means to have some power to 'make a difference' over a pre-existing state of affairs…" Thus it is not the same to have a resource as to have the chance to take advantage of it, which is the difference between *commodities* and *command* suggested by Sen (1992). Instead of structure of opportunities, I will call the macro sphere the macro structure.

The channels by which the macro sphere intervenes in household well-being are diverse. The point of departure in the understanding the causal mechanisms of poverty for Griffin and Khan (1978) is the structure of the economy of a given country. For instance, if a characteristic of the economy is a high degree of inequality, the way wealth and income are distributed will be more important in the persistence of poverty than the rate of growth that the economy can reach.[23] Also, the path taken by economic restructuring and industrial transformation will define the participation of the State and the role of the labor market (Roberts 1991a). The State --both as economic agent and provider of welfare-- can guaranty a minimum security for citizens, so that welfare (education, health, public services) is a right rather than a privilege (Griffin and Khan 1978; Filgueira 1998). Changes in the labor sphere, on the other hand, will

[23] This consideration is very helpful in the analysis of poverty in Mexico because it explains the high levels of poverty reached during the phase of the open economy, which had high levels of growth. This will be discussed in the next chapter.

define labor demand, industrial and occupational composition, and labor relations. That is, the profile of workers, level of incomes and the margin of negotiation for workers are the ways in which the labor market influences household well-being (Rodgers 1978; De la Garza 1998).

The other component of the structure, society, intervenes in household well-being through at least three channels: the phase of the demographic transition; the culture of family and gender roles; and the existence of social networks (Rodgers 1978; Roberts 1991a; Kaztman 1999). The phase of the demographic transition indicates the age structure of the population and the pace of growth, thus it allows public policy makers to calculate the current and future pressure on the labor market that comes from the volume and characteristics of the labor force. The debate about the advantages of a large and young population is still an open one since even though it may represent a "window of opportunity" as a result of having a large contingent of producers, it may also mean a limitation if those producers are unskilled and the market can only offer low income levels (Merrick 2001; Alba 2001). The ideology of traditional gender roles and strong patriarchal relationships perpetuate the confinement of women to the household, their segregation in the labor sphere, and an uneven economic burden within the household (Benería 1979 and 1992; García and Oliveira 1994; Pedrero et al. 1997). Finally, the availability of social networks, as an informal source of welfare can cushion the lack of institutional support. Those networks however, may eventually erode, and cannot substitute the State (González de la Rocha 2000).

2.4 DISCUSSION AND CONCLUSIONS

My aim in this chapter has been to trace some casual paths for better understanding social vulnerability in urban Mexico during the time of economic restructuring. What I have argued is that social vulnerability implies insecure conditions that, whether combined with triggering events or not, create the risk of facing poverty. The threat of poverty then is generated and perpetuated by household and external mechanisms that are intertwined. In order to grasp the complexity of the process, I took up separately those characteristics of the household and the macro structure that intervene in the process of social vulnerability.

I have argued that there are three features that at the household level determine the availability of resources and the possibility of mobilizing them: demographic characteristics, stage in the life cycle, and power relations within the domestic unit. Household internal dynamics influence to some extent the availability and possibility of mobilizing assets. Nonetheless, the macro structure --State, market, and society-- most determines the chance of translating resources into assets, that is, the actual utilization of the household resources.

Chapter 3: The Context of Economic Restructuring in Mexico

Having outlined in the previous chapter the theoretical framework that will guide my analysis of vulnerability to poverty in Mexico, I will situate the study temporally and geographically in this chapter.

Two periods, each linked to a specific model of industrialization, can be distinguished in recent Mexican history: the Imports Substituting Industrialization (ISI) period, roughly from the 1940s to the 1970s, and the Export-Oriented Industrialization (EOI), which embraces the last two decades of the Twentieth Century. The economic growth achieved during the ISI period resulted in an accelerated but unequal economic development in Mexico. The ISI project came to an end during the 1980s, when Mexico embarked upon its economic restructuring program. My research is temporally centered in the latter period.

This chapter is devoted to the macro economic arena. In the first part, I will offer a panorama of economic performance in last two decades, as well as highlight some of the social consequences of economic liberalization. The impact on the social sphere will be assessed in terms of trends in social inequality and poverty. I will explain the measure of poverty that I have constructed to analyze social vulnerability in the later chapters. Using that measure, I will analyze the urban poverty trends in the country.

In the second part of the chapter, I will focus on regional and local disparities in Mexico. In order to contextualize the case studies selected for this analysis, I will locate the socioeconomic characteristics of these three cities

(Monclova, Aguascalientes, and Mexico City) within the national context. I will mainly focus on their industrial structures and the position of each city *vis-a-vis* the international economy.

3.1 MEXICAN SOCIOECONOMIC PERFORMANCE DURING THE 1980S AND 1990S

3.1.1 The Macro-Economic Sphere

During World War II, Mexico could no longer count on importing intermediate manufactures from the U.S. and hence was forced to develop its own means of meeting internal demand. Because of the centralization of political power in the post-revolutionary period, industrialization was promoted through active State participation through offering favorable conditions to national investors, managing some strategic enterprises (e.g. oil), and by providing subsidies and investments in public services for the public. The viability of the import substituting industrialization (ISI) model depended on concentrating production, infrastructure and the workforce. From the 1940s, industrialization, urbanization, and the consolidation of the economic and politic power occurred simultaneously in Mexico.

The ISI period produced significant results, including sustained economic growth—which averaged 6% annually—combined with low inflation rates until the middle of the 1970's. In spite of the slowing-down of growth rates, the government's economic policy of expanding public expenditures kept the economy dynamic until the discovery of large petroleum reserves provided a

further impetus for growth. The fiscal deficit grew from 1.8% of GNP in 1971 to 7.6% in 1976, financed through foreign debt (Kelly 1999). From 1978 to 1981, when the rest of the world suffered a severe oil crisis, Mexico discovered petroleum deposits that would change its economic panorama to one that the then-President José López Portillo deemed "administering abundance". Mexico obtained foreign loans by securing them with energy production. In 1982, however, factors including falling oil prices, rising interest rates, and capital flight in anticipation of another devaluation (1976 had seen the first devaluation in 22 years) left the country in an untenable economic position. López Portillo, already an outgoing president, declared a moratorium on the debt payment in August. One of the immediate consequences was capital flight that produced a net loss equal to 6% of GNP (Alarcón and McKinley 1998).

The last 20 years of economic restructuring can be divided into roughly four periods[24]: the first runs from the beginning of the 1980's to 1987; the second, from 1988 to 1993; the third, from 1994 to 1996; and the fourth, from that year until the present (2002).[25]

The period from 1982 to 1987 has been considered an economic stabilization phase. During these years, the government's strategy was to foster price stability, gradual trade liberalization, and fiscal mechanisms that enabled the country to service its foreign debt (Lustig 1992; Dussel 1995; Kelly 1999).

[24] Although the limits between one period and another are blurred, I use this periodization in order to facilitate analysis and identify changes in economic policy over the past two decades.

[25] This last period has been marked by one of the most important events in contemporary Mexican history: ouster of the PRI in the July 2, 2000, presidential elections. Nonetheless, in the present periodization, this politically important event does not denote a new economic stage. This section briefly discusses why.

Mexico was able to pay interest on the debt, but the country suffered new setbacks caused by low oil prices in 1986, high inflation (159% in 1987), a gradual devaluation that begun in 1985, and budget cuts, all of which produced unstable prices and a serious contraction of the internal market. GNP growth averaged 1.4% from 1980 to 1990 (INEGI 1996b), while GNP per capita experienced negative growth of 1.9% between 1980 and 1988 (Boltvinik 1994).

In December 1987, the government, business magnates, and union leaders signed an "Economic Solidarity Pact" to reduce inflation. Business owners agreed not to raise prices while the unions promised to refrain from demanding real wage hikes (Alarcón and McKinley 1998). That year initiated a second round of economic reforms, which consolidated the exported-oriented economic model. The new model implemented measures including trade liberalization, privatization of state-owned enterprises, and greater openness to foreign capital (Kelly 1999).

The anti-inflationary measures produced immediate results. Annual inflation of 159% in 1987 had been reduced to 20% in 1989; in 1993, inflation became single digit (*Ibid.*). This period saw an explicit change in governmental policy, which now emphasized support for export-oriented economic activities and a "healthier" state. Although Mexico entered GATT in 1986, the announcement in 1990 of a free trade agreement with the United States and Canada—which took effect on January 1, 1994—was seen as Mexico's true entrée into the international economy. This agreement sought to make national

industry more efficient, place its products on the international market, and attract capital (Wise 1998).

Domestically, the government established a series of financial support programs for producers of non-petroleum export articles that, for example, permitted tariff-free importation of merchandise destined for re-export. Businesses committed themselves to running trade surpluses (Dussel 1995). The *maquiladora* (in-bond) industry became the main exporter of manufactured goods, jumping from 14% in 1980 to 37.1% in 1991 (De la Garza 1998).

Parallel to stimulating exports, the government privatized state-owned businesses with even greater vigor. From a total of 1,115 state-owned businesses in 1982, only 210 remained at the end of 1993. The government generated 23.7 billion dollars from 1989 to 1993 by selling off its enterprises (Dussel 1995). Before putting revenue-losing businesses up for sale, the government undertook a series of measures to make them more profitable and attractive. For example, there were severe personnel cuts, changes in collective bargaining agreements, part of the machinery was modernized, and administration was improved, becoming more efficient and effective (Rueda 1994).

During the second period of economic reform, there were several signs of stability: inflation was brought under control ; copious sums of foreign investment flowed in (more than 61 billion dollars between 1998 and 1994); GDP grew steadily (an average rate of 2.8% annually); and even real wages recovered (3.7% on average). These improvements became the main achievements of President Carlos Salinas de Gortari's administration (Dussel 1995; Pastor 1998).

Nevertheless, the peso became overvalued, affecting the competitiveness of Mexican industry by encouraging the import of products both for domestic consumption and re-export. Between 1987 and 1993, exports grew by 88% while imports increased by 247%, creating an enormous balance of trade deficit (Pastor 1998).

In 1993, the government began to speak of an economic "slowdown", but did not take measures to arrest it, however, for three main reasons: 1) presidential elections were around the corner and, in spite of its discourse, the official party (PRI) was not willing to cede power or lose credibility by devaluating; 2) Salinas's team feared that it would not culminate negotiations of the free trade agreement with the United States and Canada, thereby losing investors' confidence in governmental policy; and 3) Mexican officials were overconfident in the market's power to restore equilibrium to both the balance of trade and an overvalued peso (*Ibid*.)

In spite of a large influx of foreign capital, the country became more vulnerable to fluctuations in business expectations because direct investment decreased while portfolio investment rose to 83% of all capital inflows in 1993. In contrast the latter constituted only 11.3% of total investment in 1989. Rising interest rates in the United States, along with the political risk perceived by investors after the March, 1994 assassination of the PRI's presidential candidate, lead investors to demand higher interest rates from the Mexican government. Although they were persuaded that the political timing was wrong, the flow of capital diminished considerably that year (Rueda 1994; Dussel 1995; Pastor

1998). Meanwhile, the balance of trade deficit was financed with foreign capital, depleting currency reserves from 30 billion dollars in January of 1994, to barely 5 billion by December (Kelly 1999). These factors combined to trigger yet another economic crisis, with which the Mexican government had to contend in the middle of the 90's.

According to Pastor (1998), although the gravity of the crisis could have been avoided, once the economic situation became unsustainable, there weren't many alternatives. The measure taken by the incoming Zedillo administration to correct what he called the "mistake of December" (which was the onset of the peso crisis) —a devaluation of 15%—surprised both national and foreign investors, financial advisors, and analysts, not to mention common citizens. The devaluation was announced on December 20, and only two days later foreign reserves were further reduced to 4 billion dollars. Mexico obtained 53 billion dollars from the International Monetary Fund to back the recovery plan implemented beginning in March 1995. The government adopted a floating exchange rate accompanied by a monetary policy of which the chief objective was to stabilize prices, implemented a financial "rescue" package for the banking system, and tightened fiscal policy to counter the deficit (Kelly 1999). In general, the measures were very similar to those enacted by Miguel de la Madrid's administration at the beginning of the 80's (Pastor 1998).

In spite of a severe recession in 1995, certain signs of recovery appeared relatively soon. The key lay in the funds coming in from abroad, which supported governmental strategy and provided some guarantees for foreign investors. For

its part, the devaluation helped reduce the balance of trade deficit rapidly by favoring exports. Since non-petroleum exports—above all, those produced by the *maquiladora* industry—had become more significant, the trend in the imports-exports ratio began to reverse itself. Inflation was 24% in 1995; in 1996, it rose to 41.4%, but the following year it returned to the 1995 level, continuing to descend in 2000 (10.1%), very close to the 1994 figure of 7.1% (INEGI). GDP growth was negative in 1995 (-7.8%), but recovered rapidly: 1996 registered a 3.7% growth and in 1997, growth was 5.1%. The peso, nevertheless, again became overvalued in the years following 1995 (Pastor 1998; CEPAL 2001).

Vicente Fox, the first president from outside the PRI in over 70 years, took office very recently in December, 2000; thus, it may appear premature to evaluate the course of his economic policy. There are, however, several factors that suggest continuity with the strategy pursued by the last PRI regimes. Two decades of economic reform have institutionalized some changes in the structure of production and in the operating mechanisms of the new economic model. Similarly, economic agents, including some businessmen who are members of or close to the new cabinet, had consolidated their power under the PRI's new economic policies.

Looking outward, government officials have been very active in seeking investors from the United States and Canada, as well as from the Pacific Rim. The government is attempting to negotiate trade agreements with the European Community and to sign the Free Trade Area of the Americas (FTAA) pact. The Puebla-Panama Plan, for its part, is a governmental project to reduce inequality

between the North and South of Mexico and consolidate its regional leadership in Central America. The program, designed by the last PRI administration, is being touted to foreign leaders in order to attract investment in communications and transportation infrastructure, *maquiladora* industries, energy, and other natural resources. Internally, wider margins for participation of foreign investors have been established and export patterns consolidated, with the United States as the main client. Non-petroleum exports have increasingly won ground, with the *maquiladora* industry as the most dynamic. Consolidation of the new economic model is reflected in the increasing share of goods and services traded abroad as a proportion of GDP: from 1993 to 2000, the percentage grew from 17.2% to 36.2%,[26] making the Mexican economy much more sensitive than in the past to the vicissitudes of the international economy, and especially that of the United States. In addition, current and potential investors are offered new areas in which to invest, particularly energy markets, while modifications of the Federal Labor Act—deemed obsolete— are being enacted so that labor may be used more flexibly.

The preceding discussion raises the question of the social costs produced by economic changes—or more concretely, the repercussions wrought by the changes on income distribution and poverty in Mexico.

[26] Average of imports and exports in 1993 prices. Own calculations based on information provided by INEGI (http://dgcnesyp.inegi.gob.mx/cgi-win/bdi.exe).

3.1.2 Social Inequality

Studies on poverty and social inequality in Mexico are relatively abundant. This is due in part to the existence of periodical information generated by the National Institute of Geography, Statistics, and Informatics (INEGI in Spanish) beginning in the 1980's[27] and to pressure applied by international agencies (World Bank, UNPD) to diagnose the magnitude of poverty and implement programs to eradicate it (Boltvinik 1999). However, factors of different types have lead to divergent measures. Prominent among these factors are the sources of information, definition of variables, sample design for each source, and statistical procedures employed by the researchers (Escobar 1996; Cortés 2000). This section highlights some findings on inequality in Mexico and provides references that document the debate on methodology.

In Mexico, the main source of information on income distribution and poverty has been the Household Income and Expenditures Survey (ENIGH), carried out periodically by the INEGI beginning in 1984. These surveys take both monetary and non-monetary income into account. Monetary income includes wages, business profits, rent on real property, and transfers (e.g., remittances). Non-monetary income includes self-consumption, the imputed value of rent when families live in their own homes, and in-kind transfers (e.g., gifts) (INEGI-CEPAL 1993: 49).[28] Monetary income represents the most important component

[27] The information available for previous years was gathered by the Bank of Mexico (1963 and 1968) and by the Programming and Budget Secretariat (1977). Given the methodology used by those institutions, these surveys are not strictly comparable with those taken by the INEGI (Cortés 2000).

[28] Analysts tend to concentrate on monetary income since this makes tracking factor markets easier and avoids distortions introduced by considering non-monetary income, especially the

of total income (73.8% at the national level in 1994) (Alarcón and McKinley 1998; Cortés 2000; Boltvinik 1994 and 1999). The following table shows trends in income distribution and inequality since 1977, reproduced from Cortés (2000).

As Cortés (2000) indicates, although a direct causal relationship between the implementation of the new development model and economic inequality cannot be inferred from Table 3.1, it does suggest an association between economic processes and changes in income distribution.

Table 3.1: Monetary Income Distribution and Social Inequality in Mexican Households, 1977 – 1996 (%)

Households by Decile	*Year*					
	1977	*1984*	*1989*	*1992*	*1994*	*1996*
I	0.9	1.2	1.1	1.0	1.0	1.2
II	2.0	2.7	2.5	2.3	2.3	2.6
III	3.1	3.9	3.5	3.4	3.3	3.6
IV	4.3	5.0	4.6	4.4	4.3	4.6
V	5.8	6.3	5.8	5.5	5.3	5.7
VI	7.4	7.7	7.2	6.8	6.7	7.0
VII	9.5	9.7	9.0	8.7	8.4	8.8
VIII	12.5	12.4	11.4	11.3	11.2	11.3
IX	17.7	17.0	15.9	16.1	16.3	16.3
X	36.7	34.2	39.0	40.5	41.2	39.1
Total	100	100	100	100	100	100
Gini Index	0.496	0.456	0.490	0.509	0.514	0.489

Source: Cortés, Fernando (2000), Table 2.2, p. 82

Table 3.1 shows that at the national level from 1977 to 1984—a period marked by the oil boom and subsequent onset of the debt crisis—the relative

imputed value of rent (Boltvinik 1994; Alarcón and McKinley 1998; Cortés 2000). According to these authors, counting as income the rent a family would pay on its own housing means reducing levels of poverty and inequality. House ownership, as an asset is discussed below, in the next chapter.

participation in income of the first five deciles improved, while that of the sixth to eighth stayed constant and the top two income-earning deciles declined. The period spanning 1984 to 1989 was a stage of significant changes in the economic model. In this period, the first nine deciles saw a reduction in their relative share of income, while the only one to obtain a significant improvement was the highest decile. In 1992, a highpoint in Salinas-era optimism, the previously described tendency held steady so that the first eight deciles' share of income continued to drop, while the ninth improved slightly and the tenth advanced its position at an even greater rate. In 1994, on the eve of a new recession, households in the two lowest deciles maintained the same income share that they had in 1992 and the third through eighth deciles' income share weakened even further. In contrast, the ninth and tenth deciles, with the highest income, captured a share even greater than it had in 1992. In 1996, when the effects of the recession were already being strongly felt, deciles one to eight improved their relative stake in the income distribution, while households in the two highest deciles saw their share decline.

This panorama for income distribution raises the following questions: What is the explanation for the lowest deciles' relative share of income improving in two periods of crisis, 1982 and 1995? What are the overall changes in households' relative shares by decile between 1984 and 1996, that is, from the beginning of economic restructuring to the most recent phase? What has happened with inequality in this time period?

Recall that until the beginning of the 1980's, the internal market was relatively dynamic due to governmental investments in the form of subsidies,

creation of public sector jobs, and allotment of health services and education. As a result of this policy, between 1977 and 1984 the lowest –and intermediate-- income deciles were favored at the expense of the highest-income deciles (Hernández Laos 1992). The effects of the crisis were not immediate but when ENIGH was taken in 1989 the strategy of controlling prices and salaries had already begun to affect incomes in the lowest deciles. A very important factor—discussed more fully in the section on household assets—is that the distribution of household incomes by deciles presented in Table 3.1 doesn't show the demographic composition of the households. Large households at an advanced stage of the household cycle may have an available workforce to mobilize, explaining their improved relative position in crisis years (Cortés 2000).

Taking into account the components of the Gini index Cortés (2000) attributes the 1984 reduction in inequity to a contraction in labor remunerations, profits, real property rents, and even transfers; that is to say, all components of the index were affected in this period. As Table 3.1 indicates, the index decreased between 1977 and 1984, only to grow systematically until 1996, when it fell again. Gini index increases between 1984 and 1994 coincide with the period in which the government consolidated the new economic model. The posterior reduction might have been caused by workforce mobilization in poor households, but also because wages for labor fell, while profits also contracted to a lesser degree (Cortés 2000).

Table 3.1 indicates that the lowest income decile maintained its relative position between the beginning of the reform era and the recent period of the

consolidation of the new economic model. Nonetheless, the second through ninth deciles' share of income distribution decreased; only the highest-income decile improved its position substantially. This suggests that the period of economic reform meant deteriorating income levels for the vast majority of the population, with the middle-income strata most affected (Hernández Laos 1999).

One explanation for reduced inequality has been income contraction in the middle sectors, as well as a general reduction in real income, a phenomenon aptly called "equality through impoverishment" (or "downward equality") (Cortés and Rubalcava 1991). In this sense, the intermediate deciles would seem to be those most disadvantaged for two reasons: first, public policy targeted the population living in extreme poverty excluding the middle sectors; and second, only the highest strata have escaped falling real wages (Hernández Laos 2000).

3.1.3 Poverty

In spite of many attempts to measure the magnitude of poverty in Mexico, no "official" poverty line exists to date. Measurements carried out by governmental institutions frequently diverge from those of academic specialists. The difference fundamentally lies in the conceptual frameworks used to define the food basket and basic non-alimentary necessities and in the methodology applied (Escobar 1996). With some variations, the four methods most frequently used are: a) the poverty line (PL); b) unsatisfied basic necessities (UBN); c) the integral poverty measurement method (IPMM); and the method for measuring the quality and quantity of life (MEMEQQUAL) (Hernández Laos 2000). Since a

detailed discussion of the advantages and limitations of each method would go beyond the scope of the present work, in the Appendix I show some of the available estimates and give an idea of the debate on measuring poverty in Mexico.[29] In this research I will utilize the poverty line method.

Poverty Line. Unlike most of the studies regarding poverty carried out in Mexico so far, I do not utilize the source of information typically used, the ENIGH (Household Income and Expenditures Survey). Instead, I will rely upon the Mexican National Urban Employment Survey (ENEU, in Spanish) to construct the poverty line to be used in this analysis.

There are two main reasons for choosing ENEU over the ENIGH: 1) ENIGH is not representative at the level of urban areas, since the information it provides can only be disaggregated into totals for rural and urban areas in the country. Since my research focuses on three cities, ENIGH was inadequate for this purpose. 2) Given the centrality of employment to the well-being of the majority of Mexican households, I needed to rely on the most thorough employment survey possible, for which ENEU is the best source in Mexico. The disadvantage of using ENEU is that it does not capture all sources of household income. However, approximately 90% of total household income nationwide is derived from labor (Cortés 2000). Therefore, constructing a poverty line based only on household labor income will still accurately reflect the level of household-well-being since it takes into account the main source of revenue garnered by the domestic unit.

[29] There is an abundant bibliography on the debate concerning how to measure poverty in Mexico. See, e.g., Boltvinik (1992), Hernández Laos (1992), INEGI (1993), Alarcón (1994); Escobar (1996); Boltvinik and Hernández Laos (1999).

In 1992, INEGI-CEPAL estimated the cost of the basic food basket for urban areas as $335,910.00 in current pesos a month.[30] This threshold served as the point of reference in determining the poverty line that I will utilize henceforth. INEGI-CEPAL (1993) set the threshold based on average (not minimum) prices of the items in the basket. Patterns of consumption were referenced to the II-V deciles.[31] This poverty line—the only "official" estimate so far—was adapted as follows.

First, since I would use 1994 pesos to compare real income across the whole period under observation (the 1990s), I converted the $335.91 current pesos in 1992 to 1994 pesos. To do that, I adjusted the amount by the average inflation rate of the second quarter in 1994, which yielded the figure of $393.01 pesos. This made the poverty levels comparable across the time period under study.

Second, the PL calculated by INEGI-CEPAL represents the minimum income necessary for any adult to avoid poverty; that is, no adjustments are made based on the household structure (sex and age of each member). According to both agencies, the household income necessary to stay out of poverty, then, is equal to the cost of the basic food basket multiplied by the number of household members. In order to avoid overestimating poverty in this study (to the extent that this was possible), I adjusted the poverty threshold by household structure utilizing a table of adult equivalencies designed by the National Statistics and

30 In 1993 Mexican officials reformed the monetary system, dropping three digits from the currency. Thus, this amount became 335.91 current pesos a month, approximately $108.60 US dollars (exchange rate at the second quarter of 1993 = 3.094 pesos per dollar).

31 For an exhaustive examination of the problems with taking deciles II-V as a point of reference and of the possible defects in the model used by INEGI-ECLAC, see Boltvinik (1999: 90-118).

Census Institute (INDEC) of Argentina, used in the Permanent Household Survey (EPH) of Argentina from 1990 to 2000. The coefficients are shown in the following table.[32]

Table 3.2: Coefficients for Weighting Adult Equivalencies in Households

Age	Sex	Coefficient
0	Male; Female	0.33
1	Male; Female	0.43
2	Male; Female	0.50
3	Male; Female	0.56
4 – 6	Male; Female	0.63
7 – 9	Male; Female	0.72
10 – 12	Male	0.83
10 – 12	Female	0.73
13 – 15	Male	0.96
13 – 15	Female	0.79
16 – 17	Male	1.05
16 – 17	Female	0.79
18 – 29	Male	1.06
18 – 29	Female	0.74
30 – 59	Male	1.00
30 – 59	Female	0.74
60 +	Male	0.82
60 +	Female	0.64

Source: INDEC, Permanent Household Survey, Argentina 1990-2000

Third, I added the income reported by all household members who took part in the workforce, using information provided by the ENEU[33] to calculate household income. Finally, to determine whether the household was poor, total household income was checked against the poverty threshold. Thus, the total number of equivalent adults in the household multiplied by $393.01 pesos,

[32] For the case of Mexico, a similar series of coefficients has not been defined. Thus I adopted one that has been used recently in another Latin American country.

[33] This income is obtained from the principal occupation because the survey does not seek information concerning income from secondary occupations.

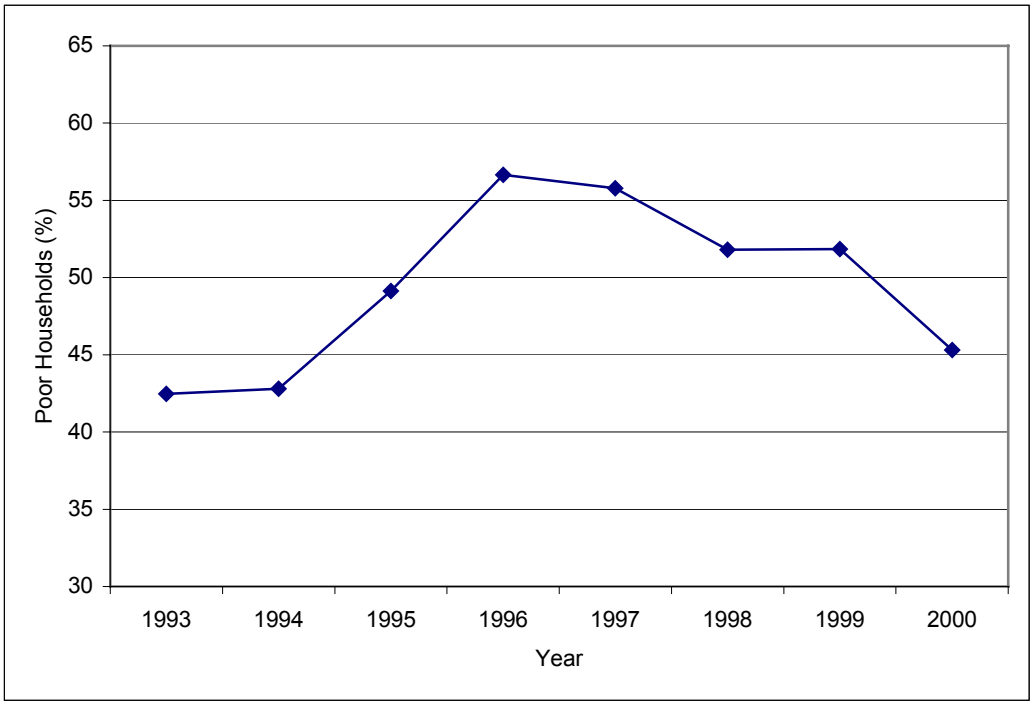
indicated the amount required for a household to live out of poverty, which is the *threshold* or *poverty line* properly speaking. If total household income was below the threshold, the household was poor. Consequently, if household income was equal to or above the line, the household was classified as non-poor.

The poverty level calculations presented here do not include the imputed value of housing as part of family income. As pointed out above (see note 28), non-official studies on economic inequality and poverty based on ENIGH data usually do not impute the rent families would pay for their own housing as additional household income. These studies do not downplay the importance of saving on rent; rather, they seek to avoid reductions in poverty and inequality levels that are, in a sense, artificial (Alarcón and McKinley 1998; Cortés 2000; Boltvinik 1994, 1999). For example, in the 1980ies, property rents increased considerably. Counting rent savings as income would then make a family whose income was below the PL appear in the statistics as not poor thanks to the imputed income, even though their capacity to buy basic necessities would not have changed (Boltvinik 1994). Given that the PL measure constructed for this study counts only monetary income derived from the primary job of each household member in the workforce, property has been considered as a separate resource and, so, does not artificially modify poverty levels. Housing as a resource will be discussed in subsequent chapters.

Trends in Urban Poverty in Mexico during the 1990s. Since the ENEU is carried out continually every quarter, it was possible to determine poverty trends for Mexico's major urban areas. The following graph illustrates fluctuations in

poverty for 35 urban areas in the country. The ENEU included all 35 cities during the period under observation,[34] making possible annual comparisons from 1993 to 2000.

Figure 3.1: Poverty Trends in Urban Households in Mexico (1993 – 2000)



Source: Own calculations based on the National Urban Employment Survey, second quarter of each year

Urban poverty has been very high since the beginning of the 1990's and continues to be so now, worsening during the years of economic crisis. At the peak of the Salinas-era, in 1993, 42.5% of urban households lived below the

[34] The 35 cities included in the ENEU are: Mexico City, Guadalajara, Monterrey, Puebla, Veracruz, Nuevo Laredo, Tijuana, Matamoros, Ciudad Juárez, León, San Luis Potosí, Torreón-Gómez Palacio, Mérida, Orizaba, Tampico, Chihuahua, Aguascalientes, Campeche, Saltillo, Tuxtla Gutiérrez, Durango, Acapulco, Toluca, Morelia, Cuernavaca, Tepic, Oaxaca, Culiacán, Hermosillo, Villa Hermosa, Coatzacoalcos, Zacatecas, Colima, Manzanillo, and Monclova.

poverty line, and this proportion became larger afterwards. In the middle of 1995, some months after the onset of the crisis, about half of the urban households (49.1) were in poverty, but, according to Figure 3.1, 1996 was the most difficult period for households because the proportion of those living in poverty rose to 56.7%. The relative recovery after that year has been slow. At the end of the decade, the proportion of poor urban households was still decreasing, but had not reached the level before the crisis.

From these findings, as well as from the indicators of inequality, it can be inferred that the model of industrialization via economic liberalization and export production has not brought a visible improvement of living conditions for the majority of population. In the next section of this chapter, I aim to depict the economic heterogeneity within Mexico, emphasizing the characteristics of the urban areas that I selected to analyze vulnerability to poverty.

3.2 INTERNAL DISPARITIES IN MEXICO: SELECTION OF CASE STUDIES

The notion of the existence of "many Mexicos" is rooted in the historically deep inequality between regions of the country. There is a consensus among specialists on the severity of inequality, but there is no agreement on how to divide the country in order to assess the main differences between regions. This lack of consensus stems from the multi-faceted nature of inter-regional inequality, which is political and cultural, as well as economic (Roberts 1992; Alba 1999).

Since a thorough survey of internal disparities in Mexico transcends the objective of this study, I will first depict some economic characteristics that

differentiate the Mexican regions and specific cities. Next, I will concentrate on some aspects –participation in the global economy, industrial structure and demographics of the labor force—of the three selected case studies: Mexico City, Aguascalientes, and Monclova.

3.2.1. Characteristics of Regional and Local Labor Markets

Regional Level. At least three broad blocks can be distinguished to analyze changes in Mexico's industrial geography over the last two decades.. The *north* includes the states located on the border between the United States and Mexico. The region has focused on industrial and agro-export activities, and is, in general a relatively dynamic region, mainly due to the exchange with the American economy. The *center* is a heterogeneous region that includes areas such as Mexico City, the main economic center of the country, as well as poor states and cities. The *south* is more clearly homogeneous and contains the least dynamic and poorest states (Alegría et al. 1997; Hiernaux 1998; Martínez 1999; Alba 1999; Unger and Saldaña 1999).

Although this division offers an initial differentiation within the country, official agencies have suggested –and utilized for planning purposes- nine smaller demarcations comprising adjacent states. Using the official classification, researchers have reconstructed the economic profile of each region for the last

two decades (Aguayo and Salas 2002).[35] The following table illustrates the differential participation of each region in the GNP.

Table 3.3: Regional Structure of the GNP, Mexico 1980-1998

Region	GRP Annual Growth Rate		Regional Participation to the GNP		
	1980-1988	1988-1998	1980	%	1998
Northwest	3.4	3.6	7.0		8.5
North	3.5	3.6	6.6		8.7
Northeast	2.4	3.5	8.7		9.7
North-Central	1.9	4.5	5.8		7.0
West	3.3	3.1	9.4		10.0
Central	3.2	4.1	7.1		8.5
Gulf-Central	-1.2	1.3	9.6		5.6
South-Pacific	1.2	3.8	4.5		3.9
Peninsular	0.7	3.9	5.8		5.0
Capital	0.7	3.2	35.6		33.2
National	*1.6*	*3.4*	100		100

Note: Monclova is located in the North region; Aguascalientes in the North-Central; and Mexico City in the Capital.
Source: Aguayo and Salas (2002), forthcoming, Table 1

Table 3.3 shows the pace of growth of the Gross Regional Product (GRP) during two broad periods. Stagnation of the 1980s and the posterior relative recovery had a different impact on the regions. During 1980-1988 GRP grew fastest in the North region (3.5% annually) compared to the other groups in the table. In the next period (1988-1998) the North-Central region was the most

[35] The former Ministry of Urban Development and Ecology (SEDUE in Spanish) in 1992 divided the country in the following nine groups: *Northwest* (states of Baja California Norte, Baja California Sur, Sinaloa, and Sonora); *North* (Chihuahua, Coahuila, and Durango); *Northeast* (Nuevo Leon and Tamaulipas); *North-Central* (Aguascalientes, Guanajuato, Queretaro, San Luis Potosi, and Zacatecas); *West* (Colima, Jalisco, Michoacan, and Nayarit); *Central* (Hidalgo, Morelos, Puebla, and Tlaxcala); *Gulf-Central* (Veracruz and Tabasco); *South-Pacific* (Chiapas, Guerrero, and Oaxaca); *Peninsular* (Campeche, Quintana Roo, and Yucatan). Aguayo and Salas (2002) proposed to create an extra region that helps to differentiate the weight of the *Capital Zone* in which they include the Federal District and the State of Mexico, separating them from the Central region (in the original classification).

dynamic out of the ten (4.5% annually). Comparing the North and North-Central regions –where Monclova and Aguascalientes are located- to the Capital, the latter region registered the slowest economic growth during both periods. However, the influence of the Capital region can be observed in the right column of Table 3.3. Even though the relative importance of the region is decreasing, it still represents more than a third of the national economy. The other two regions, North and North-Central, have increased their share of the GNP over the last two decades.[36]

The next table summarizes the relative participation in non-agricultural activities by region in the last two decades.

Table 3.4: Regional Participation by Economic Sector, 1980-1998

Region	Manufacturing		Commerce		Services	
	1980 %	1998	1980 %	1998	1980 %	1998
Northwest	5.0	10.0	9.8	8.4	8.2	8.6
North	6.9	14.4	7.2	7.3	6.3	7.5
Northeast	11.3	12.0	8.7	8.4	8.4	9.0
North-Central	7.6	11.7	7.1	10.3	6.7	9.1
West	9.1	10.4	11.3	12.9	11.4	11.7
Central	7.9	9.2	5.6	8.4	5.8	7.4
Gulf-Central	4.2	3.8	6.0	6.8	6.0	6.5
South-Pacific	1.9	3.0	4.2	7.3	5.8	6.3
Peninsular	1.7	2.1	2.3	3.5	3.0	4.3
Capital	44.4	23.5	37.7	26.7	38.5	29.5
National	100	100	100	100	100	100

Source: Aguayo and Salas (2002), forthcoming, Table 9

[36] Another aspect in which this unevenness can be observed is the distribution of foreign investment. Between 1994 and 1999, the Capital region concentrated 61.8% of total investment in the country, whereas the North received 7.5% and the North-Central, only 1.0% (Aguayo and Salas 2002, Table 3).

Table 3.4 strikingly illustrates the de-industrialization of the Capital region and the process of de-centralization as economic power deconcentrates outward from the center. The Capital's participation has decreased in every single economic activity, a fact widely noted (Aguilar and Graizbord 1995; Alegría et al. 1997; Hiernaux 1998). Manufacturing shows the steepest decline in comparison to the other two sectors.

In contrast to the Capital, both the North and North-Central regions have increased their relative importance, mainly in manufacturing. The share of commerce and services for the North regions remained fairly stable, but the North-Central region had garnered a significantly greater proportion of the national market in 1998 compared to its 1980 share (Graizbord and Ruiz (1999) reached the same conclusion).

In general, the transformation of the industrial structure at the regional level suggests a process of relatively rapid change, linked to the export-oriented economic model. Even though such a geographical division of the country is a useful analytical tool, there is no "natural" outgrowth of local market systems that make-up the so-called regions (Roberts 1992; Hiernaux 1998). That is, a conglomeration of states can hide the heterogeneity within them.

Local Level. The study of local economies has revealed a highly differentiated participation of urban areas in the national and international economy. Thus the role of new "centers and peripheries" played by each city has been redefined by the global economy (Sassen 1994). Roberts (1992) argues that in analyzing the predominance of certain localities at the expense of others it is

important to keep in mind that cities' relative position in a given period are the synthesis of interplay between internal and external factors.

During the ISI period in Mexico production and distribution for the internal market was mostly organized in large urban areas, principally the capital, Guadalajara, and Monterrey. Producers, the workforce and, hence, consumers were conveniently located in the same place. It is not surprising then that the pattern of urban growth in Mexico has had a metropolitan character in which the Mexico City area has been the predominant city (Garza 1990). Given the centralization of political power in the country, Mexico City has been historically the site where relevant economic and politic decisions are made.

Towards the end of the ISI model during the 1970s, the border cities, following the federal government's initiative, started to gain economic prominence. Alegría et al. (1997) delineated two "axes" of industrialization in that time period. The first included the large metropolitan areas, while the second comprehended the border cities. The latter axis became the focus of the Mexican government's new model of industrialization. The northern border cities have attracted both domestic and foreign capital transforming themselves from sleepy frontier outposts into bustling urban centers.

Mexico's increasing participation in the international economy during the last two decades has also implied a reconfiguration of national territory –as suggested by Tables 3.3 and 3.4-, which has meant the emergence of new industrial centers and the de-concentration of the large metropolitan areas. Besides the border cities, there are other cities scattered among various states that

have gained importance in the national economy –among others, Hermosillo, Torreón-Gómez Palacio, Querétaro, Saltillo-Ramos Arizpe, and Aguascalientes (Salmerón 1996; Hiernaux 1998). The new model of industrialization has paralleled the rapid growth of medium size cities in Mexico, the so-called "intermediate" cities (Aguilar, Graizbord, and Sánchez 1996).

In order to select the case studies, I resorted to two classifications of Mexican cities based on their economic characteristics. The first classification was proposed by Roberts and Saraví (1999). Based on information from the Economic Censuses, the authors grouped 44 cities according to two dimensions. The first dimension is industrial specialization where the authors created three categories: manufacturing cities, service and commerce cities, and diversified cities. The second dimension taken into account was economic dynamism, assessed by the performance of value added and wages during 1989-1994. From the second dimension, Roberts and Saraví constructed a four-fold classification. The matrix that the authors obtained is presented in Table 3.5.

This classification shows the heterogeneity of urban economies throughout the country. Roberts and Saraví did not find a clear correlation between the performance of value added and wages during 1989-1994 and the location of the city. That is, they did not observe the formation of "regions" in the sense of similarities between adjacent or close areas. For instance, even the border cities were classified into different categories because they are not homogenous (e.g. Tijuana and Ciudad Juarez).

Table 3.5: Mexican Urban Economies 1989-1994

	Manufacturing Cities	*Service and Commerce Cities*	*Diversified Cities*
Value Added Growing & Wages Growing	**Aguascalientes**, Torreón-Gómez Palacio, Guadalajara, Querétaro, **Mexico City**	Ciudad del Carmen, Colima, Manzanillo, Oaxaca, Cancún, Villahermosa, Zacatecas, Pachuca, Morelia	Tijuana, León, Nuevo Laredo, Hermosillo, Mérida
Value Added Growing & Wages Declining	Coatzacoalcos	Campeche, Mexicali	Durango, Tepic, Veracruz
Value Added Declining & Wages Growing	Saltillo-Ramos Arizpe, Celaya, Cuernavaca, Monterrey, San Luis Potosí	Tuxtla Gutiérrez, Culiacán	Irapuato
Value Added Declining & Wages Declining	Ciudad Juárez, Toluca, Puebla, Tampico, Tlaxcala, Matamoros, Orizaba, Chihuahua **Monclova**	La Paz, Acapulco	

Source: Roberts and Saraví (1999), Table 1, p. 5

Rojas-García (2002) proposed the second classification used in singling out the case studies. The author compared the precariousness of employment in 38 Mexican cities between 1994 and 1998. This assessment was based on the ENEU, which provided information regarding different labor market characteristics --percentages of workers in micro-enterprises, unpaid workers, salaried workers without social security, workers earning less than twice the minimum wage, those working less than 15 hours a week, and the unemployed--, from which a "precariousness index" was constructed. The index was constructed using factor analysis. Two main factors were formed, with the most important one

combining low income, workers in micro-firms, salaried workers without social security, and unpaid workers.

In Rojas García's comparison of precariousness of local labor markets, Aguascalientes was grouped with the cities offering better working conditions in 1994. However, by 1998, the information suggests some deterioration. Mexico City did not figure among the best cities in 1994 and working conditions had worsened further by the end of the observation period. In Monclova, the opposite happened.[37] In 1994 it was grouped with some of the poorest cities in the country; but by 1998 it had improved and appeared in the same category as Mexico City.

Both classifications helped in identifying three cities specialized in manufacturing with different and changing economic performance during the 1990s: Aguascalientes, Mexico City, and Monclova. Next, I will discuss each city's profile more thoroughly.

3.2.2 Three Contrasting Experiences: Mexico City, Aguascalientes and Monclova

In order to compare the three Mexican urban areas that have been selected for this study –Mexico City, Aguascalientes, and Monclova-, I shall make explicit the differences between them.

Mexico City is the largest urban area and the capital city of the country. By 2000 the population size of the metropolitan area, according to the census, was

[37] The antecedent of this publication was an exercise with information from the ENEU corresponding to 1993, in which Monclova was grouped with some of the poorest cities in the country (e.g. Oaxaca). Those results made this city a puzzling case.

17.4 million of inhabitants (about a fifth of the national population, Puig 2000) (see Table 3.6). Mexico City is the politically and economically most important center in the country. Aguascalientes is the capital city of the state of Aguascalientes. It concentrates three quarters of the population of the state (it had more than 722 000 inhabitants in the metropolitan area by 2000), and is the economic and political center of the state. The metropolitan area of Monclova, on the other hand, had a total population below 300 000 inhabitants in the year 2000. It is the third most important city in the state of Coahuila (after Saltillo and Torreón) (Dávila 1994); and is not the capital city of the state.

Although neither their size nor their economic and political significance would make these three urban areas comparable, I chose them to carry out this analysis of social vulnerability because the three are paradigmatic cases of industrialization in Mexico. They have been "social laboratories" in which the State and the financial forces –the "ruling class"- have applied different models of industrialization in different epochs. However, given that a historical survey of the processes of industrialization in each area is beyond the goal of this research, next I will highlight some salient characteristics of their industrialization during the ISI period, and the changes in the last two decades.[38]

Mexico City. Its urban growth has depended on the dynamism of its economic activities (Garza 1991). The type of urbanization –fast, unplanned, and with limited participation of the State- converted Mexico City into the largest

[38] In this contextual chapter I risk not doing justice to each case because the description is necessarily schematic (even simplistic) in such a brief comparison. The availability of literature about my case studies seems to be proportional to the size of each city. That is, the literature on Mexico City is abundant, but not so for Aguascalientes and Monclova.

concentration of population and resources in the country. Mexico City is one of those examples among Latin American cities "made" by peasants (Roberts 1978, Ward, 1990). Up to the 1970s the city attracted large contingents of migrants due to its rapid industrialization –and the decline of small-scale agriculture- which, joined to the natural growth of population, resulted in a rapid expansion of the metropolitan area. Between 1940 and 1960 the industrial structure of the capital city (based on manufacturing) was consolidated. In 1960 Mexico City concentrated 44.5% of industrial production in the country (Garza 1991). In those two decades the pace of population growth was fast: from 1940 to 1950, 5.36% and 5.07% in the following decade (Table 3.6).

During 1960-1980 the industrial structure diversified and still concentrated above 43% of total production in Mexico (Garza 1991). According to this author, despite the relative stability of industrial production, the increase in population maintained a steady trend. In the decade of 1960-1970 the average annual growth was 5.27% and by the following decade it dropped to 4.33% (Table 3.6). Despite the reduction in population growth, a rate of 4.33% –still very high- represented an increase of over 4 million people in 10 years. Thus, by the 1980s, Mexico City concentrated population, industrial production, and much of the infrastructure of public services (health, education), and political power.

Table 3.6: Total Population and Annual Rates of Population Growth in Mexico City, Aguascalientes, and Monclova 1940 - 2000

	1940	1950	1960	1970	1980	1990	2000
Mex City Tot Popul	1 962 278	3 307 566	5 426 000	9 066 723	13 921 372	15 226 196	17 416 923
Growth R.		5.36	5.07	5.27	4.33	0.90	1.35
Aguasc Tot Popul	82 561	93 545	126 901	184 866	294 123	512 862	722 589
Growth R.		1.26	3.10	3.83	4.75	5.72	3.49
Monclova Tot Popul	31 416	49 712	69 822	137 269	186 074	263 625	286 589
Growth R.		4.70	3.46	6.99	3.09	3.55	0.84

Note: Population estimated to June 30th of each year
Sources: From 1940 to 1980, Ruiz and Tepichini, 1987 (Table 4.2, p.118); from 1990 to 2000, own calculations based on Population Censuses

The consolidation of Mexico City's industrial structure by 1970 can be observed through the distribution of the workforce among economic sectors. The tertiary sector –commerce and services- has historically occupied the majority of the labor force. By 1970 (when 2.7 million people constituted the economically active population) only 2.8% worked in agriculture, 56.8% were involved in the tertiary sector, and 40.4% worked in manufacturing (Garcia and Oliveira 2000). During the ISI period, social and producer services grew more rapidly than personal and distributive services (commerce, communications, and transport) (Oliveira and Roberts 1994).

One of the main characteristics of Mexico City's industrial structure in recent decades is de-industrialization, due mainly to the location of manufacturing elsewhere (Alegría et al. 1997; Hiernaux 1998; García and Oliveira 2000; Aguayo and Salas 2002). De-industrialization has reinforced the predominance of the tertiary sector and the growing share of non-wage jobs. These three elements have

constituted the main trends of employment in Mexico City from the 1980s (Rendón and Salas 1992). In recent decades, the proportions of workers in the social services have decreased within the tertiary sector, reflecting a declining State commitment (García and Oliveira 2000). A combination of a declining manufacturing sector and a steep process of tertiarization of the economy has led to a very diverse industrial structure in the city (Rendón and Salas 1992; Garcia and Oliveira 2000). The economic predominance of the city has enabled it to adapt in order to participate in the global economy. At the end of the 1990s Mexico City concentrated the foreign investment capital and the city's manufacturing production –even though it has decreased- still represents more than a third of the GNP (*vid supra* Table 3.1). The headquarters of the most important financial services and large firms in the country are based in Mexico City (Hiernaux 1998).

The city economy is increasingly dependent on the tertiary sector, which is characterized by heterogeneity in productivity, job positions, and wages. Thus Mexico City has become a complex and polarized labor market containing economic sectors that offer competitive jobs and sectors that are niches that barely offer a subsistence income (as will be shown in Chapter 5).

Monclova. The economic development of Monclova is a symbol of the ISI period that coincided with the city's "golden era". Monclova, "an industrial mirage-oasis under the reddish cloud in the desert landscape" (Yáñez-Chávez 1994: 70) is located in the central part of the state of Coahuila, about 200 miles

from the Mexico-U.S. border.[39] Though one interpretation of Altos Hornos de Mexico, S.A. (AHMSA)'s foundation is a quasi-epic story (which to some extent is justified given the particular difficulties of establishing the enterprise), the role of AHMSA in the consolidation of capitalism is not a romantic one (*Ibid.*).[40]

At the end of the 1930s the Federal Government planned to construct a rolling mill, but its location had not been decided. At the time, the American Rolling Mill Company (ARMCO) had decided to negotiate with the Mexican government the establishment of an enterprise that would allow them to supply steel, which was urgently needed during the time of World War II. Harold R. Pape,[41] an American engineer, was designated by ARMCO to negotiate and lead the project. Pape tried to convince the Mexican government not to construct a rolling mill (which would have to import steel), but to produce steel itself since the raw materials were available. Both ARMCO and the Mexican government studied the viability of the project and the location. In 1941 the decision to carry out the project was made. The attributes that led them to choose Monclova were: the availability of raw materials in the region (iron ore and coal deposits, and water), the closeness to the U.S.-Mexico border, plus the accessibility of train

[39] By 1833, before the separation of Texas from Mexico, Monclova was the capital city of the territory constituted by the states of Coahuila and Texas. However, until the 1940s the city of Monclova was not economically significant (Museum of Regional History, Monclova).

[40] According to Yáñez-Chávez (1994: 70) the Spanish phrase *altos hornos* is a literal translation from the German *hochoefen* (he quotes Cole 1967: 11). The translation into English is "blast furnace."

[41] Harold R. Pape was a very charismatic and farsighted person. While carrying out the fieldwork in Monclova, I realized that Pape is a sort of "local hero" partially because he devoted himself to the consolidation of AHMSA, and partially because of the paternal relationship with AHMSA's workers. In general, people from Monclova recognized the important role played by Pape in the development of the city. All around Monclova his imprint can be found due to his interest in constructing infrastructure for public services (for instance health, education, housing, and recreation).

communication that would ease the distribution of the product in both countries (Chávez Quezada 1994; Toledo and Zapata 1999).

Harold R. Pape and, on the Mexican side, Abelardo L. Rodríguez, counting on all the support of the government, became the leaders of the new firm.[42] The first blast furnace installed in Monclova was bought and dismantled in Saint Louis, Missouri (it had been abandoned since World War I) as well as the material to build the steel-making and rolling workshops. All that second hand equipment became the base on which AHMSA started working in 1944. Some American technicians were hired to train a group of Mexican engineers –there were no Mexican steel specialists at the time. Both teams assembled the blast furnace "piece by piece" in Monclova (Chávez Quezada 1994). Along with some technicians, AHMSA attracted semi-qualified workers from the region, who mainly had experience in mining (called "*maistros*" who later on became supervisors). The majority of the workers, however, had no industrial experience. Most of the available workforce in Monclova was peasants (called "*chileros*"), who "learnt by doing" (Toledo and Zapata 1999). The romantic interpretation has derived from the diverse difficulties –financial, technical, and human- that had to be overcome in order to carry out AHMSA's ambitious project (Yáñez-Chavez 1994).

AHMSA constituted the first direct intervention of the Mexican State in the creation of large manufacturing firms. For a decade ARMCO participated in AHMSA, but from the 1950s it "became Mexican" with the Mexican government

[42] The Mexican government "had very wisely set up a vehicle for the sponsoring of such new and additional industrialization…" (Yáñez-Chávez (1994: 82) quoted Pape (1950: 51). That vehicle was Nacional Financiera (the development bank).

as the principal stockholder. Until the beginning of the 1970s the management continued as that of a private firm. Pape was the general manager until then. Some of the main goals achieved by him were: consolidation of integrated steel production in the country; and a stable and high production (in 1970 the total production was 1.5 million tons), which made AHMSA the principal steel producer in Latin America. Furthermore, Pape gained the support of stockholders and workers –due to the high profits and the decent labor conditions, respectively (Chávez Quezada 1994; Toledo and Zapata 1999).

The dynamism of Monclova in those decades can be illustrated with the city's population growth rates: by 1940 it was a county of about 30 thousand people who were mainly involved in agriculture.[43] The transformation of Monclova into an industrial city also implied a rapid increase of population between 1940 and 1950 (4.70% annual), but the peak of the growth rates was during 1960-1970, when it was 6.99% (Table 3.6).

Since the 1970s, AHMSA has experienced dramatic changes. On the one hand, the Federal Government centralized the management of the firm in 1977. Siderúrgica Mexicana (Sidermex) concentrated the iron and steel producers in the country (AHMSA, Fundidora Monterrey, and Sicartsa), which entailed a political (not technical) administration that centralized commercial, financial, and operational activities (Yáñez-Chávez 1994). In the middle of the 1970s, a radical left-oriented organization (*Línea Proletaria*) took away power from the co-opted "official" leaders and controlled the union. A combination of union pressure and

[43] In the literature about this period authors (Chávez-Quezada 1994; Yáñez-Chávez 1994; and Toledo and Zapata 1999) coincide that Monclova had about 6 000 inhabitants. However, the Census reported about 30 000 (see Table 3.6).

an "absent" authority in the steel plant – - the local director had no power because all decisions were made in Mexico City -- put in danger the existence of AHMSA (Rodríguez and Rueda 1994). The plant director granted concessions to the workers in order to preserve labor peace. But at the beginning of the 1980s there was an excessive number of workers on the payroll, the equipment was in poor condition, the workers organized strikes, "collective absences," assemblies during their working time, or other types of protest (*Ibid*).

However, at this time, a new group of politicians came to power in the Federal Government in Mexico. The series of reforms that eventually changed the economic model also had an impact at the local level. By the middle of the decade, the search of a "healthier" State was underway. The World Bank evaluated the functioning of Sidermex and right afterwards, the dismantlement of this corporation as well as the closure of Fundidora Monterrey were announced. AHMSA would be restructured in order to become competitive and open to the external market (the physical restructuring was financed by the World Bank). From this date, three (out of five) blast furnaces would be shut down, the production of steel and coke (plus electricity, oxygen, and related services) would be reduced. One of the conclusions of this evaluation was that the oversupply of steel in the world would reduce considerably the prices of the product. Thus, a decreasing production would help balance the market (Yáñez-Chávez 1994; Chávez Quezada 1994). This restructuring process implied the layoff of a considerable proportion of workers, but the exact figure was not announced in advance to avoid protests. After 1986 workers faced the constant threat of losing

their jobs. Between that year and 1992 AHMSA's payroll dropped from 17 000 to 8 000[44] (Yáñez-Chávez 1994: 79). In 1991 AHMSA was privatized. The restructuring had been a prerequisite for "offering" the firm on the market (Rueda 1994). Grupo Acerero del Norte (GAN) bought the plant.

The impact on Monclova of what happens to AHMSA has to do with the high dependence of the local and surrounding region's economies on the enterprise. Monclova has no other important firm besides AHMSA.[45] Not only are smaller firms in Monclova kept alive at the expense of AHMSA (as subcontractors), but also some of the surrounding municipalities depend on AHMSA (e.g. the coal producing northern municipalities). Still in 1992 about 37% of the blue-collar workers in the metropolitan area worked in AHMSA and a further 17% in a related firm (Rueda 1994). Before the restructuring process, Monclova was an outstanding municipality due to the high level of well-being of its population (it had the best indicators in the state of Coahuila) (Cárdenas and Redonnet 1990). At the time of the mass layoffs the union could eventually "negotiate a severance pay and horse-traded or served as a clearing-house for job assignments" (Yáñez-Chávez 1994: 166).[46] In Monclova, right after the "readjustment" of workers there was some money circulating, but in 1992 and 1993 a deep recession affected the region. Workers had no experience in business administration and were not advised on how to invest their money. For many of

[44] Workers covered by union contract (those with tenure or *definitividad*) (Yáñez-Chávez 1994).
[45] While carrying out the fieldwork I realized that AHMSA's supremacy in the town is material and symbolic. Not only the economy is contingent upon AHMSA's "health," but also the firm dominates the landscape. From any point around the city the gigantic structure of the firm can be seen.
[46] Some workers targeted for layoffs did not want to leave, while others not on the layoffs lists were attracted by the severance pay (Ibid.).

these ex-AHMSA workers the consequences of burning up the money of years of labor were disastrous (Rueda 1994).

By the end of the 1990s, the economy of Monclova was still mainly dependent on AHMSA. The remaining workers were fewer in number than a decade before (about 6 000), and were still threatened by a possible layoff.[47] In 1998 and 1999 AHMSA faced a serious problem to finance the debt to suppliers and claim a moratorium (*suspensión de pagos*).[48] Its insertion in the global economy has not been very successful despite AHMSA looking for partnerships with international firms. On the other hand, local entrepreneurs have tried to attract national and international capital. However, micro-enterprises and a few *maquiladora* plants seemed the only alternative that the potential workers have. Other regions of the state (e.g. Saltillo-Ramos Arizpe) have been more fortunate in attracting investment.[49]

Aguascalientes. The main characteristic of Aguascalientes' economic development has been the succession of economic sectors (Romo Vázquez 1998). During the ISI period traditional industry and commerce were the key elements. From the 1930s, food and drink processing (wheat, corn, and grapes) became an important activity and the textile industry was an important activity in the following decade. However, despite the location of the state (centrally-located in the country, between two large metropolitan areas, Guadalajara and Monterrey)

[47] Information from the field.
[48] *La Jornada* (May 25, 1999).
[49] Interview with Lic. Jorge W. Williamson, president of the civil association "Promoción y Fomento Económico del Centro de Coahuila". According to Lic. Williamson, the leftist antecedents of AHMSA's union give Monclova a bad reputation with possible investors.

and the availability of roads and railroad, Aguascalientes was not nationally economically important during ISI. According to Romo Vázquez, during the 1950s and 1960s the state was de-industrialized since the relative importance of manufacturing in the state Gross Product diminished. The main reason, he argues, is that capital was attracted to Guadalajara and Monterrey, where industry and the workforce were concentrated (besides Mexico City).

Table 3.6 shows that population growth reflects the degree of industrial dynamism in the three case studies. During the ISI period Aguascalientes is the city with the lowest rates of population growth as compared to Monclova and Mexico City (see for instance the rate between 1940 and 1950). Unlike Monclova and Mexico City, Aguascalientes shows the highest rates of population increase in recent decades.

Even though the Federal Government did not consider Aguascalientes a priority area during the ISI period, an important transformation that took place at the end of the ISI period. At the end of the 1970s (in the midst of the oil boom), a fortunate coincidence of a close relationship between the Governor and the President,[50] plus the felt need of local businessmen to diversify the industrial structure and the willingness at the federal level to stimulate "poles of development", other than the large metropolitan areas, led to drastic changes in the industry of the state (Salmerón 1996).

The three main changes in the productive structure of the state were: a decreasing share of agriculture in the Gross Product, in employment and in

[50] Rodolfo Landeros Gallegos and José López Portillo, respectively (Salmerón 1996).

wages; a growing importance of manufacturing in these three areas; and the consolidation of the tertiary sector (Rojas Nieto 1993). The decreasing participation of agriculture, one of the pillars of the state economy during the ISI period, is due more to the increasing share of manufacturing than to the lack of dynamism of agriculture itself. There was a displacement of some products (grapes) and the consolidation of others (dairy), which were related to the expansion of the city over land formerly used to cultivate grapes, and to the mechanization of production in the case of dairy (*Ibid*; Sifuentes 1994).

The relative growth of manufacture had a two-fold origin. On the one hand, the city attracted large transnational firms (Nissan, Xerox, and Texas Instruments were among the most important). On the other hand, the adaptation of the traditional sectors to the new demands of the market. An example is food processing and another is textiles. The textile industry had been important since the ISI period and, in order to survive, they sought to expand to the national and international market and to change the productive process (via converting themselves into *maquiladora* firms) (Rojas Nieto 1993; Romo Vázquez 2000). Small firms that could not compete disappeared (Salmerón 1996). The consolidation of the tertiary sector was mainly due to support activities for the industrial expansion - –financial services and distribution -- as well as to the public services demanded by a growing and more diverse population. Public investment was crucial in the transformation of the sector (Sifuentes 1994; Martínez Omaña 1994; Salmerón 1996; Bassols Ricardez 1997).

One of the most striking facts of this restructuring process was its timing. Mexico's debt crisis started in 1982, resulting in a deep recession that lasted at least through 1988, but in that period the Aguascalientes economy was booming. For that reason, the recent industrialization of the state has been labeled "the exceptionality of Aguascalientes" (Rojas Nieto 1993; Salmerón 1996; Romo Vázquez 1998). There are various factors that help explain this exceptionality.

First, the conjoint federal and state government's proactive involvement in a competition for attracting direct foreign investments and generating and consolidating export-oriented industrial parks. One of the channels utilized by the Federal Government to stimulate the location of manufacturing outside the three large metropolitan areas at the time (Mexico City, Guadalajara, and Monterrey) was the creation of "industrial parks," mainly during the 1970s (Garza 1992). Aguascalientes was included among the cities that would receive financial support from the center. According to Salmerón (1996), one of the reasons why not all cities included in that federal project were as successful as Aguascalientes was the decisive participation of the local elite in taking advantage of federal backing.

Second, in order to obtain extra-local capital the state and municipal governments have funded an important share (up to 70% and 80%, respectively) to consolidate infrastructure, such as communications and public services (e.g. accessible housing for the labor force). And they have also offered attractive conditions for investment –reasonably cheap land, exemption from certain taxes, and a 'docile' labor force (Sifuentes 1994; Salmerón 1996; Bassols Ricardez

1997; Hernández and Gutiérrez 1999).[51] Eventually the policy of attracting capital was fruitful and the city was able to accumulate public and private investment (Rojas Nieto 1990 and 1993; Romo Vázquez 2000). A third element that also contributed to the local economy's enhancement during the 1980s was that on the Federal Government's initiative Aguascalientes became part of the "experiment" of decentralization. In 1985 the city became the headquarters of the INEGI (National Census Bureau), which meant that 2 500, relatively well-paid employees and their families moved from Mexico City to Aguascalientes (Salmerón 1996; Martínez Omaña 1994).

The rapid transformation of Aguascalientes has had various consequences that are likely to affect the city in the medium and long-run. According to Rojas Nieto (1990 and 1993) and Romo Vázquez (2000), though the accumulation of capital has been an essential injection to stimulate local dynamism, it has also meant the relative decrease in the share of local capital. They argue that the city and state economies have become highly vulnerable to the fluctuations of the international economy.

On the other hand, a positive consequence of the industrial transformation has been the diversification and expansion of the workforce. Labor demand has changed the distribution of the economically active population in the following ways: a considerable reduction in agriculture workforce (mainly due to mechanization of activities); a growing share of workers in manufacturing (both

[51] In the promotion of Aguascalientes as an ideal place to invest, a low-risk of investment was associated, among other elements, with the hard-working nature of the workers and their almost non-existent protests. In the 1980s, the state government proudly publicized the fact that there had not been a strike registered in 30 years (Salmerón 1996; Hernández and Gutiérrez 1999).

in modern and traditional industries); and a rapid increase in services and commerce (Rojas Nieto 1993; Duch 1998).

A parallel process to the rapid industrial transformation has been the changing profile of the population and of the physical layout of the city. The city of Aguascalientes started growing rapidly from the 1970s, but the peak of population growth occurred from 1980 to 1990: 5.7% annually (Table 3.6). Aguascalientes became a magnet that attracted migrants from the surrounding rural areas and from medium-size and large cities (e.g. Mexico City). Migrants were, mostly, economically active and had diverse levels of qualification.

Two consequences of the rapid population growth were an increasing demand for urban infrastructure and a cultural diversification. Contrary to the pattern of urbanization in most Mexican cities, Aguascalientes has had a planned growth. The only experience of land invasion is one neighborhood founded in the second half of the 1970s, but after that the local government has controlled the use of land in the city. Among other measures taken by the government –e.g. location and regulation- it has implemented specific policies to provide relatively accessible land for housing (Sifuentes 1994; Jimenez Huerta 1995; Salmerón 1996; Bassols Ricardez 1997). And last but not least, at the beginning of the 1980s, people from Aguascalientes (*hidrocálidos*) were challenged by the arrival of people from many other places, mainly from Mexico City (the *chilangos)* and foreigners (mainly from Japan and the U.S.) who demanded housing, schools, and entertainment. The *hidrocálidos* did not expect that these strangers would

eventually modify the culture (Herrera Nuño [1989] 1996). That has been the "new" Aguascalientes, a city in rapid transformation.

3.3 DISCUSSION AND CONCLUSIONS

In this chapter my aim has been to depict the changing context of Mexico's industrialization –from the ISI model to the export-oriented model- and some of the repercussions at the local level. I have also discussed the selection of the case studies and the particularities of each city during these two phases of Mexican industrialization.

Neoclassical economic theory maintains that in a country with an abundant labor supply, such as Mexico, creating industrial jobs through economic liberalization and export production would bring about a trend toward greater equality (Alarcón and McKinley 1998). Dussel (1995) argues that since the 1980s the Mexican State's has assumed that three variables exogenous to structural change —abating inflation, controlling spending deficits, and attracting foreign capital— would transform microeconomic and sectorial structures. However, as this chapter has shown, the outcomes have not been as optimistic as the theoretical postulates would suggest (*Ibid*; Cortés 2000).

An example is the level of urban poverty throughout the 1990s. In the middle of that decade Mexico, faced the deepest crisis ever, in which international backing was essential for recuperation. However, while macroeconomic indicators recovered fairly quickly, household economies did not share in that well-being. I adopt the hypothesis proposed by Escobar (1996) to explain why

poverty increased in the eighties despite recovery after economic crisis to explain the same phenomenon in the nineties. Escobar suggests that poverty increases even while indicators such as the GDP recover because of a long-term trend in which real wages and labor's share of total national income have both fallen. According to this explanation, declining wages is the most important factor, and economic stagnation takes a back seat. The same dynamic can be observed in the nineties, although the decline in income was even more severe.

Macroeconomic changes during recent decades have also implied a territorial reconfiguration of "centers and peripheries" (Sassen 1994). Internal disparities in the country were analyzed in this chapter at both the regional and local level. The role of regions has changed in recent decades –mainly as a result of the de-industrialization and decreasing concentration of the GNP in the Capital region (Aguilar and Graizbord 1995; Alegría et al. 1997; Hiernaux 1998; Aguayo and Salas 2002). Though the definition of regions as groups of adjacent states is a useful tool, I argue that such a grouping of relative economic importance can hide intra-state differentials. I selected three cities –Mexico City, Monclova, and Aguascalientes- as my case studies for the analysis of social vulnerability. A common characteristic of the three cities is that they have been the locus where the Federal Government –in the cases of Mexico City and Monclova- or together with local elites –as in Aguascalientes- have changed the path of the city's industrialization.

The three case studies involve cities with different historical trajectories. Given the still overwhelming weight of Mexico City's economy, it has been able

to adapt and participate in the global economy. Monclova and Aguascalientes are more "prototypical" cases, linked to a specific model of industrialization. The former city flourished during the ISI period and has not quite fitted into the external market in recent decades. Aguascalientes, on the contrary, took off at a time when the country was amidst the debt crisis in the 1980s, and has been a very successful example of export-oriented industrialization.

The industrialization models (ISI and EOI) have changed their inhabitants' way of life. The specific contexts of Mexico City, Monclova, and Aguascalientes are the frame in which households meet –or try to meet- their particular needs. So far, this account has offered a general sense of what macroeconomic changes mean for the cities economic dynamism (for instance, regarding industrial structure and population growth). However, it is now necessary to look more specifically at how households of different types fare under the changing conditions. The question is whether a local economy relatively more dynamic its poorer inhabitants are better off than those in a fading economy. I aim to elucidate that in the following chapters.

PART II: HOUSEHOLD'S ASSET PORTFOLIO AND SOCIAL VULNERABILITY IN THREE MEXICAN CITIES: A QUANTITATIVE APPROACH

Chapter 4: Demographics of Poor Households in Mexico City, Aguascalientes, and Monclova: A Descriptive Survey

Household resources that help families face economic difficulties are diverse. Following the theoretical discussion presented in Chapter 2 on the availability of assets and according to Moser (1996), the main individual and household resources are: labor, human capital, productive assets, household relations, and social networks[52]. ENEU, the main source of information used in this analysis, does not provide data on all those aspects, but it allows us to construct indicators to assess the determinants of vulnerability to poverty. The quantitative approach offered by this and the next two chapters, will be complemented by the qualitative information in Part III.

The aim of this chapter is to identify those demographic components that help explain the persistence of poverty in urban households. I explore some household attributes that are associated with poverty. But beyond such an association, the question relies on the underlying demographic factors that locate families in differential positions while facing economic instability, and which, in the long term, create structural conditions that do not allow the least favored to overcome poverty.

[52] Social networks as a household asset will not be explored in the quantitative chapters, but in Part III (the qualitative analysis).

The perspective will be cross-sectional and descriptive, focused on three cities and on three moments during the 1990s. The cities are Monclova, Aguascalientes and Mexico City. The rationale of this selection, as developed in Chapter 3, responds to the diverse role played by each one in the current industrial structure of Mexico. A closer look at the urban system of the country reveals on the one hand two medium size industrial cities with contrasting economic experience: Monclova represents a very successful case of industrialization through the import substituting model that, nonetheless, has stagnated in the new configuration of the global economy. Aguascalientes is the up and coming city in the redefined internal economy of Mexico brought by the new industrial model oriented to the external market. Mexico City is the largest metropolitan area that is characterized by a process of de-industrialization and the increasing predominance of the tertiary sector. These three cities enable us to compare the impact of their changing industrial structures on poverty. The quantitative analysis focuses on three periods: the year in which Monclova was first included in ENEU (1993), 1996, because it was the economically most difficult year of the decade, and 2000, the most recent ENEU information. In macro economic terms, both 1993 and 2000 were relatively more stable than 1996.

Part II of the quantitative analysis, is organized in a stepwise fashion. Chapter 5 will focus on the relationship between labor and household poverty. Both chapters 4 and 5 provide a general description of the household resources that might or might not help a family solve economic difficulties. Chapter 6 will

assess the risk of facing poverty from both a cross-sectional and a longitudinal perspective.

The indicators presented in the three chapters are grounded in the "asset vulnerability approach" discussed in Chapter 2. However, the literature using that perspective (i.e. Moser 1996; González de la Rocha 2000) does not operationalize the household resources portfolio in ways that can easily be adapted to a quantitative analysis[53]. Therefore, I adjust some of the indicators used in those studies and suggest additional ones to separate the pool of household assets.

4.1 HOUSEHOLD DEMOGRAPHICS

In Moser (1998)'s theoretical framework, "household relations" is a concept that embraces both the household structure and its internal dynamics. Such a concept is not, *per se,* measurable, but according to the author household structure, composition, and family cohesion determine members' ability to adjust to changes in the external environment. Household internal dynamics will be more thoroughly approached in Part III, the qualitative analysis, and in this section I will utilize household demographics as a proxy for household relations. I will divide household demographics in two quantifiable components: demographic attributes and the household economic burden.

[53] Mainly because such studies are ethnographic.

In the following table I display the household sample size for each city in the three corresponding periods.[54]

Table 4.1: Household Sample Size for Mexico City, Aguascalientes and Monclova

Data / City ***Not weighted***	***1993***	***1996***	***2000***
Mexico City	4 218	3 707	4 453
Aguascalientes	1 518	1 505	1 895
Monclova	1 648	1 645	2 034
Total	7 384	6 857	8 382
Weighted			
Mexico City	2 851 754	3 026 189	3 686 123
Aguascalientes	76 513	87 233	125 742
Monclova	54 747	63 864	59 742
Total	2 983 014	3 177 286	3 871 804

Source: Mexican Urban Employment Survey (ENEU). Second quarter of each year

4.2.1 Demographic Structure

The poverty of urban households is closely related to their demographic characteristics and to the life cycle (Roberts, 1989; Hareven 1990; Selby et al., 1990; González de la Rocha 1994). I will focus on age and gender of the head of household, family size and structure, as well as children's ages.

The proportions of households headed by a woman have increased throughout the decade in the three urban sites. In Mexico City, for instance, in 2000 such households represented about a fifth of the total; in Monclova, the

[54] Most of the calculations will be done with weighted data.

proportion was smaller (15.1 percent), but has increased as well. In keeping with Boltvinik's (1996 and 1999) findings, female-headed households are under represented amongst those living in poverty. In the three cities the share of poor households headed by a woman is smaller than the proportion of households headed by men. During the decade, these proportions have kept increasing in the three cities. Female-headed households are now more frequent and their probability of facing poverty is higher.

In Table 4.2 the proportions of poor households within each category of age and gender of the head are included.

Table 4.2: Shares of Poor Households within each Gender and Age Category in Mexico City, Aguascalientes and Monclova during the 1990s (%)

	1993		***1996***		***2000***	
Mexico City *Head's Age*	Male	Female	Male	Female	Male	Female
15-24	44.9	23.8	63.1	37.5	53.4	31.4
25-40	48.9	37.7	59.9	62.8	53.7	46.7
41-60	43.9	41.7	59.3	46.9	49.0	44.1
61+	45.4	44.6	60.7	55.4	52.8	47.9
Aguascalientes *Head's Age*						
15-24	35.4	0.0	54.2	33.7	33.6	24.1
25-40	44.5	34.1	59.9	63.9	44.5	37.7
41-60	46.6	34.2	63.9	63.2	43.5	42.7
61+	48.3	39.0	63.8	68.0	50.0	71.1
Monclova *Head's Age*						
15-24	54.8	0.0	61.9	22.2	31.7	26.0
25-40	52.6	52.7	59.6	72.1	51.4	65.1
41-60	56.8	61.8	62.7	67.5	43.0	52.2
61+	67.5	48.2	68.7	67.9	63.6	53.2

Note: Calculations done with weighted data
Source: Mexican Urban Employment Survey (ENEU). Second quarter of each year

Vulnerability to poverty varies throughout the decade and between cities according to the age and gender of the head of household (Table 4.2). Among male-headed households from Mexico City, except for 1996, the two groups most affected by poverty were those headed by someone whose age is 25 to 40 years old and those headed by the elderly. In 1996, the two extremes in the age structure (heads aged 15 to 24 and 61 and above) were the groups most threatened by the risk of facing poverty. Within female-headed domestic units those headed by the eldest seem to constantly face the risk of poverty, with some variations for the other age groups. For instance in 1996 and 2000 households led by a woman aged 25 to 40 have a higher probability of being poor. In 2000 there were more poor households than in 1993 for both male and female heads in all age groups, possibly as a sequel of the mid-decade crisis.

Aguascalientes offers another picture. In the three observed periods, for both male and female heads, households seem to experience the risk of poverty more frequently when the head is older. The pattern is consistent throughout the decade. Male-headed households seem to have recovered from the high levels of poverty registered in 1996 and only amongst the elderly was there a higher proportion of poor households at the end of the decade than in 1993. However, in the group of female heads, every age category had higher proportions of poor households in 2000 than in the first half of the decade. In 2000 there was a considerable recovery for both male and female household heads. However, female heads –mainly the oldest- are far worse off than they were in 1993.

Monclova's pattern is less consistent. Within male-headed households, those whose head was 61 or older were more frequently in deprivation throughout the decade as compared to the other age groups. Among female heads, on the other hand, for those whose age was 41 to 60 in 1993, poverty was more recurrent. In 1996 and 2000, those households headed by someone who was 25-40 years old were more frequently struck by poverty. As in the case of Aguascalientes, male-headed households in Monclova recover by 2000 to such an extent that they had lower proportions of poverty than in 1993. In contrast, female-headed households suffer poverty in higher proportions in 2000 than in 1993, except for those aged 41 to 60. During the nineties Monclova showed the highest poverty levels when compared to the other two cities for both male and female heads aged 25 and above.

For a general association of household poverty and age in the population, ENEU information shows that in the three cities those aged below 6 and those between 6 and 14 years old seem more likely to suffer poverty than the grown ups[55]. Poverty prevalence is even more accentuated among those in the age group 6 to 14. These findings also support those reported elsewhere regarding the close relationship of deprivation and the early stages of family formation in Mexico (Selby, Murphy and Lorenzen 1990; González de la Rocha 1994). Nonetheless, this picture of higher frequency of poverty during childhood and early

[55] Boltvinik (1999) states that the biggest volume of poor people is found amongst the adult population, which is true because the bulk of Mexican population is adult. In this analysis, however, I observe the shares of poor population within age group and the frequency is higher at early ages than in each of the adult age groups. This may mean that those households with youngsters are likely to live in poverty due partially because of the economic dependency implied by raising them.

adolescence is not an unique characteristic of the Mexican case (see SIEMPRO (2001) about the Argentine case).

Household living arrangements are likely to be important for facing economic difficulties because they create the potential of placing extra labor in the labor market.

Table 4.3: General Distribution of the Domestic Unit Structure and Poor Households *within* each Category in Mexico City, Aguascalientes and Monclova during the 1990s (%)

Mexico City	***1993***		***1996***		***2000***	
Domestic Unit Structure	General	Poor	General	Poor	General	Poor
One person	3.9	6.9	3.7	17.5	4.2	10.5
Couple, no children	4.7	22.0	5.9	29.2	6.0	21.8
Couple + children	59.0	49.8	56.0	63.3	57.5	56.8
Single parent + children	7.4	43.0	8.7	54.8	9.5	46.6
Extended family	22.2	48.4	23.0	63.9	20.0	51.8
Non-family related	2.8	30.9	2.6	40.1	2.7	34.9
Total	100	45.5	100	58.4	100	50.2
Aguascalientes						
Domestic Unit Structure						
One person	2.7	4.4	2.9	35.1	3.9	16.8
Couple, no children	4.6	16.0	5.4	28.1	6.3	25.0
Couple + children	63.0	46.5	62.3	64.5	65.2	44.7
Single parent + children	6.7	31.0	9.6	60.8	7.1	43.7
Extended family	20.3	51.0	17.6	67.4	15.8	57.8
Non-family related	2.7	27.9	2.3	48.1	1.7	39.7
Total	100	43.3	100	61.5	100	44.3
Monclova						
Domestic Unit Structure						
One person	2.7	26.2	4.4	26.9	3.8	25.1
Couple, no children	6.4	31.3	8.0	43.9	7.7	36.3
Couple + children	68.0	55.8	65.6	63.2	66.3	48.7
Single parent + children	4.5	64.3	5.9	71.3	7.5	55.0
Extended family	16.8	63.5	15.0	75.6	14.1	61.2
Non-family related	1.6	39.5	1.1	51.6	0.7	31.1
Total	100	54.9	100	62.3	100	48.8

Note: Calculations done with weighted data
Source: Mexican Urban Employment Survey (ENEU). Second quarter of each year

Table 4.3 shows that despite the predominance of the nuclear family – couple plus children- and the extended family, other household arrangements are becoming more important, such as the one-person domestic units, those where the couple lives alone, those headed by one parent (usually women), and other non-blood related households. Not surprisingly, the largest and most heterogeneous city, Mexico City, shows the highest proportions of these emergent living arrangements.

Those household living arrangements where poverty is more recurrent are the nuclear family, extended families, and those headed by one parent –this evidence also corresponds to what has been found in other studies (Boltvinik 1996 and 1999). Single person, couple and unrelated person households are likely to have lower ratios of economic dependency and thus of poverty.

There is some variation between cities. For instance, in Mexico City the highest proportions of poor households are found among nuclear families, whereas in Aguascalientes and Monclova, extended families are the most affected. In the three cities during the mid-decade crisis all family structures were struck by deprivation. Practically none of these household groupings have been able to recover the above poverty levels they had in 1993. Only in Monclova are poverty levels lower in 2000 than in 1993.

In the three cities, poverty is associated with larger households, and at every household head age level. Note that household size declines between 1993 and 2000 in Mexico City and Aguascalientes, but not as sharply in Monclova.

Table 4.4: Average Number of Members among Poor and Non-poor Families by Head of the Household's Age in Mexico City, Aguascalientes and Monclova during the 1990s**.**

Mexico City	***1993***		***1996***		***2000***	
	Average	Members	Average	Members	Average	Members
Head's Age	*Poor*	*Non-poor*	*Poor*	*Non-poor*	*Poor*	*Non-poor*
15-24	3.9	2.7	3.6	2.4	3.5	2.6
25-40	4.9	3.8	4.7	3.4	4.6	3.4
41-60	5.7	4.7	5.3	4.0	4.9	3.9
61+	4.9	4.3	4.6	3.7	4.3	3.5
Total	**5.1**	**4.1**	**4.9**	**3.7**	**4.6**	**3.6**
Aguascalientes Head's Age						
15-24	3.8	3.1	3.9	2.9	3.8	2.6
25-40	5.6	4.0	5.4	3.7	5.1	3.9
41-60	7.0	5.4	5.8	4.3	5.5	4.4
61+	5.3	4.4	4.9	4.0	4.1	3.9
Total	**6.0**	**4.5**	**5.5**	**3.9**	**5.1**	**4.0**
Monclova Head's Age						
15-24	3.7	2.9	3.5	2.6	3.7	2.8
25-40	5.0	3.9	4.8	3.7	4.7	3.8
41-60	5.5	4.4	4.9	3.9	4.7	3.9
61+	4.0	3.5	3.7	3.2	3.7	3.4
Total	**5.0**	**4.0**	**4.6**	**3.7**	**4.5**	**3.8**

Source: Mexican Urban Employment Survey (ENEU). Second quarter of each year

The data show that in Mexico City and Aguascalientes every size category of household has more poverty in 2000 than in 1993. Since Monclova started the decade amidst a serious crisis, in 1993 the proportions of poor families were higher there than in the other cities in all age categories. By 2000, poverty levels in Monclova were lower among households of all size categories than they were in 1993, but still higher than in the other two cities

4.1.2 Household Economic Burden

In this section, the household economic burden is approached through dependency ratios and the contributions to household income by each member. The household dependency ratio (those members not engaged in the labor force relative to those who do participate) is based on the premise that "a higher dependency ratio implies relatively fewer workers and that greater resources must be diverted to the consumption of non-producing groups" (Clark and Spengler 1980: 63).[56]

[56] At the household level, these dependency ratios can be interpreted as the number of consumers relative to the number of producers. Thus, if all members of the household work the ratio will be 1, and so on. The age-specific dependency ratio means that all members of an age group not working were divided by the total number of those in the labor; and the total ratio at the household is the summation of the partial or age-specific ratios.

Table 4.5: Average Economic Dependency Ratio among Poor and Non-Poor Households by Age Groups of Dependents, Mexico City, Aguascalientes and Monclova during the 1990s

Mexico City	*Poor Households*				*Non-Poor Households*			
Year	Kids	Adults	Elderly	Total	Kids	Adults	Elderly	Total
1993	.324	.270	.031	.625	.190	.174	.025	.390
1996	.295	.278	.038	.612	.169	.224	.034	.427
2000	.298	.297	.033	.629	.149	.191	.030	.370
Aguascalientes	Kids	Adults	Elderly	Total	Kids	Adults	Elderly	Total
1993	.351	.244	.038	.633	.211	.179	.024	.414
1996	.334	.278	.047	.660	.199	.203	.028	.430
2000	.352	.277	.056	.685	.209	.183	.021	.413
Monclova	Kids	Adults	Elderly	Total	Kids	Adults	Elderly	Total
1993	.315	.238	.023	.577	.215	.178	.017	.410
1996	.310	.251	.038	.598	.218	.221	.025	.463
2000	.324	.282	.046	.651	.205	.214	.021	.441

Note: Kids= 0 to 14 years old; adults= 15 to 64; elderly= 65 and above
Source: Mexican Urban Employment Survey (ENEU). Second quarter of each year

Table 4.5 shows that in the three cities and throughout the decade poor households have higher dependency ratios than the non-poor ones. Only a third part of members of poor households are economic producers, whereas among the non-poor the proportion is approximately 60%. The biggest differences seem to be contributed by the kids group[57], although other age groups also contribute to the gap. In Mexico City the largest differences between poor and non-poor households appear both in kids and adults. The elderly dependents' (65 and

[57] ENEU questions on the labor participation do not apply to those below 12 years old. Therefore, all of them are defined in the survey as economically inactive. The category "dependent kids" used here include those younger than 12 plus those aged 12, 13 and 14 not participating in the labor force.

above) figures suggest a comparable burden. Aguascalientes is similar to Mexico City regarding kids and adults, but the difference between poor and non-poor households in relation to elderly dependents is larger in Aguascalientes. Monclova has a smaller gap in the three groups of dependents between poor and non-poor families, but the dependency ratios are higher among poor families.

Information from Table 4.5 contradicts what I expected in two ways. First, adults' dependency did not decrease during the mid-decade crisis, whereas I assumed that households would allocate members to the labor force in difficult moments resulting in lower adult economic dependency. On the other hand, the general trend in reduction of family size and population ageing suggested that I would find a reduction of kids and adults dependency ratios and an increasing economic burden of the elderly throughout the decade. However, Table 4.5 does not show evidence in that direction –increasing dependency ratios of the elderly are only observed among poor families in Aguascalientes and Monclova. The total dependency ratio increased in the three cities among poor households and, within the non-poor, it decreased only in Mexico City.

Sample data (not shown here) indicates that the youngest headed households, those aged 15 to 24, but mainly those between 25 and 40 have the highest dependency ratios. Those heads aged 61 and over have also high dependency ratios. Therefore, households headed by someone aged between 41 and 60 seem to have the least economic dependency of all head's age groups.

These data suggest a combined effect of fertility transition and the natural maturation in the life cycle. Those heads under 40 are at the peak of their

reproductive life and therefore are raising children, which explains why they have high dependency ratios and a relatively high likelihood of facing poverty. The elderly, on the other hand, did not realize the fertility transition (which started during the seventies) and also have high economic dependency. Consequently, those heads aged 41 to 60 seem to be the best allocated in the life span: they may have purposely reduced their family size –since they were exposed to family planning information and methods. They are also in the consolidation phase in the family life cycle given that the reproduction phase may have finished for them. As González de la Rocha (1994) shows, during this stage of the family life cycle, some members of the household are old enough to participate in the labor force or may leave (leading the household towards the dispersion phase), which will in any case result in a lower economic dependency ratio.

The economic burden within the household can also be approached through the individual participation in the pooled income. Household income will depend on the number of earners (that in itself depends on family size and the life cycle stage), the income each person can make out of their labor, and household criteria for pooling such an income. ENEU does not provide information regarding power relations inside the domestic unit, but provides data on the contribution of household members to the common income[58]. What is important here are the amount and the diversification of income sources a domestic unit has. Thus, the lower the number of people contributing to the pooled revenues, the higher the vulnerability of a household to labor market instability.

[58] It is worth pointing out that those unpaid (family or not family) workers also collaborate to the family economy, but their contribution cannot be taken into account in this assessment since it is based only on actual incomes.

Table 4.6a shows the fractions of household income that depend on the head's earnings. As would be expected, the main provider of economic resources is the head of the household, although his participation in the pooled income shows differences between cities and between poor and non-poor households.

This information suggests that the classic pattern of the head of the household as the unique breadwinner (providing 75 to 100% of total income) is more predominant among poor domestic units than among those not deprived. On average, above two thirds of poor households' income is determined by the heads' in the three cities and in the three moments (average of the three years by city, 67.5% in Mexico City, 64.9% in Aguascalientes, and 68.1% in Monclova), whereas such figures in their non-poor counterparts are 46.1%, 46.4%, and 55.2%, respectively. In general, Aguascalientes seems to be the city with least dependency upon the heads' earnings and Monclova to have the most.

Table 4.6a: Share of Household Income coming from the Head's Earnings among Poor and Non-Poor Families, Mexico City, Aguascalientes and Monclova during the 1990s (%)

Mexico City	*Poor Households*				*Non-Poor Households*			
Year / Fraction	<25	25-49	50-74	75-100	<25	25-49	50-74	75-100
1993	2.6	10.5	14.5	72.5	7.1	20.9	23.9	48.1
1996	3.8	14.5	18.2	63.5	5.5	19.1	27.0	48.4
2000	2.7	13.2	17.8	66.4	7.2	21.2	29.9	41.7
Aguascalientes	<25	25-49	50-74	75-100	<25	25-49	50-74	75-100
1993	3.5	10.9	18.1	67.4	9.2	17.2	24.3	49.4
1996	5.4	17.4	16.8	60.4	4.4	22.8	27.4	45.4
2000	4.2	13.1	15.8	66.9	8.1	18.4	29.1	44.4
Monclova	<25	25-49	50-74	75-100	<25	25-49	50-74	75-100
1993	6.2	9.6	12.4	71.8	4.5	13.3	23.9	58.3
1996	5.9	13.4	15.4	65.2	4.2	15.5	28.5	56.8
2000	3.0	11.8	17.9	67.4	5.1	17.6	26.9	50.5

Note: Calculations done with weighted data
Source: Mexican Urban Employment Survey (ENEU). Second quarter of each year

The heads reduce their participation as the main provider in the household during the mid-decade crisis among poor households in the three cities and in Aguascalientes and Monclova amongst the non-poor. Such a decrease is more accentuated amid poor households in the three cities. In 1996, heads' participation in the pooled income in Mexico City did not decrease, in Monclova it is slightly different, and Aguascalientes shows the biggest change amongst non-poor households. These adjustments of heads' participation in the household pooled income may indicate that the heads of non-poor households have more stable earnings than their poor counterparts.

Table 4.6b: Household Income Share Coming from the Spouse's Earnings among Poor and Non-Poor Families, Mexico City, Aguascalientes and Monclova during the 1990s (%)

Mexico City	*Poor Households*				*Non-Poor Households*			
Year / Fraction	<25	25-49	50-74	75-100	<25	25-49	50-74	75-100
1993	19.2	38.6	18.7	23.5	22.7	46.5	26.2	4.7
1996	25.9	41.8	15.7	16.6	20.9	46.3	28.0	4.9
2000	24.2	45.3	15.8	14.7	22.7	52.0	21.4	3.9
Aguascalientes	<25	25-49	50-74	75-100	<25	25-49	50-74	75-100
1993	29.6	34.5	12.3	23.7	24.0	52.9	18.6	4.5
1996	26.4	50.7	8.5	14.5	20.2	42.8	32.4	4.6
2000	30.1	38.9	13.1	17.9	22.7	52.8	21.7	2.8
Monclova	<25	25-49	50-74	75-100	<25	25-49	50-74	75-100
1993	43.0	30.2	10.6	16.1	31.0	42.3	21.7	5.1
1996	47.2	30.3	11.9	10.7	32.1	41.7	23.2	3.0
2000	40.6	42.1	13.7	3.6	35.5	40.4	20.9	3.2

Note: Calculations done with weighted data
Source: Mexican Urban Employment Survey (ENEU). Second quarter of each year

Spouses' participation in household income also offers some interesting insights. At a first glance, Table 4.6b suggests that more poor households obtain the bulk (75 to 100%) of their income from spouse's earnings than the non-poor ones. Nonetheless, within poor households too, there are also high proportions where the spouse contributes a small part of the total household income. On the other hand, even though only a few spouses in non-poor households contribute the bulk of household's revenues, their participation mostly concentrates in the interval 25 to 49% of total income. This panorama suggests that within poor households the spouses have an "extreme" participation in pooled income in the sense that they either contribute with the bulk or with a rather small part of the

total household revenues, while within non poor households there are more members pooling their income.

Within poor households a higher proportion of spouses collaborate with a small part (less than 25%) of total income in Aguascalientes and Monclova than in Mexico City. Monclova seems to be the city where spouse's contribution is the smallest share of household income either in poor or not poor units when compared to the other two cities, which reflects the importance of the breadwinner role described above for this city.

Table 4.6c: Household Income Share Coming from the Children's Earnings among Poor and Non-Poor Families, Mexico City, Aguascalientes and Monclova during the 1990s (%)

Mexico City	*Poor Households*				*Non-Poor Households*			
Year / Fraction	<25	25-49	50-74	75-100	<25	25-49	50-74	75-100
1993	8.4	32.7	31.9	27.0	14.7	32.9	36.9	15.5
1996	9.1	36.0	28.8	26.2	18.9	30.8	30.4	19.9
2000	9.4	35.4	32.1	23.1	16.0	32.4	36.8	14.8
Aguascalientes	<25	25-49	50-74	75-100	<25	25-49	50-74	75-100
1993	11.8	40.4	26.3	21.6	16.2	28.8	35.6	19.4
1996	8.0	32.9	38.9	20.3	19.2	39.1	27.5	14.2
2000	4.8	33.6	38.4	23.2	21.2	31.4	31.2	16.3
Monclova	<25	25-49	50-74	75-100	<25	25-49	50-74	75-100
1993	14.9	30.9	30.5	23.8	22.9	44.1	21.1	11.9
1996	24.0	30.8	29.4	15.7	37.3	24.1	28.0	10.7
2000	17.8	43.8	27.6	10.8	25.5	38.9	25.3	10.4

Note: Calculations done with weighted data
Source: Mexican Urban Employment Survey (ENEU). Second quarter of each year

This information shows that as in the case of spouses, there are more poor households that depend mainly (above 75% of total income) on children's earnings when compared to non-poor units. However, within the latter, the corresponding figures are higher in this case than those found for spouses. Therefore, children as assets are important for households, whether poor or not.

On average, poor households seem to rely more frequently on children as the main providers (above 75% of household income) in Mexico City (25.4%) than elsewhere (21.7% in Aguascalientes and 16.8% in Monclova). Amongst non-poor units, such proportions are 16.7% in Mexico City, 16.6% in Aguascalientes, and 11.0% in Monclova. In the latter city, the fact that children contribute less than in the other two cities in both poor and non-poor households also supports -as in the case of spouses- the suggestion that heads are more likely to be the main breadwinners in Monclova. In the other two cities, there are lower proportions of children participating with less than 25% of household revenues in poor households in comparison with non-poor households.

Family life cycle information, that was not included in the tables, suggests that the younger the household -based on head's age-, the more dependent it is on the head as the main provider. This trend is more accentuated among poor households. This evidence plus that shown in Tables 4.6a, b and c indicate that household income is more evenly distributed between members in non-poor units than in the poor ones because, according to information on dependency ratios, non-poor households seem to have more resources allocated to labor. In poor households, the economic burden rests either on the shoulders of a specific

member or on fewer members of the household. A hypothesis derived from this body of data is that poor families face either one of the following two problems: lack of assets (members such as spouse or children available to participate in the labor force) or the meager level of income obtained by those who labor. Both issues will be tackled below.

4.2 HUMAN CAPITAL

Human capital is analyzed here as a quality that differentiates the labor force and provides access to personal and social benefits (Bracho 2000). This section is mainly focused on education[59].

Table 4.7 shows that Mexico City has the highest average education of those aged 12 and above in 1993 and in 2000 as compared to the other two cities and to other urban areas throughout the country. Even though Monclova had higher educational levels than Aguascalientes in 1993, the latter seems to have improved the educational profile of its population during the decade at a faster pace –the average education in the total population of Aguascalientes increased 1.1 years, whereas in Mexico City and Monclova, the average gained 0.7 and 0.9 years, respectively.

[59] ENEU is rather a limited source for human capital. It does not provide information about in-the-job training, experience in the labor market or health situation. I attempted to create the indicator "experience" by subtracting 12 (age at which an individual can potentially be part of the economically active population as defined by the ENEU) to actual age. However, given the high correlation between both age and experience, I decided not to include the latter in this analysis.

Table 4.7: Average Education by Poverty Situation in Mexico City, Aguascalientes and Monclova, 1993 and 2000

	Years of Schooling ***1993***			*Years of Schooling* ***2000***		
City	Total	Poor	Non-poor	Total	Poor	Non-poor
Mexico City	8.4	7.6	9.2	9.1	8.0	10.2
Aguascalientes	7.6	6.7	8.5	8.7	7.4	9.9
Monclova	7.8	7.1	8.9	8.7	7.8	9.7
Urban Areas [b/]	8.2	7.3	9.0	8.9	7.8	9.7

Note: Average years of schooling for population 12 and above; the category "urban areas" corresponds to 16 cities comparable throughout this period
Source: Mexican Urban Employment Survey (ENEU). Second quarter of each year

In 1993 the gap between poor and non-poor in Mexico City was narrower than in the other two cities, since in the former it was 1.6 years in 1993, whereas in Monclova and Aguascalientes it reached 1.8 years. However, by the end of the decade the disparity in mean schooling apparently increased in the three cities: Monclova showed the smallest difference (1.9 years), in Mexico City it was 2.2 years, while in Aguascalientes the gap was 2.5 years of schooling.

Table 4.8: Average Education by Kinship among Poor and Non-poor Households in Mexico City, Aguascalientes and Monclova, 1993 and 2000

1993	*Poor*			*Non-poor*		
City	Head	Spouse	Children	Head	Spouse	Children
Mexico City	6.9	6.4	8.5	9.4	8.5	9.8
Aguascalientes	5.8	5.5	7.5	9.0	8.2	8.9
Monclova	6.3	6.2	7.9	9.6	8.8	9.3
2000						
City						
Mexico City	7.6	7.1	8.9	10.7	10.0	10.7
Aguascalientes	6.9	6.9	7.9	10.8	10.2	9.8
Monclova	7.1	7.2	8.5	9.9	9.5	9.9

Note: Average years of schooling; children aged 12 and above
Source: Mexican Urban Employment Survey (ENEU). Second quarter of each year

Human capital available within poor and non-poor households according to kinship is displayed next. The distance in mean education of members of households living in poverty relative to those who are not deprived, suggests the importance of human capital as an asset (Table 4.8).

In the three cities, irrespective of status within the domestic unit –head, spouse or child-[60], members of poor households possessed lower levels of mean education than their non-poor counterparts, both in 1993 and at the end of the decade.

Except for poor households in Aguascalientes at the end of the decade, in all cases spouses tend to have slightly lower schooling levels than heads, either in

[60] Corresponding information for other members of the household (ascendant or descendant relatives) was also analyzed. Differences in mean education between those living in poor and non-poor households do exist, but were not shown for the sake of space. Thus, data displayed in Table 5.8 do not only relate to nuclear families, but to any family structure.

poor or non-poor domestic units. On the other hand, in 1993 and 2000 children in poor households have higher education levels than their parents, but that is not the case in the non-poor households. Nonetheless children in non-poor units have reached better educational levels than their poor counterparts.

It is worth noting that children in poor households are doubly disadvantaged. First, the likelihood of reaching middle or high level education is lower because it is hard for parents to keep their children aged 12 and over matriculated (Reimers 2000). Second, the "value" of their education as an asset will not be high enough to compete for a well-paid position in the labor market and, therefore, it will be more difficult to overcome poverty.

Table 4.9: General Distribution of Head's Education and Poor Households within Level in Mexico City, Aguascalientes and Monclova during the 1990s (%)

Mexico City	***1993***		***1996***		***2000***	
Head's Education	General	*Poor*	General	*Poor*	General	*Poor*
Less than 6	21.5	55.9	18.6	76.8	17.2	65.4
6 – 9	45.6	55.1	45.1	70.3	45.1	61.1
10 – 12	16.0	35.5	16.9	48.3	17.6	43.6
13 and more	16.9	17.2	19.4	25.4	20.1	20.8
Total	100	45.7	100	59.0	100	50.7
Aguascalientes						
Head's Education						
Less than 6	28.3	58.1	27.3	81.9	20.8	66.8
6 – 9	42.8	51.6	45.5	69.4	40.8	52.9
10 – 12	12.7	26.5	12.5	40.8	15.8	35.0
13 and more	16.2	13.4	14.7	21.0	22.6	16.5
Total	100	44.1	100	62.1	100	44.7
Monclova						
Head's Education						
Less than 6	23.9	71.7	22.1	78.4	17.7	66.3
6 – 9	47.0	64.2	49.1	72.0	49.4	56.4
10 – 12	15.6	41.5	13.9	48.1	17.8	38.4
13 and more	13.5	15.5	14.9	23.1	15.1	17.1
Total	100	55.9	100	62.8	100	49.0

Note: Average years of schooling; calculations done with weighted data
Source: Mexican Urban Employment Survey (ENEU). Second quarter of each year

Table 4.9 suggests a gradual decrease of households where the head did not accomplish basic education in the three cities during the 1990s. Aguascalientes, which had the highest share of households in that situation, seems to have had the fastest decrease, mainly in recent years. Mexico City was the site with the lowest proportion of household heads with less than primary school in 1993 and 2000. Monclova has occupied an intermediate place.

The decrease in the proportions of households whose heads reached basic education implies a concentration in higher levels, but each city offers a different profile. For instance, Mexico City remained fairly stable in relation to those households with heads who achieved up to secondary school (up to 9 years) and showed a slight increase in high school (10 to 12 years) –or equivalent number of years if obtaining a technician's qualification after secondary school. In that city the share of heads that attended college and graduate school increased the most between 1993 and 2000.

In Monclova the proportion of those heads whose educational achievement was up to secondary school increased between 1993 and 1996, but remained stable afterwards. The share of those who reached high school or equivalent and the ones who attended higher education increased as well. In this city, the figures of heads that reached one of the three levels after primary school –secondary, high school, college and above- apparently increased at a similar pace between 1993 and the end of the decade. However, out of the three cities under study, in 2000 Monclova was the case with the lowest proportions of heads that achieved higher education (15.1%).

Echoing the information displayed in Table 4.9, Aguascalientes is the outstanding case with the fastest change towards a profile of more highly qualified household heads. However, judging by the distribution of head of the household's education, it seems that Aguascalientes has a more polarized situation than the other two cities because it shows the highest proportions in both extremes of the educational structure. This characteristic suggests that

employment opportunities may be rather unequal, based on the educational profile of the head of the household.

The other facet offered by this table is poverty within education levels. There is a pattern observed in the three cities: the lower the head of the household's educational level, the higher the proportion of those living in poverty. This corresponds to what would be expected (Boltvinik 1994 and 1999; Reimers 2000; Bracho 2000).

It is worth highlighting three additional elements suggested by this data. First, during the mid-decade crisis, regardless of the head of the household's mean education, domestic units in all categories became more susceptible to poverty. Second, based on the share of poor households within each category, nine years of schooling and below seems to be the cut-off point that determines a greater chance of facing poverty. And third, except those households where parents had a maximum of 6-12 years of schooling in Monclova, in all educational categories in the three cities there were higher proportions of poor households in 2000 than in 1993.

Monclova's special case deserves a closer look. In 1993 Monclova had just faced the shock of the restructuring of its main industry and its poverty levels were already high prior to the 1995 peso crisis. Nonetheless, in 1996 poverty levels still increased and the relatively more stable economic situation of 2000 allowed those households at the lower levels of educational attainment to better themselves. Households where the head attended college and above were the least affected by AHMSA's restructuring at the beginning of the 1990s, but could not

avoid the effects of the peso crisis and at the end of the decade were –like those in Mexico City and Aguascalientes- still trying to recover.

4.3 PRODUCTIVE ASSETS: HOUSING

Housing is not the only productive asset that poor urban families have, but according to the literature, it is the most important (Moser 1996). This section will be devoted mainly to ownership and quality of housing in the three case studies.

In Mexico there has been a general improvement in housing availability in recent decades. Up to the 1960s, the population was growing at a faster pace than household construction (rates of 3.7 and 2.7, respectively). However, from the next decade this trend reversed itself: from 1970 to 1990 population growth rate was 2.6 whereas housing increased at an annual rate of 3.3. During the nineties, the corresponding figures were 1.8 and 3.2 (Schteingart 2000).

Other important issues besides the pace of housing creation are household conditions and ownership. The relevant conditions are the materials used in the construction, age and size of the unit, services within it, and number of occupants. Such items are worth examining because they constitute the immediate material environment in which the family develops their daily life and should offer a minimum of security and hygienic conditions. Additionally, household ownership will provide some economic security.

According to Boltvinik (1994) and Schteingart (2000), houses constructed with solid materials[61], as well as the availability of potable water and sewage, have improved during the last decades. Schteingart (2000), however, finds that in the 1990s these trends continued but at a slower pace. Based on population censuses the author also observes that household ownership stagnated in the last decade[62].

Information on housing in ENEU was not available in 1993, but I will survey 1996 and 2000. I will focus on ownership, overcrowding, and quality of housing.

Table 4.10 shows that the three case studies present a different profile in terms of ownership. In the three cities the proportion of owned households is high; but Mexico City is the least favored (62.7% in 2000), Aguascalientes is the intermediate case, and Monclova shows the highest level (79.5% in 2000)[63]. In Mexico City, the proportion of owned households decreased in the second half of the decade. In contrast, rented and borrowed units[64] increased. Aguascalientes also shows a reduction of owned households, but the proportion of those who borrow the place where they live did not increase, thus, rented homes grew from 16.4% to 21.5% during this five-year period. In Monclova the share of owned households slightly increased, but apparently the effect of a sharp decrease in borrowed units was a growing proportion of leased ones. Therefore, the three

[61] In Mexico –and elsewhere in Latin America- materials socially considered as good and solid for constructing a household are mainly brick (walls) and cement (ceiling).
[62] In the 2000 population census was first included a question about age of the house. Schteingart (2000) points out the importance of relating age of the unit and current conditions of materials and services.
[63] The national figure is 77.7% in 2000 (Schteingart 2000).
[64] These families usually borrow the household from a relative.

cities increased the proportion of rented households, and in Mexico City borrowed units increased as well.

Table 4.10: General Distribution of Household Ownership and Poverty Situation in Mexico City, Aguascalientes and Monclova, 1996 and 2000 (%)

Mexico City	***1996***			***2000***		
Ownership	Total	Poor	Non-poor	Total	Poor	Non-poor
Owned	65.7	65.3	66.3	62.7	60.6	64.7
Leased	20.2	18.2	23.1	21.4	18.9	24.0
Borrowed	14.1	16.6	10.6	15.9	20.5	11.2
Total	100	100	100	100	100	100
Aguascalientes						
Ownership						
Owned	76.9	77.8	75.5	72.2	72.5	71.9
Leased	16.4	14.4	19.6	21.5	19.7	22.9
Borrowed	6.7	7.8	4.9	6.4	7.8	5.3
Total	100	100	100	100	100	100
Monclova						
Ownership						
Owned	78.0	80.1	74.6	79.5	79.7	79.2
Leased	14.4	12.1	18.3	20.2	19.6	20.8
Borrowed	7.5	7.8	7.1	0.3	0.6	0.0
Total	100	100	100	100	100	100

Note: Calculations done with weighted data
Source: Mexican Urban Employment Survey (ENEU). Second quarter of each year

This information leads to a hypothesis about urbanization and household possession: the less urbanized is the area, the higher the share of those living in their own housing. Mexico City is, by far, the most urbanized site out of these three cases, with a complex history of expansion through the foundation of shantytowns when the city was making itself – in the fifties to seventies-, active intervention of the State during the 1970s, and its withdrawal from household public policy since the 1980s (Roberts 1990; Ward 1990; Schteingart 2000).

Aguascalientes is the capital city of the state and since the 1980s the local government has had an explicit policy that promotes housing. This has two main aims: to discourage the illegal occupancy of land and to show potential investors that the government cares about social demands (reference). Monclova is the smallest city and the housing issue has mainly been solved through lots given to the main industry's union, foundation of shantytowns and "nesting" of families – as children build houses on their parents plots (in Moser's (1998) words)[65].

In relation to tenancy and the poverty situation of the family, the high share of owned households among the total population implies that a considerable proportion of poor families are proprietors of the place where they live. Proportionally there are more non-poor families renting houses than poor ones, and in contrast, there are more poor house-borrowers in the three cities in 1996 and 2000. This suggests that borrowing is a resource more frequently used by poor families.

The number of people per inhabitable room –bedrooms and living room- is also an indicator of improved living conditions in Mexico, due both to the general reduction of family size and to the creation of more households (Schteingart 2000). The acceptable standard has been defined as two or less persons per inhabitable room (Boltvinik 1994).

There are local differences in the numbers of people per room. In general, fewer families lived in overcrowding conditions in 2000 relative to 1996 in

[65] Nesting of families is actually a resource used in the three cities, but there is no specific information on the matter. It can be assumed though that the less urbanized the site is, the cheaper the land is and the easier is the expansion of houses within parents plots.

Aguascalientes and Monclova, but in Mexico City the proportion increased from 12.8% to 13.1%. The reduction of units with overcrowding in Monclova and Aguascalientes favored the poor since there was a slight increase of non-poor households in such conditions. However, not surprisingly, the bulk of those who exceed the "norm" were poor households in both periods in the three urban sites. In the case of Mexico City, the general increase in overcrowding affected both poor and non-poor households -in 2000 amongst the poor, a fifth lived in overcrowded households whereas such figure was 5.6% among the non-poor.

The measure of quality used here is a combination of four indicators: ownership, wall materials, overcrowding, and exclusive use of bathroom. This quality scale means that households in very good shape are defined as: owned, brick-walls, with two or fewer people per inhabitable room, and non-shared bathroom. But the unit can also be finely finished with expensive materials and it still would be in the same category. Therefore, a very good quality household here does not mean a luxurious home. It may be austere and still rank as very good. However, the opposite extreme means a really disadvantaged situation: not owned, overcrowded and/or with shared bathroom, and/or walls made with materials other than brick[66].

Mexico City had the highest proportion of households in very bad conditions, both in 1996 and at the end of the decade. And the fraction has increased –about a tenth of total households in 2000. In contrast, in Monclova and Aguascalientes, a small portion of the total households is living under very bad

[66] Asbestos, cardboard, wood, or disposable materials.

conditions and this proportion has diminished in the second half of the nineties. In Monclova there are the highest proportions of well-equipped family units in 2000 (72.8%).

Table 4.11: General Distribution of Household Quality and Poverty Situation in Mexico City, Aguascalientes and Monclova, 1996 and 2000 (%)

Mexico City	***1996***			***2000***		
Quality	Total	Poor	Non-poor	Total	Poor	Non-poor
Very Good	56.2	52.2	61.9	55.0	50.0	60.1
Good	21.3	20.5	22.3	20.1	17.6	22.8
Bad	14.0	15.7	11.6	15.0	17.8	12.2
Very Bad	8.6	11.7	4.2	9.8	14.6	5.0
Total	100	100	100	100	100	100
Aguascalientes						
Quality						
Very Good	69.9	67.2	74.3	67.4	63.4	70.6
Good	20.9	21.2	20.4	24.0	25.2	23.0
Bad	7.1	8.5	5.0	6.8	7.4	6.3
Very Bad	2.1	3.2	0.3	1.9	4.1	0.1
Total	100	100	100	100	100	100
Monclova						
Quality						
Very Good	65.4	63.0	69.3	72.8	69.0	76.5
Good	22.1	23.0	20.8	22.2	23.5	20.9
Bad	9.3	9.8	8.4	3.9	5.9	2.0
Very Bad	3.2	4.2	1.5	1.1	1.6	0.5
Total	100	100	100	100	100	100

Note: Quality measured as a combination of ownership, overcrowding, walls material, and exclusive use of bathroom; calculations done with weighted data
Source: Mexican Urban Employment Survey (ENEU). Second quarter of each year

Table 4.11 shows that in the three cities non-poor families are over-represented amongst those with a very good housing situation in 1996 and 2000. However, the changes in that period in Mexico City, suggest a gradual deterioration of infrastructure –decrease of households living under very good and

good housing conditions and increase in the two least favored categories. This deterioration has affected both poor and non-poor families. In Aguascalientes the decrease in households in the two extremes of the quality continuum has meant an increase of units that left something to be desired (good category) from 20.9% to 24.0%. This has affected both poor and non-poor families. In Monclova, the increase of very good households suggests a generalized improvement in living conditions for poor and non-poor families.

4.4 DISCUSSION AND CONCLUSIONS

In the study of poverty and the resources available at the household, socio-demographic characteristics of the domestic unit are crucial to understand its potential or limitations when dealing with economic instability. The aim of this chapter has been to survey those household factors that may intervene in the persistence of poverty in urban Mexico. I focused on three sets of characteristics that have been highlighted –apart from labor- as the prime resources held by a domestic unit: the composition of the household, human capital available, and housing.

My analysis was spatially located in Monclova, Aguascalientes, and Mexico City, three urban areas that have a different position in the current economic structure of the country. Such cities constitute examples of the local labor markets diversity and hence the chances a household has of seeking an income. Three moments during the nineties were also selected to show the

reaction of households in periods of relative economic stability (1993 and 2000), and crisis (1996).

The age of the head of household –used as a proxy for stage of the life cycle- and the size of the family are key factors in determining the economic situation of the household. Poverty is associated with large families –nuclear or extended- during the expansion phase (mainly when heads are aged between 25 and 40 years old). Most of these families are raising children and, consequently, dependency ratios tend to be high –i.e. there are more consumers than producers within the household. Overall, these results coincide with which has been reported elsewhere (Boltvinik 1996 and 2000).

What at a first glance would seem as counter-intuitive is the fact that families in their expansion phase, but not necessarily at the earliest period (heads aged 15 to 24), are the ones with a higher risk of facing poverty. However, when reproduction is complete-, having children at school age and not old enough to contribute to the household income, represent a considerable economic burden and a difficult period for the parents.

Poor households tend to be highly contingent upon one economic provider (either the head, the spouse or a child). In other words, poor households are more vulnerable to the market's ups and downs because they have fewer resources allocated to the labor market than do the non-poor and therefore, sources of income are less diverse and economic instability may have a greater impact on such poor households.

Poor households have less human capital than the non-poor and the gap has increased during the 1990s. Within the household, it is a constant that the spouse holds a lower level of education than the head, but children tend to achieve higher schooling than the parents. Another unvarying characteristic is that every single category of kinship –i.e. head, spouse, children- within poor households had a lower level of education than those living in non-poor units. Information presented in this chapter shows that the increasing level of education is a secular trend in urban areas. Nonetheless, the lower the level of schooling, the higher the likelihood of being poor.

In spite of the improvements in tenancy and quality of housing in the last decades in Mexico, these upward trends have decelerated. In general, high proportions of both poor and non-poor families are the owners of the place where they reside, but alternative solutions to tenancy are not used in the same way. It is more common for a non-poor family to recur to renting, whereas borrowing housing tend is more likely to occur among poor families. This information suggests that the nesting of families and borrowing a house are relatively frequent practices in urban Mexico. Furthermore, overcrowding and occupancy of a lower-quality house are more frequent among poor domestic units.

What is the role played by the city in this characterization of poor households? The comparison of three cities reveals that there is at least one inherent characteristic derived from the "natural" process of a city's maturation: the deterioration of infrastructure. The industrial structure of the city and government policies are two other local variations that affect it as a living

environment. The combination of these three factors represents the "structure of opportunities" (Kaztman 1999) that may boost or limit the household resources.

Overall, the association between socio-demographic household characteristics and poverty holds for the three cities, but there are some slight variations. Mexico City had the highest proportion of poor households at the end of the decade (50.2%) and shows a slower recovery than the other two cities after the mid-decade crisis. In Monclova, the background of economic instability since the 1980s located this city in a particularly difficult position at the beginning of the nineties and its situation was exacerbated with the crisis: in 1993, 55% of the households lived in poverty and this proportion increased to 62% in 1996. Although the local economy has recovered somewhat (the share of household poverty in 2000 was 49%), such a long-term economic depression is not easy to overcome. Though no place was able to avoid the shock of mid-nineties, Aguascalientes has a similar poverty level at the beginning and the end of the decade (44%).

The macro economic conditions particular to each city influence the opportunities families have at different stages in the life cycle. For instance, those aged 25 to 40 years old heads are more vulnerable to poverty than the other age groups in Mexico City throughout the decade and in Monclova at the end of it, suggesting, that raising children increases the risk of facing poverty. On the other hand, the pattern in Aguascalientes suggests that its industrial expansion favors the youngest workers and, consequently, the older workers get the less likely they are to have the profile required for industrial jobs.

It is paradoxical that Mexico City is the area with the highest average schooling, but is the one with the slowest recovery from the high poverty levels reached during the peso crisis. Monclova shows a more traditional profile linked to the qualification requirements of the working class during the import-substituting period, since in 2000 it had the lowest proportions of households' heads that have reached higher education. Aguascalientes, the city with the most diversified economy, has a polarized situation in terms of human capital because it shows the highest proportions in both extremes of the educational structure.

Mexico City is the most "mature" of these three cases. Housing conditions –tenancy, overcrowding, and quality- are less advantageous in such an urban area. Earlier the illegal occupancy of land and the subsequent limited but significant governmental participation, as well as self-construction were effective channels for acquiring a house. Nowadays such opportunities are no longer operative. Unlike Aguascalientes, in Mexico City there has not been (at least since the 1970s) an active public policy that supports housing.

But, how structural conditions for persistence of poverty in urban Mexico are developed based on household characteristics? Domestic units are not passive agents, but have a reduced margin of action since they face a series of constraints imposed by the macro sphere –of the economy and State. The cumulative disadvantages within poor households (stage in the life cycle, size, education), I argue, become an obstacle because the labor market does not demand these characteristics. Additionally, the increasing negligence of the state in caring for the basic needs of large volumes of people leaves them adrift, forcing families to

increase their effort to gather income. Since household mediates between workers and labor market, it is worth to reviewing how specific characteristics perform in the economic structure.

Chapter 5: Labor as an Asset in Facing Poverty

Diverse studies have argued that the withdrawal of the Mexican State from social welfare –a drastic reduction of investment in social services and elimination of subsidies in basic goods- together with the long-term contraction of salaries, have implied the transfer of public responsibility for the reproduction of the workforce to the private arena (see for instance Cortés and Ruvalcaba 1991; González de la Rocha 1994 and 2000; Moser 1996 and 1998; Oliveira 1999; Cortés 2000).

This chapter is focused on labor as the prime asset of poor households since it constitutes the main means of obtaining income. Based on this premise, allocating more members into the workforce means increasing economic resources for the domestic unit. However, to what extent is labor an available good for households? And what are the labor market dynamics that affect the economic situation of the household?

In the environment of deep recession and hesitant recovery experienced by the Mexican economy during the nineties, the labor market offers few real opportunities to overcome poverty. Households need more income, but the effort they have to put out to obtain that income increases considerably as the conditions of work worsen and the resources of poor households erode (Roberts, 1991 and González de la Rocha, 2000). There are different mechanisms, I suggest, through which the labor market produces poverty and makes households vulnerable to poverty, for instance, through occupations, income, job instability, and lack of

social protection. I will re-look at some the demographic characteristics of the household, but in terms of the relationship with labor.

5.1 AVAILABILITY OF LABOR WITHIN THE HOUSEHOLD

Labor is a key element when households implement "private adjustments" (in González de la Rocha (2000)'s words) to combat potential or actual deprivation. However, a household's capacity to respond is limited by the means they have, namely, its labor resources and the freedom the domestic unit has to reallocate them in the market (Roberts 1991). In this section I will explore the availability of labor within the household and some characteristics that may be rewarded –or penalized- by the market, for instance, age, gender, and education.

Table 5.1 shows that in the three cities, in the first half of the 1990s, there were two or more people per household participating in economic activities. However, in all cases participation decreased during the decade. This contrasts with the national trends reported by Cortés (2000:104) regarding the number of income-makers in the household. This contrast is discussed at the end of this chapter.

Table 5.1: Average Number of Household Earners by Poverty Situation in Mexico City, Aguascalientes and Monclova during the 1990s

	Earners ***Mexico City***			*per* ***Aguascalientes***			*Household* ***Monclova***		
	Total	Poor	Non-poor	Total	Poor	Non-poor	Total	Poor	Non-poor
1993	2.0	1.8	2.1	2.1	2.0	2.2	2.0	2.0	2.0
1996	1.9	1.9	2.0	1.9	1.9	2.0	1.8	1.8	1.8
2000	1.8	1.7	2.0	1.8	1.7	2.0	1.7	1.6	1.9

Note: Participants in the economically active population
Source: Mexican Urban Employment Survey (ENEU). Second quarter of each year

During the decade the mean number of providers was higher in non-poor households than among poor units in Mexico City and Aguascalientes; in Monclova this was true only in 2000. According to Table 5.1, Mexico City presents the pattern reported by the literature on the allocation of labor in face of economic crises: poor households allocated more members into the labor market (increased from 1.8 to 1.9 between 1993 and 1996). However, among the non-poor households in Mexico City, both the poor and non-poor in Aguascalientes and the poor in Monclova, the number of earners declined between 1993 and 1996.

Table 5.2 shows the total number of earners in poor and non-poor households. In the three cities the proportion of households that only have one economic provider is larger among poor households than among their non-poor counterparts. Consequently, non-poor units have more resources allocated in the market, and therefore, they are more likely both to have higher incomes and more diversified sources of income.

Table 5.2: Average Number of Household Earners by Poverty Situation in Mexico City, Aguascalientes and Monclova during the 1990s

	Poor Households Number of Earners				*Non-poor Households* Number of Earners			
Mexico City	1	2	3+	Total	1	2	3+	Total
1993	51.2	27.8	21.0	100	34.8	36.7	28.6	100
1996	47.1	29.3	23.6	100	38.2	39.4	22.4	100
2000	52.4	30.8	16.8	100	36.0	40.9	23.1	100
Aguascalientes								
1993	49.0	23.2	27.8	100	35.1	37.1	27.8	100
1996	48.8	26.6	24.6	100	35.9	42.4	21.7	100
2000	57.9	26.1	16.0	100	38.5	38.8	22.7	100
Monclova								
1993	46.9	28.1	24.9	100	35.4	45.0	19.7	100
1996	48.7	31.5	19.8	100	43.0	41.5	15.5	100
2000	56.7	29.5	13.8	100	39.9	41.5	18.6	100

Note: Participants in the economically active population
Source: Mexican Urban Employment Survey (ENEU). Second quarter of each year

In the three cities, the proportions of poor households with two economic providers increased from 1993 to the crisis year of 1996. This does not mean, however, that there was a general rise in the number of earners. In Mexico City, the share of poor households with three or more providers increased, but not in Monclova nor in Aguascalientes.

Among non-poor households, the adaptation to crisis also suggests a complex situation. Between 1993 and 1996 in Mexico City and Aguascalientes the share of non-poor households with two providers increased. However, in the three cities those units with three or more members in the workforce diminished. Against what I expected, the proportions of households with only one provider (the classic model of the breadwinner) maintained its importance during the

decade. In the three cities and whether the family is poor or not, the proportions of households with only one provider increased between 1993 and 2000[67].

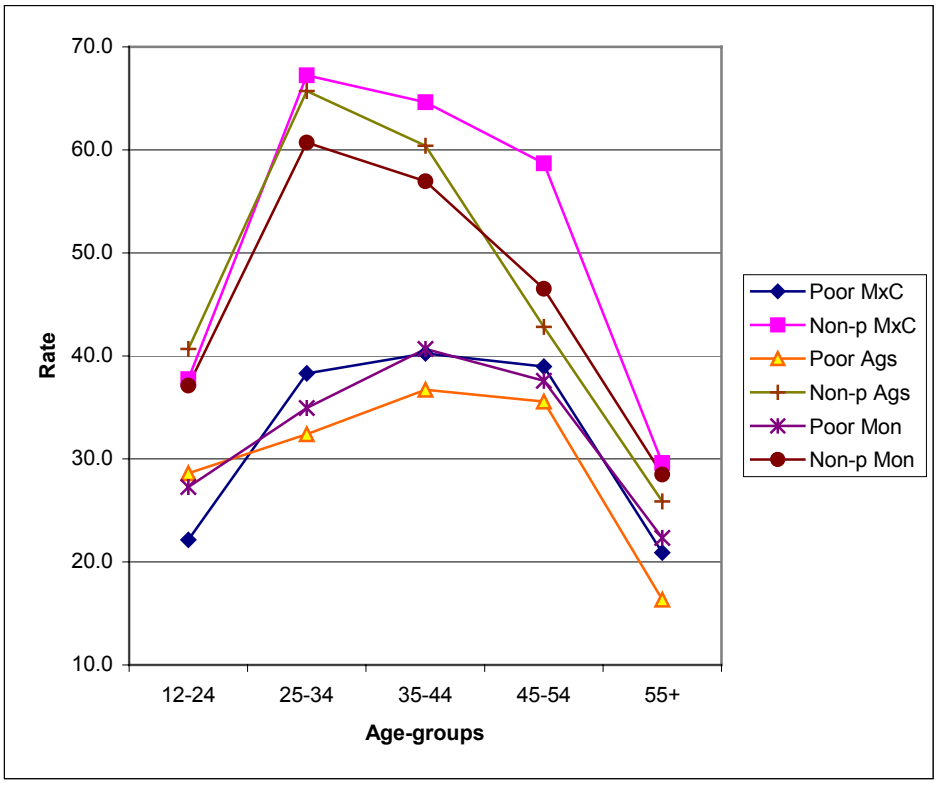
The availability of labor is highly determined by stage in family cycle. The ENEU data suggest that households at an earlier stage in the life cycle (heads aged 12 to 24) tend to allocate only one member to the labor force. Households raising children have the heaviest economic burden and fewer available labor resources to be allocated to the labor market. As the head of the household gets older, then two or more people participate in economic activities. There are some differences between poor and non-poor domestic units. Amongst the poor, the bulk of households in the early stages of the family cycle have only one member in the workforce. For instance 78.1% of poor households had only one member in the labor force in Mexico City in 2000, whereas within non-poor units this figure was 50.1%. In general, regardless of the head of the household's age, the proportions of non-poor families that have only one economic provider are lower than among poor households –in the three cities throughout the decade.

Male age-specific rates of labor market participation have historically been high in Mexico. Although such rates are slightly lower among those men living in poor households, they are still high and very similar to men from non-poor units. Figure 5.1 illustrates two aspects of differential female involvement in the labor market in 2000: participation of women from poor or non-poor households, and divergences between cities. Mexico City, except for the youngest women, has the highest rates of economic participation in all age groups, for both

[67] See the last section of the chapter for a further discussion of these results.

poor and non-poor households. Women from Monclova and Aguascalientes have a more "traditional" pattern of economic participation, that is, women tend to withdraw from the labor market in their twenties and onwards, presumably, when they start raising children.

Figure 5.1: Female Age-specific Rates of Economic Participation by City and Household's Poverty Situation, 2000



Source: Mexican Urban Employment Survey (ENEU). Second quarter.

In all age groups, women from poor families have lower rates of economic participation than those from non-poor units in the three cities. Among those

living in poor households, the youngest women (aged 12 to 24) in Mexico City show the lowest engagement in economic activities (22 out of 100), and in the same age group, poor women from Aguascalientes have the highest rate (29 in each 100). In the following age groups Aguascalientes has the lowest rates of female economic participation. Figure 5.1 suggests that although poor women's rates of economic participation are lower than those shown by non-poor women, when they reach 35 years old and above, their rates become similar in the three cities and increase relative to younger ages. Women living in non-poor households in Mexico City show the highest rates of participation and are more likely to remain in the labor market. Out of the three cities, women from Monclova have the lowest participation among the non-poor households, at least up to the 35-44 years old interval. Aguascalientes has the highest participation rates among young women (41 out of 100), but they withdraw from the labor force at a fast pace.

These data confirm other studies that emphasize the higher rates of female participation in Mexico City compared to other cities (Pedrero 1990; García and Oliveira 2000). Some of the suggested reasons for Mexico City's exceptionality are its historic industrial concentration, higher levels of education, and decreasing fertility rates. It is women from non-poor households who reflect the transformation of female labor force participation (cf. Pedrero 1990; García and Oliveira 1994). Namely, they do not necessarily withdraw from the labor force when they acquire more responsibilities in the household such as getting married and childrearing. Starting at the age interval of 35-44, female participation in poor

and non-poor households tends to converge. Women from non-poor households drop out of the labor force more frequently, whereas their poor counterparts tend to stay in. The oldest women (65 and above) present very similar rates -from the three cities and whether poor or not[68].

The evidence just displayed indicates differential involvement in the labor force between poor and non-poor families. I will next explore the combined and separate effect of three factors that may influence this gap: the employment rate, economic participation, and potential economically active population within households. The procedure is taken from Boltvinik's (1999) proposal to study poor and non-poor households in the whole country. The idea behind it is to detach each factor and, at the same time, summarize both economic and demographic elements that may explain –at least partially- the opportunities or barriers poor households face while trying to participate in economic activities. These measures are constructed at the household level in the following way:

Employment rate = total employed / economically active population

Economic participation rate = economically active population / those at working age (12 years old and above)

Potential economically active population = those 12 and above / total number of members in the household

The first rate *(empl)* depends on the economic cycle; the second *(ecopar)* is related to economic conditions as well as to socially accepted practices such as participation of women and children in the labor force; the third *(poeap)* depends

[68] Although a clearer picture of entrances into and departures from the labor market could be obtained through the analysis of different cohorts, Figure 5.1 gives an idea of such movements from a diachronic perspective.

on demographic factors (Boltvinik 1999). The occupation rate *(o/n)* is the product of these three measures. Table 5.3 displays the results for the three cities.

Table 5.3: Decomposition of Occupation Rates by Poverty Situation of the Household in Mexico City, Aguascalientes and Monclova during the 1990s

1993	***Mexico City***		***Aguascalientes***		***Monclova***	
Rates	*Poor*	*Non-poor*	*Poor*	*Non-poor*	*Poor*	*Non-poor*
Empl	0.953	0.970	0.961	0.984	0.885	0.946
Ecopar	0.505	0.659	0.503	0.648	0.567	0.668
Poeap	0.738	0.839	0.734	0.809	0.757	0.804
o / n	**0.369**	**0.537**	**0.355**	**0.516**	**0.380**	**0.508**
1996						
Rates						
Empl	0.932	0.953	0.956	0.971	0.923	0.952
Ecopar	0.543	0.663	0.500	0.664	0.566	0.652
Poeap	0.736	0.818	0.705	0.774	0.709	0.760
o / n	**0.372**	**0.516**	**0.337**	**0.499**	**0.370**	**0.472**
2000						
Rates						
Empl	0.975	0.978	0.981	0.980	0.956	0.962
Ecopar	0.522	0.672	0.521	0.668	0.529	0.658
Poeap	0.730	0.816	0.652	0.754	0.698	0.770
o / n	**0.372**	**0.536**	**0.333**	**0.494**	**0.353**	**0.488**

Source: Mexican Urban Employment Survey (ENEU). Second quarter of each year

The table supports the findings presented in previous subsections, but also sheds light on the cumulative effect that economic and demographic conditions impose on poor families during stable or critical moments. Not surprisingly, in general, households living in poverty are disadvantaged –as compared to non-poor ones- in the three aspects: they are more frequently affected by

unemployment, have fewer members participating in economic activities, and also count on less human resources that can be allocated to the labor force[69].

Unemployment rates in Mexico have been low and relatively stable. Therefore, the general employment rates are high in the three cities. Nonetheless, except for Aguascalientes in 2000, unemployment affects poor households more frequently. Only in Monclova in 1993, just after AHMSA's restructuring, was unemployment above 11% (a level not even reached during the peso crisis) and fell most on poor households.

Among poor families, only in Mexico City did the negative rates of occupation increase. Non-poor families, except those in Monclova, increased their involvement in economic activities between 1993 and 1996, as a response –we can assume- to economic hardship. Towards the end of the decade, the rate of economic participation among poor households in Monclova and Mexico City decreased, unlike their non-poor counterparts, who showed a growing participation in the three cities.

Poor families are also disadvantaged in terms of the potential workforce – those old enough to work (12 and above according to ENEU definition). In all cases during the three periods under observation, poor households do not have as many labor resources as those available to non-poor units.

The cumulative effect of this series of disadvantages for poor households means a relatively large gap between them and those better off. The distance

[69] This evidence coincides with Boltvinik (1999)'s nationwide findings. Regarding only urban areas, he observes a wider difference between poor and non-poor households than when rural households are also taken into account. Information from ENEU also shows a large differential between poor and non-poor households, and allows us to identify some dissimilarities in these specific cities.

between the occupational rates of the poor and the non-poor seem to be larger in Aguascalientes than in the other two cities. In the former, the occupation rate of poor households was 68.8% less than that of non-poor families in 1993, and decreased even more in the second half of the decade: 67.5% and 67.4% in 1996 and 2000, respectively. In Mexico City the initial gap was similar to that in Aguascalientes but decreased slightly afterwards so that the occupation rate of poor households was 69.4% less than that of non-poor families. Monclova shows the smallest difference: the occupation rate of poor households was 72.3% of non-poor ones in 2000.

Next, I focus on the formal qualifications of those involved in economic activities.

Table 5.4: Average Education of those in the Labor Force by Poverty Situation in Mexico City, Aguascalientes and Monclova in 1993 and 2000

	Years of Schooling ***1993***			*Years of Schooling* ***2000***		
City	Total	Poor	Non-poor	Total	Poor	Non-poor
Mexico City	9.0	7.8	9.9	9.8	8.4	11.0
Aguascalientes	8.3	6.9	9.4	9.7	7.8	11.0
Monclova	8.4	7.2	9.9	9.5	8.1	10.6

Note: Average years of schooling for population in the labor, aged 14 and above
Source: Mexican Urban Employment Survey (ENEU). Second quarter of each year

The economically active population has, in general, a higher mean education than those not engaged in the labor force in the three cities and in the two selected periods. The average years of schooling of those in the labor force is higher than that of the total population (*vid supra* Table 4.6). Mexico City has the most highly educated labor force in 1993 and at the end of the decade. However,

both Aguascalientes and Monclova reduce the educational difference with Mexico City by 2000.

There is a persisting divergence in educational levels between members of poor and non-poor households. The educational levels of its labor force improved in Aguascalientes, but the difference in mean education of the workforce between poor and non-poor increased from 1993 to 2000 (2.5 years versus 3.2). Mexico City has the mid position: in the first half of the decade with a gap of 2.1 years of schooling and in 2000 with one of 2.6 years. In Monclova the difference diminished during the same period, since the corresponding figures were a gap of 2.7 and 2.5 years of mean education. Contrary to what happened in Mexico City and Aguascalientes, in Monclova the mean education of workers from poor households improved more than that of their non-poor counterparts and the result was a reduction in the educational gap between poor and non-poor workers.

5.2 LABOR MARKET AND POVERTY: THE HOUSEHOLD LINKAGE

Next I address the circumstances under which poor and non-poor workers participate in the labor market. Studies on the linkage between households and the labor market have emphasized the two-way nature of such relationship (Selby et al. 1990; González de la Rocha 1994 and 2000). That is, the volume and human capital –education, specific training, and health- of the workforce in a specific moment will be the input available for firms. Hence, households influence the market. On the other hand, the domestic unit is the locus where individuals solve primary needs such as food, shelter, and clothing, provided from the pooled

income. In this section I will focus on the kind of occupations, working condition, and income offered by the market.

5.2.1 Occupations

To classify the principal occupation of the head as well as that of other members of the household and to observe the relationship between occupation and the poverty status of the domestic unit, I rely on Erikson and Goldthorpe's (1993) construction of occupational class[70].

In Table 5.5 both the general distribution of heads by occupational class and the fraction of those households living in poverty within each class are presented. The occupational structure in which heads of households participate is relatively stable throughout the decade and indicates the industrial specialization of each city.

[70] Although this classification was originally constructed to study social mobility in Britain and the main assumptions for grouping might not directly apply to the Mexican structure of occupations, I adapted the Mexican Classification of Occupations (INEGI 1992) to Erikson and Goldthorpe's (1993). The aim of their class schema is to differentiate positions in terms of the *employment relations* that they entail (emphasis in the original, p. 37). According to the authors, this schema "bring(s) together individuals holding similar market and work situations" (Ibid.). I utilize this classification assuming that individual's relative position in the labor market will also determine her economic position.

Table 5.5: Occupational Class of the Head of the Household and Percentage of each Class in Poverty in Mexico City, Aguascalientes and Monclova during the 1990s (%)

Mexico City	***1993***		***1996***		***2000***	
Occupational Class	All	*Poor*	All	*Poor*	All	Poor
High-Service Class	9.6	13.9	11.4	21.2	9.8	11.7
Lower-grade Prof.	11.0	26.3	10.9	30.7	10.2	24.9
Routine Non-manual	15.8	42.9	16.0	52.2	14.1	50.6
Pettite Bourgeoisie	23.3	49.5	24.3	64.5	24.4	55.0
Skilled Manual	20.6	51.3	17.2	67.4	20.7	57.2
Semi & Unskilled Manual	9.3	59.0	8.6	82.2	8.5	69.1
Lower-Service Class	10.8	53.4	11.7	71.3	12.4	58.1
Total	100	44.1	100	56.7	100	49.1
Aguascalientes						
Occupational Class						
High-Service Class	10.6	16.8	9.7	15.8	12.5	10.7
Lower-grade Prof.	9.4	17.5	7.7	29.7	11.0	22.2
Routine Non-manual	11.5	33.3	15.1	51.2	13.2	35.7
Pettite Bourgeoisie	27.3	47.2	26.4	68.2	21.9	49.9
Skilled Manual	23.5	49.4	22.1	69.3	21.3	51.5
Semi & Unskilled Manual	7.5	58.9	9.1	78.9	8.9	56.6
Lower-Service Class	10.3	50.2	10.0	74.9	11.1	55.9
Total	100	41.3	100	59.5	100	41.7
Monclova						
Occupational Class						
High-Service Class	7.9	9.5	7.3	13.3	7.4	9.0
Lower-grade Prof.	7.8	23.3	9.1	36.5	8.2	26.0
Routine Non-manual	9.1	54.4	10.9	60.0	9.8	46.6
Pettite Bourgeoisie	24.4	62.5	21.4	71.9	19.5	53.4
Skilled Manual	26.1	52.6	24.5	61.0	25.7	46.9
Semi & Unskilled Manual	14.3	62.6	17.8	69.2	19.6	51.8
Lower-Service Class	10.4	66.4	9.1	72.0	9.7	57.7
Total	100	52.3	100	60.0	100	45.6

Note: Calculations done with weighted data
Source: Mexican Urban Employment Survey (ENEU). Second quarter of each year

In Mexico City and Aguascalientes the predominant classes are the petite bourgeoisie –that includes the self-employed and owners of micro enterprises (up

to five workers)-, skilled manual workers (supervisors and qualified industrial workers), and routine non-manual workers, a class that groups both the bureaucracy and sales clerks. In Monclova's class structure the most numerous classes are skilled manual workers, the petite bourgeoisie, and semi and unskilled manual workers. Monclova is a smaller town (compared to Mexico City and Aguascalientes) and historically has had a clearer specialization in heavy industry (steel production).

This information suggests a close correlation between lower positions in the class structure of the household head and the poverty of the household. In Mexico City and Aguascalientes, the largest proportions of poor households are found among those headed by semi and unskilled manual workers, the lower-service class (mainly personal services), and the skilled manual. Monclova shows a different pattern: poor households concentrate among those households where the head is a worker in the low-service class, is part of the pettite bourgeoisie, or is either a semi or unskilled manual worker. The skilled manual class seems to resist poverty, as compared to other classes. However, the levels of poverty among all occupational classes in Monclova, except for those at the top, are higher than in the other two cities.

The 1996 figures show that all occupational classes were more vulnerable to poverty during the mid-decade crisis than in the other years. The recovery by 2000 was not uniform. In Mexico City only households headed by somebody in the two highest positions show a reduction in poverty by 2000. Similarly, in Aguascalientes except for those in the high service class, all other groups had

more poor households at the end of the decade. In contrast, in Monclova whose crisis came in 1993, all but the lower-grade professionals show lower proportions of poor households by 2000.

Informal activities also differentiate the labor situation of poor and non-poor households. Informal are those employers with five or fewer workers, the non-professional self-employed, wage-workers in enterprises with up to five workers, and unpaid workers. More than a third part of heads of households in the three cities was engaged in informal activities through the decade. The counter-cyclical nature of informality is particularly clear in Mexico City: in 1993, 38.5% of households were headed by an informal worker, 42.0% during the peso crisis period, and 41.4% at the end of the decade. Aguascalientes and Monclova seem to have an opposite trend since in the former figures for 1993 and 2000 are 42.2% and 36.4%; in the latter 38.2% and 30.7%, respectively. This difference between Mexico City and the other two cities reflects both the industrial specialization of Aguascalientes and Monclova and the heterogeneity of the labor market in Mexico City[71].

Most of the households are poor when headed by somebody participating in informal activities and in every single category (employer, self-employed, salary or unpaid worker). The allocation of members of the household within informal activities differs according to their status in the domestic unit. Most of those who work as informal employers and as self-employed are heads of households. Children represent an important share of informal employees. Most

[71] What I call "heterogeneity" for the case of Mexico City relies on the predominance of the tertiary sector, characterized by a large variation in terms of job positions, productivity, and salary.

of the unpaid workers are either children or spouses. In the majority of these cases, it is likely that unpaid workers collaborate in a family business.

5.2.2 "Precarization": social protection, contract, and working hours

Indicators of deteriorating labor conditions in Mexico are the creation of jobs that are not protected by the social security, that are not backed by a written permanent contract, and in which working hours have increased. This worsening of working conditions is not generalized among all positions. Instead, it polarizes the opportunities offered by the labor market in such a way that disadvantages cumulate and the labor market becomes an obstacle instead of a channel to overcome poverty.

Table 5.6 compares the proportions of households where none of the members are covered by the social security system. Of the three cities, Mexico City is the one where most households –whether poor or not- lack social protection. In Mexico City the proportions of poor and non-poor households that have no access to social security have kept increasing during the 1990s. At the end of the decade, more than half of poor households and a third of non-poor ones do not have social protection. In Aguascalientes and Monclova the proportions are not as high, but the distance between poor and non-poor remains large.

Table 5.6: Households where No Member is Covered by Social Security by Poverty Situation in Mexico City, Aguascalientes and Monclova during the 1990s (%)

	Mexico City		***Aguascalientes***		***Monclova***	
Year	*Poor*	*Non-poor*	*Poor*	*Non-poor*	*Poor*	*Non-poor*
1993	47.6	30.4	40.1	26.0	43.9	24.7
1996	53.2	31.8	44.4	26.9	43.0	22.7
2000	53.5	33.4	41.1	23.0	36.6	21.8

Note: Social security: access to health care services, health insurance, and retirement pension (IMSS, ISSSTE, or another); calculations done with weighted data
Source: Mexican Urban Employment Survey (ENEU). Second quarter of each year

The lack of social security may have both short and long-term implications for poor households. An immediate consequence is likely to be a cutback in the household budget when health care is required for any member. Among the future repercussions, the lack of health insurance and a pension –even if it is as meager as it currently is in Mexico- may mean total destitution for the elderly.

The kind of contract that salaried workers have affects job stability as well as job entitlements. This information was not available in 1993, but a comparison between the other two years is revealing. In the three cities the importance of temporary (written) contracts diminished between 1996 and 2000. Aguascalientes had the smallest proportions of salaried workers on temporary contracts in 1996 (6.6%) and at the end of the decade (6.8%). In Mexico City the proportion of temporary contracted workers decreased from 14.9% to 9.7%, whereas Monclova kept roughly the same proportion –14.1%, which, in 2000, is the highest of the three cities. However, the major divide is between those who hold either a written

permanent contract or a verbal agreement. By 1996 Aguascalientes had the highest share of workers on written permanent contracts: 58% that increased to 63.7% in 2000. Despite its industrial specialization, Monclova has comparatively a lower level of workers with a permanent contract: 45.9% in 1996 and 56.6% at the end of the decade. Mexico City had an intermediate position in 1996 (49.3%), but by 2000 it had the lowest proportion of permanent wageworkers with a written contract (52.6%).

In the following table I examine differences in contracts according to intra-household status and poverty situation. The data are presented for 2000 only since the main features are the same as in 1996.

Table 5.7: Type of Contract of Salary Workers in the Household by Kinship and Poverty Situation in Mexico City, Aguascalientes and Monclova, 2000 (%)

Mexico City	*Poor*			*Non-poor*		
Type of Contract	Head	Spouse	Children	Head	Spouse	Children
W. Permanent	53.0	31.8	30.2	70.7	71.1	51.2
W. Temporary	7.3	11.5	14.0	6.0	6.5	16.1
Verbal	39.7	56.7	55.8	23.3	22.4	32.6
Total	100	100	100	100	100	100
Aguascalientes						
W. Permanent	61.4	43.0	47.8	77.4	74.5	59.3
W. Temporary	4.0	9.8	7.9	6.5	6.8	7.9
Verbal	34.6	47.2	44.3	16.1	18.7	32.8
Total	100	100	100	100	100	100
Monclova						
W. Permanent	59.9	34.3	35.2	74.9	61.7	49.9
W. Temporary	14.3	6.2	18.7	12.0	11.3	15.9
Verbal	25.8	59.4	46.1	13.2	27.0	34.1
Total	100	100	100	100	100	100

Note: Calculations done with weighted data
Source: Mexican Urban Employment Survey (ENEU). Second quarter of each year

The first striking aspect of Table 5.7 is the unstable labor conditions of members of poor households. For each intra-household status those salary workers living in poverty are less likely to have a written permanent contract and more likely to have a verbal contract than those from non poor households. The pattern with respect temporary written contracts is not that neat.

Note the vulnerability (lower proportions of permanent contracts and higher shares of verbal contracts) of spouses in poor families as compared to their non-poor counterparts. The data suggest that working conditions are more even – in terms of contract- between the head and the spouse in non-poor households than in poor ones. In poor households, children and spouses have similar types of contract, and these are more disadvantageous than those of the head of household.

Within both poor and non-poor households, the head is most likely to have a permanent contract. The spouses and children are more likely to hold only a verbal agreement.

Throughout the decade in the three cities there is a reduction in the proportions of those working less than 35 hours a week. The increases are mainly in the proportions of those working between 35 and 48 hours. Between 1993 and 1996 the number of hours worked in both segments –35 to 48 and more than 48 hours- increased in the three cities. By 2000 however, only the former kept increasing.

In all three cities, the household head is the least likely to be engaged in a job for less than 35 hours whether the family is poor or not. The head also more frequently spends more than 48 hours working than any other member of the

household. In contrast, it is the spouse who works more frequently for less than 35 hours a week and such proportions are higher among poor households. Children from poor and non-poor households have similar working hours and over half of them concentrate in the segment 35 to 48 hours a week.

5.2.3 Income

The level of per capita income in a household is mainly related to the level of economic participation and the income of each member participating in economic activities. I present a decomposition of per capita income between poor and non-poor in order to specify the impact of three factors: difference due to the rate of economic participation, difference due to the mean income per worker, and the combined effect of both. The procedure was developed by Boltvinik (1999: 282-283) to identify these effects at the national level. The divergence between poor and non-poor in terms of per capita income can be expressed as follows:

$(y/n)_2 - (y/n)_1 =$

$[(o/n)_2 (y/o)_1 - (o/n)_1 (y/o)_1]$ …. (1)

$+ [(o/n)_1 (y/o)_2 - (o/n)_1 (y/o)_1]$ …. (2)

$+ [(o/n)_2 - (o/n)_1] [(y/o)_2 - (y/o)_1]$ …. (3)

where:

(y/n) is the per capita income

(o/n) is the occupation rate

(y/o) is the mean income of those in the labor force

group 2 is the non-poor households, and group 1 the poor ones.

The first component represents the difference due to the occupation rate, so the term on the left hand side, $(o/n)_2\ (y/o)_1$ is the per capita income poor would have if they had the same occupation rate as the non-poor. From that amount the per capita income of the poor, $(o/n)_1\ (y/o)_1$, is subtracted. This implies that what remains can be attributable to the occupation rate.

The second component is the difference between mean monthly income per worker that the poor and non-poor make. In this case, the term $(o/n)_1\ (y/o)_2$ represents the income the poor would have if –holding the same rate of occupation- they earned as much as the non-poor in the labor force. Subtracting per capita income of the poor from this term, we obtain the difference attributable to the mean income of those in the labor force. The third term is the combined effect of the both the occupation rate and mean income.

In Table 5.8, I present the summary of these calculations in pesos (of 1994) and the relative importance of each term.

Table 5.8: Decomposition of Difference in Per capita Monthly Income between Poor and Non-poor, Mexico City, Aguascalientes and Monclova during the 1990s

Year / City	Components $(y/n)_2 - (y/n)_1$ Absolute (pesos)				%			
1993	(1)	(2)	(3)	Total	(1)	(2)	(3)	Total
Mexico City	839.7	2594.2	1174.1	4608.0	18.2	56.3	25.5	100
Aguascalientes	849.2	2537.4	1154.3	4540.9	18.7	55.9	25.4	100
Monclova	604.3	2541.4	857.1	4002.8	15.1	63.5	21.4	100
1996								
Mexico City	615.2	2142.9	829.6	3587.7	17.1	59.7	23.1	100
Aguascalientes	693.9	1405.6	675.1	2774.6	25.0	50.7	24.3	100
Monclova	384.0	2605.2	712.2	3701.5	10.4	70.4	19.2	100
2000								
Mexico City	727.3	2469.9	1091.9	4289.1	17.0	57.6	25.5	100
Aguascalientes	778.6	1808.3	870.3	3457.2	22.5	52.3	25.2	100
Monclova	613.0	2355.5	898.4	3866.9	15.9	60.9	23.2	100

Note: Pesos of 1994; (1) difference due to the occupation rate, (2) difference between mean monthly income per worker, (3) combined effect of the both the occupation rate and mean income

Source: Mexican Urban Employment Survey (ENEU). Second quarter of each year

Since I am using real earnings in this comparison, we can observe the absolute difference in per capita income between poor and non-poor in each city during the decade. *Grosso modo*, this data indicates a considerable drop in the total per capita income from 1993 to 1996 that affected the non-poor more and meant a smaller gap between them and those living in poverty. By 2000, the distance in per capita monthly pesos between the groups grew again, but it is not as large as it was in 1993. This suggests that the non-poor have not reached the income level they had in the earlier year, rather than the poor improving during this period (with this statement I echo Cortés and Ruvalcaba (1991), who labeled

"equalization through impoverishment" the process that Mexico started during the 1980s).

Similar to the nationwide figures reported by Boltvinik (1999), I find that the most relevant factor in the total difference of per capita income between poor and non-poor[72] is the mean income obtained from work in the three cities throughout the decade. The fraction attributable to the occupation rate varies between the cities and periods (in 1996 the largest variation is observed: 10% in Monclova and 25% in Aguascalientes), but explains –at the most- a fourth part of the total difference in per capita income. And, given the relative stability of the mixed effect (which also explains approximately a fourth of the gap), mean earnings play a key role in the total difference of per capita income between poor and non-poor.

Monclova shows the lowest importance for the occupation rate factor in the three observed moments and, consequently, the gap in mean income explains most of the difference in per capita income between poor and non-poor. In the other two cities the weight of such components vary, but mean earnings are still the most important part. Therefore, labor market opportunities –turned into wage/profits- are more relevant than demographic characteristics (occupation rate) when explaining household revenues.

[72] Boltvinik's (1999) definition of strata according to the intensity of poverty does not match exactly to my division of poor and non-poor, but the general conclusions of his and my comparisons are the same.

5.3 DISCUSSION AND CONCLUSIONS

Labor is a key resource for most households in urban Mexico, but the availability of labor is limited and rewards in the market are not homogeneous. In this chapter I concentrated on the mechanisms through which household's members' labor market participation or influences the economic situation of poor and non-poor households. Poor domestic units have fewer resources allocated into the labor market –lower participation rates- with less formal qualifications and make lower incomes than their non-poor counterparts.

Contrary to what I expected and to what has been reported in the literature on a nationwide basis (Oliveira 1999; Cortés 2000), I did not observe either an increasing number of earners per household or a revival of the role of the male breadwinner in urban areas.

In relation to the average number of earners per household, I found that for 16 urban areas throughout the country it was 2.5 in 1993, 2.2 and 2.1 for 1996 and 2000, respectively. In the three case studies, Mexico City, Monclova and Aguascalientes, such figures are similar. Cortés (2000) reported that between 1977 and 1996 the average number of income-makers (*perceptores*) has increased from 1.56 to 1.77. However, in *strictu sensu* his and my results are not comparable. The author's information is based on the Mexican National Household Income and Expenditures (Encuesta Nacional de Ingresos y Gastos de los Hogares-ENIGH), and more concretely the figures correspond to *any* kind of income –wages, profits, and transfers- gathered by all the household's members. Additionally, his findings represent the total households in rural and urban areas.

Since I utilize ENEU, which is devoted to urban areas, as my data source and concentrate on labor participants, the quantities do not coincide. It is not surprising though, that the average number of earners per household is higher because in urban areas female participation in economic activities is more frequent than in rural areas –according to surveys.

Regarding the role of the breadwinner, the reasons of the discordance between my findings and what Oliveira (1999) has reported are similar to what I just explained about the source of information and the sample design of the two surveys –rural and urban for ENIGH and only urban for ENEU. A distribution of the number of labor participants in 16 urban areas shows that households with only one provider slightly decreased (from 45.2% to 45.1%) between 1993 and 2000. However, taking Mexico City, Monclova, and Aguascalientes together this proportion increases from 45.0% to 45.8% (if each city is taken separately the results are similar to the latter, as shown in Table 6.2). That is, this evidence does not show a steady decrease of households depending on one provider. However, those households with two providers have increased during the 1990s in both the 16 cities and in the three cities (whether the household is poor or not). The fraction of households with three or more participants in the labor does not show a clear trend.

It might appear contradictory that the share of households with one provider increases and the same happens with those with two people in the labor market, but it is not. What this information reveals is that for households it is vital to diversify and increase income, but not necessarily possible. The availability of

labor is highly determined by the stage in the family cycle. As the head of the household gets older, it is more frequent that two or more members participate in economic activities. However, in general, regardless of the head of the household's age, the proportions of non-poor families that have only one member in the workforce are lower than among poor households. Differential rates of female economic participation according to the poverty situation of their households are a suggestive example of the capacity to diversify the sources of income. Mainly at ages below the forties, women from poor households tend to have lower rates of participation in the labor market than those from non-poor households. Another factor is the level of education. Workers from poor households have less schooling than their non-poor counterparts.

I replicated Boltvinik (1999)'s decomposition of occupation rates into three elements: the employment rate, economic participation, and potential economically population within the household. Even though the author utilizes ENIGH and uses nationwide figures, my findings are similar to his. Households living in poverty are disadvantaged –as compared to non-poor ones- on the three aspects. Thus, they are more frequently affected by unemployment, have fewer members participating in economic activities, and also count on less human resources that can be allocated to the labor force. This is valid for the three cities during the decade.

Within the labor market, the information suggests a close correlation between lower positions in the occupational structure –I utilize Erickson and Goldthorpe (1993)'s classification- of the head of the household and poverty of

the domestic unit. Figures for 1996 show that all occupational classes were more vulnerable to poverty during the mid-decade crisis than in the other years. However, the recovery has not been uniform neither among the occupational classes nor in the cities under study. In the three cities those households leaded by someone in the two upper classes –high-service class and lower-grade professionals- were the least affected by the economic shock of the mid-nineties. In Mexico City and Aguascalientes the other classes have bigger shares of poor households at the end of the decade than in 1993. Monclova is highly dependent on AHMSA's fluctuations, therefore, the crisis that this city lived since the 1980s is reflected in the elevated proportions of poor households in all occupational classes, except the top ones. The "recovery" in this case is relative to the poverty levels at the beginning and mid-decade critic situation.

The provision of social security and a stable contract are two conditions that are associated with the economic specialization of each city. Mexico City, where the tertiary sector is predominant, is the one where most households – whether poor or not- lack social protection and have kept increasing during the decade. In terms of written permanent contracts, this city occupied an intermediate position in 1993, but in 2000 had the lowest proportion of permanent wageworkers with a written contract. Monclova and Aguascalientes are more specialized in manufacture, and although non-poor households are more likely to be covered by social security than in Mexico City, the gap between them and poor households is similar to that found in Mexico City. Despite Monclova's industrial

specialization, it has had (compared to Aguascalientes) a lower level of workers with a permanent contract.

Per capita income differentials between poor and non-poor were decomposed into three components: the gap due to the rate of economic participation and the difference due to the mean income per worker, and the combined effect of these two factors. In this procedure I also replicated Boltvinik (1999)'s assessment and overall my results coincide with his findings for the whole country. The most relevant factor in the total difference of per capita income between poor and non-poor is the mean income obtained from work in the three cities throughout the decade. Therefore, labor market opportunities –turned into either wage or profits- are more important than demographic attributes (in this case the occupation rate) when explaining household's revenues.

The survey of poor and non-poor households' differentials presented in this chapter and the previous one suggests some of the main factors determining poverty. They will be approached in the next chapter from a cross-sectional and a longitudinal perspective through the construction of models that take into account such diversity of elements.

Chapter 6: Importance of Household Assets for the Likelihood of Living in Poverty

Chapters 4 and 5 presented a general survey of the variety of household resources –demographic characteristics, human capital, labor, and housing. The specific aim of this chapter is to disentangle their importance in the determination of social vulnerability. Although I basically use the household asset portfolio examined in the two previous chapters, I will focus on the effects of those variables that the descriptive overview identified as most relevant.

Chapter 6 has two components. In the first part, through a series of logistic regression models I will assess the effects of diverse attributes on the probability that a household is poor. The first part constitutes a cross-sectional analysis of the three cities under study: Mexico City, Aguascalientes and Monclova for the same periods (1993, 1996, and 2000) reviewed in previous chapters. These models indicate that the selected household characteristics do influence the likelihood of living in poverty and that the city effects and those of other factors change during the decade. Thus vulnerability to poverty has a spatial and temporal variation.

The second part is a longitudinal analysis of the household's likelihood of facing poverty. The source of information is also the National Urban Employment Survey (ENEU), which can be used to construct year-long panel data sets. In this case, the response variable is continuous and represents the gap between the household's income and the poverty line, seeking to grasp the relative household's deprivation introduced in the theoretical discussion of Chapter 2.

Although the window-time of observation is brief (five consecutive quarters), it still shows transitions in the poverty status of the household and a differential exposure over time to the risk of falling below the poverty line. I will use longitudinal growth models to analyze these transitions.

6.1 A CROSS-SECTIONAL VIEW: LOGISTIC REGRESSION MODELS

6.1.1 Data, Measures, and Methods

Data and Methods. The data source is the Mexican Urban Employment Survey (ENEU) as in the previous two chapters[73]. I will assess the likelihood that a household lives in poverty through a series of logistic models that have been constructed in a stepwise fashion including diverse sets of household's attributes. To estimate the importance of the bivariate relationships and the logistic models throughout the decade to the tables at the end of this section present the results for 1993, 1996, and 2000. This series of models were constructed using SAS for Unix, version 8.2. The coefficient estimates of the diverse factors were obtained with weighted data – weights provided by ENEU itself - and the standard errors were given by unweighted information.

Measures. The response variable is *household poverty*, a dichotomous measure of whether a household is below the poverty line (1 = yes). This analysis focuses on several key sets of predictors: city of residence, household demographics, human capital, labor, and housing.

[73] A brief description of this survey can be found in the introduction.

City of residence. Seeking to identify a differential effect for city of residence, I created models separately for Mexico City, Aguascalientes, and Monclova. Though there are some variations in the odds ratios, the direction of such effects remains constant in the three cities at the beginning and the end of the period under observation. Consequently, in the models that will be shown, city has been considered apart with the twofold objective of assessing the risk of facing poverty based solely on the fact of residing in a specific urban area and to emphasize the importance of each set of household resources in the three cities. Dummy variables were created for Monclova and Aguascalientes, taking Mexico City as the reference category.

Demographic Characteristics. Two variables are selected to estimate the importance of demographic factors in the determination of household poverty: *gender of the household's head* (Male = 1), and the *head's age*, which is a discrete measure of age intervals that takes those aged between 41 and 60 years old as the reference category[74].

Human Capital. I will assess only the effects of head's education because after modeling both the head's and the spouse's schooling as continuous and discrete variable, I find that the head's education is more important than the spouse's in the determination of the household's economic situation (besides, the education of the two of them is highly correlated). The selection of *the head of the household's level of education* rather than years of schooling is based on the greater significance of completed level of education on the likelihood of facing or

[74] I will not include in the models other demographics attributes of the household than age and gender of the head. The reason is that the composition of the household is subsumed in the poverty assessment because the threshold was adjusted by age and sex of each household member.

avoiding poverty that was suggested by the descriptive survey presented in Chapter 4. In this case those who achieved a high school diploma are taken as the reference.

Labor. In the models below I will include six control variables: the *number of household members in the workforce* to assess the effect of the allocation of household labor in the market. It is a continuous variable and counts any member, irrespective of their kin relationship within the household. The rest of the characteristics belong to the head of the household[75]: *occupational class*, a discrete variable constructed according to Erikson and Goldthorpe (1993) and discussed in Chapter 5. The reference category is the group belonging to the petite bourgeoisie. I also include *the number of hours* worked per week, which is a discrete measure in which those working between 35 and 48 hours constitute the reference group. *Size of the firm* is also a discrete variable with those involved in micro enterprises (up to five workers) as the reference category. *Economic sector* was constructed as a discrete variable in which the social services represent the reference category. *Coverage of social security* of the household head (1 = yes) is included as a proxy for household social security protection.

Housing. As was mentioned in Chapter 4, housing characteristics have been captured by ENEU since 1994 so I could only include such information in logistic models corresponding to 1996 and 2000. Only *housing tenure* is taken into account, it is a categorical variable in which owning the house is the reference.

[75] For a discussion of why only the head's economic involvement was considered in this series of models see Chapter 5 and the concluding remarks of this chapter.

Not all these sets of variables are expected to influence household poverty in the same way. The most important factors in the determination of household's poverty are likely to be human capital and employment. The rationale is that education is an attribute that will be either penalized or rewarded by the labor market, while the specific employment conditions are the direct economic channel between the household and the market.

The other factors mediate the direct link between the market and the domestic unit by either strengthening or limiting the economic capabilities of the household. The city of residence is included to assess the importance of regional context and should reflect the diverse impact of macroeconomic changes in Mexico. The demographic characteristics of the household suggest the differential chance of accessing income sources a household will have based on the head's gender and stage in the life cycle. Housing conditions do not directly "cause" poverty, but may be associated with deprived living conditions. House ownership, for instance, provides some security. Rent is, in contrast, a constant charge against household income. The effect of the selected variables on household's poverty is assessed next.

6.1.2 The Effect of City

The city factor changes throughout the decade. By 1993 Monclova was in the midst of a deep recession due to AHMSA (the main enterprise in the region)'s restructuring that started during the 1980s and was privatized in 1991. Model 1 for 1993 (Table 6.1) indicates that it was 48% more likely that a household in

Monclova would face poverty than if it had been located in Mexico City. These effects are mediated to some extent by the inclusion of the various sets of household assets in the other models. Retaining their high statistical significance, the odds declined to 43% as the household demographics were included in Model 2, and to 39% when the level of education of the household's head was incorporated (Model 3). The inclusion of employment conditions (Model 4) slightly modifies the likelihood of facing poverty if living in Monclova (41%) as compared to those households in Mexico City. Thus adding control variables attenuates the risk of poverty in Monclova, but not considerably. Though the odds for Aguascalientes operate in the opposite direction – suggesting a lower risk of facing poverty as compared to Mexico City, the result is not statistically strong enough to establish a difference between Aguascalientes and Mexico City with respect household poverty.

Table 6.2 suggests that in 1996 when household demographics, human capital, employment, and housing are taken into account the likelihood of facing poverty was very similar in the three cities. In 2000 (Table 6.3), when either the place of residence is considered alone (Model 1) when the other sets of control variables are added (Models 2 through 5), households were about 20% less likely to be poor in Aguascalientes than in Mexico City. The coefficients in Monclova's case are statistically significant only in Models 3 and 4, and indicate a widening gap in the probability of being poor between Mexico City and the other two areas (a 23% lower risk for those living in Aguascalientes and 19% for those in Monclova according to Model 4). When adding housing control variables (Model

5, Table 6.4) to the other sets of variables, the likelihood of facing poverty if living in Monclova remains below that shown by Mexico City (15% less), but loses predictive power. This information suggests that among these three urban areas Mexico City stands out as the one where vulnerability to poverty was more frequent at the end of the decade and Monclova at the beginning.

6.1.3 The Effect of Household Demographics

In the descriptive survey of household demographic attributes (Chapter 4) female-headed households seemed less frequently affected by poverty. Out of the three bivariate relationships, only that for 1993 is highly statistically significant and indicates that male-headed households were 29% more likely to live in poverty than their female counterparts. In the same year, as shown by Table 6.1, adding the effect of head's age and city (Model 2) diminishes the predictive power, but the odds only change slightly (27%). However, similar to the other years under scrutiny, the inclusion of human capital and more powerfully employment attributes increases the effect of head's gender on the likelihood of household poverty. Model 3, which takes into account head's education, shows a 37% higher risk of suffering poverty for male-headed households. The mediation of employment leads to a 72% higher likelihood of being poor for male-headed households.

In the subsequent years, the effect of head's gender is statistically strong only in Models 3 through 5. Nonetheless, they also show a higher risk of living in poverty for male-headed households: according to Model 4, 70% in 1996 and

73% at the end of the decade, and slightly lower odds when housing is included (Model 5), that is, 68% and 69%, respectively.

In 1993, Models 3 and 4 show some statistically strong results for age of the household head, which coincide in the direction of the effects, but not in the magnitude. When the effects of city, household demographics, and human capital are taken into account (Model 3), those households headed by someone aged between 25 and 40 were 49% more likely to live in poverty than those in the age interval of 41 to 60. The same model indicates that in contrast the elderly were 15% less likely than those aged 41 to 60 to live in poverty. Model 4, that includes employment conditions, attenuates the risk of poverty as compared with the odds in Model 3 since households headed by someone aged 25 to 40 were 17% more likely to live in poverty than those where the head is between 41 to 60, and the elderly represented a likelihood 35% lower than the former. In this case, the odds for the domestic units headed by the youngest became statistically significant ($p<.01$) and show a 32% lower risk of facing poverty than those aged 41 to 60 do.

In 1996 as well, only Models 3 through 5 show statistically strong coefficients for head's age. Although the pattern is similar to that in 1993, the high probability of living in poverty for those households headed by somebody in the age interval of 25 to 40 does not decrease when the employment (Model 4) or the housing attributes (Model 5) were included. The respective odds were 48% and 55% higher than those headed by somebody aged 41 to 60.

The bivariate relationship between the head's age and household poverty is statistically significant only in 2000, showing that domestic units headed both

by those aged 25 to 40 and by those 61 and above were respectively 23% and 12% more likely to live in poverty than those headed by someone aged 41 to 60. Similar odds are obtained with Model 2 that takes account of city of residence and the head's gender. Unlike the previous years, when including head's education (Model 3) only the result for heads aged between 25 to 40 is statistically significant and indicates a 43% higher risk of living in poverty as compared to those households headed by persons aged 41 to 60. Interestingly, when including employment control variables (Models 4) the odds of facing poverty for those households headed by the group of heads aged 25 to 40 considerably decrease (14% higher than the reference group) and the inclusion of housing makes little difference to these odds (15%). In Models 4 and 5 for 2000 as well, the two extreme age groups become statistically significant and show approximately a 30% lower risk of facing poverty than those households headed by someone aged 41 to 60.

6.1.4 The Effect of Human Capital

Education of both the head of the household and the spouse has a negative relationship with the likelihood of facing poverty. The level of schooling held by the head shows a very consistent pattern through the decade and the results are statistically robust, regardless of the control variables added to this series of models.

The bivariate relationship in 1993 (Table 6.1) follows the same trend as will be seen throughout the decade: the higher the level of education attained by

the head the lower the risk that his or her household will live in poverty. The magnitude of the relationship does not remain intact as the control variables are included. According to Model 3 (that apart from education of the head, takes into account the effect of city and household demographics), those households whose head did not achieve a primary school diploma were 3.2 times and those who completed primary 2.9 more likely to live in poverty as compared to those domestic units where the head completed high school. The threat of poverty diminishes in the subsequent levels of education. However, Model 4 suggests that taking account of employment attributes moderates the effect of education of the head on the determination of the household's poverty. The odds of poverty decreased for those households where the head attained a level below high school as compared to Model 3 whereas the households in which the head achieved some college or above –still the least threatened- lost some protective effect since the likelihood of not living in poverty decreased from 64% to 57% when compared with those heads who had high school.

The economic hardship of the middle of the decade (Table 6.2) reinforced the effect of education of the head on household poverty. The estimates provided by the bivariate equation are considerably higher than in 1993, though the direction remained the same. The pattern is similar to what has just been discussed. According to Model 3, those domestic units where the head did not complete primary school were six times more likely to live in poverty than those headed by someone who obtained a high school diploma. Those households where the head finished elementary school had as well high odds of living in

poverty (3.9 times). Although employment attributes also attenuate this hardship, the likelihood of facing poverty for these groups of households was still remarkable: 4.4 times for those households where the head did not complete primary and 3 times higher likelihood of facing poverty for those who completed primary as compared with those that finished high school. Note, however that for those in the highest levels of education the risk of living in poverty increased as compared to 1993, meaning that even for them schooling was a less protective factor than before the crisis.

Table 6.3 suggests that in 2000 the risk of poverty diminished as compared to the odds at the middle of the decade, but the differential among schooling levels remained – and were similar to those in 1993. The estimates given by the bivariate analysis show that the odds of living in poverty for those households where the head is classified in the lowest level of education and those whose heads completed secondary school were higher as compared to such results in 1993. In the models that take into account the effect of city of residence, and household demographics (Model 3), as well as employment (Model 4), the pattern is similar to that found for the other periods under question. Model 4 reveals higher odds of living in poverty for all education categories -except the heads that completed primary education- as compared to those displayed in Table 6.1 for 1993. This may be a result of the mid-decade crisis that did not allow these groups to achieve at least the conditions they had before the economic disruption.

The inclusion of housing tenure in Model 5 for 1996 (Table 6.4) and 2000 (Table 6.5) only slightly modifies the effects of education found in Model 4. Thus

a constant in the years under observation is the lower odds ratios for all categories of educational attainment but the highest when the employment (Model 4) and housing (Model 5) control variables are considered. These modifications show that these two sets of variables mediate the effect of the head's education on household poverty, diminishing the impact of schooling achievement, that is, labor and housing characteristics reduce the unfavorable effect for those that achieved secondary school or less and also decrease the protective nature of higher levels of education for those households whose head studied at least some college. Nonetheless, the gap in the likelihood of facing poverty between one level and the other remains noticeable, favoring those with the highest achievement.

6.1.5 The Effect of Employment

The bivariate relationship between allocating one more member of the household to the workforce and household poverty shows this factor to have a smaller impact when compared to the estimate obtained through the logistic models in the three years under study. In 1993 the bivariate analysis shows, with a high statistical significance, that as one more member participated in economic activities his or her household was 20% less likely to be poor, but as the other control variables were considered this variable became more important in the determination of household's economic situation. Following Model 4, which assesses the importance of employment as a resource to resist economic instability, the allocation of one more household member into the workforce

represented 30% less likelihood of facing poverty than for those domestic units that do not have availability of such an asset. During the critical period of the mid-decade crisis, the availability of labor within the household was not such a powerful resource. The bivariate analysis did not show statistically significant results (Table 6.2), and in Model 4 the protective nature of the availability of labor only offered a 15% lower risk of suffering poverty (about half of that in 1993). By the end of the decade (Table 6.3) the availability of labor recovers its importance and presents a 32% lower risk of living in poverty for those domestic units that are able to allocate a further member to the labor force. When housing characteristics are taken into account (Model 5 for 1996 and 2000), the effects of members participating in the labor force remains very similar to those reported by Model 4.

Occupational class is an important determinant of household poverty.[76] The bivariate analysis and Models 4 and 5 that take into account the effect of the range of variables do not coincide in the magnitude and even the direction of the effects of occupational class. The bivariate analysis in the three years under observation suggests that as the "social ladder" descends the odds of living in poverty increase, although the coefficients for the three bottom classes are not statistically powerful. The bivariate equation for 1993 shows for instance that those households where the head was involved either in high-service, lower-grade professional, or routine non-manual activities were less likely to fall below the poverty line than those headed by the petite bourgeoisie (self-employed and

[76] As was indicated in Chapter 5, households are not classified by the couple's occupational class due to the small proportion of spouses in the workforce and because head's occupation is still a characteristic that offers a relatively neat differentiation amongst social strata.

entrepreneurs of micro firms): 85%, 68%, and 30% less likely respectively for each class. The bivariate estimates of those domestic units headed by someone involved in the three manual classes are not statistically very strong (except for the semi and unskilled manual workers in 1996), but suggest that the latter group is more likely to live in poverty than the petite bourgeoisie. The other groups show no difference.

Model 4 reveals that the protective effect of occupation for those located in the top positions is not as large as that showed by the bivariate relationship and shows that those in the bottom positions are more vulnerable to poverty than what the bivariate analysis suggested. Following Model 4 for 1993 (Table 6.1), those heads working in high-service occupations were about half as likely as those self-employed and entrepreneurs of micro firms, and the lower-grade professionals were only 30% less likely to live in poverty than the self-employed and entrepreneurs. The estimate for the semi-skilled and unskilled manual workers became statistically stronger than in the bivariate analysis and indicates that this group was 38% more prone to face poverty than the petite bourgeoisie.

The same Model 4 for the other two periods under study shows a relatively clearer division in the likelihood of falling below the poverty line between those households headed by a worker in the top class and the other groups, with the latter more susceptible to living in poverty. In 1996 (Table 6.2) households headed by someone working in the high-service class were –as in 1993- about half as likely to live in poverty as those domestic units where the head was in the petite bourgeoisie. The three classes of manual workers were

more likely to live in poverty than the petite bourgeoisie, specially the semi and unskilled workers (2.7 times) and those in the low-service class (87% more).

As compared to the other two years, Model 4 for 2000 (Table 6.3) shows an improvement in the relative position of those at the top of the class structure (high-service class), since the odds of living in poverty for them was the lowest in the decade (61% less likely to fall below the poverty line than those heads in the pettite bourgeoisie). Although the risk of falling below the poverty line diminishes to some extent, the pattern of the three manual classes coincides with that just described for 1996, that is, those are the groups more prone to face poverty in the class structure, being the semi and unskilled workers the worst positioned –since they were 2.1 times more likely to live in poverty than the pettite bourgeoisie. In this case the estimates for the lower-grade professional class and the routine non-manual gained statistical power and confirm that the lower the position in the occupational structure the higher the economic vulnerability of the household -i.e. the lower-grade professional class were 30% less likely to live in poverty than those in the pettite bourgeoisie whereas those involved in the routine non-manual activities had a 37% higher risk). The inclusion of housing control characteristics in 1996 and 2000 (Model 5) does not significantly change the odds ratios obtained through Model 4.

The bivariate relationship between the number of weekly hours devoted by the head of the household to work is statistically significant only in 1993, showing as expected, that those working fewer hours were more likely to live in poverty. Table 6.1 indicates that heads working fewer than 35 hours a week were 20%

more likely to live in poverty than those who work between 35 and 48 hours, and heads devoting longer working hours were 6% less likely than the former.

As in the case of the previous employment variables, taking the selected characteristics together accentuate their effect. In 1993 those working less than 35 hours a week were 28% more likely to live in poverty than those where the head devoted 35 to 48 hours, but those working above 48 hours were 14% less likely to face poverty than the former. By 1996 though the estimates lose some predictive power, the odds of facing poverty for those working fewer hours remains the same as before the crisis and the protection for those working more than 48 hours decreased since they were only 7% less likely to fall below the poverty line as compared to the ones that work between 35 and 48 a week. By 2000 (Table 6.3) the risk of poverty decreased for those working less than 35 hours as compared to the previous years (21% higher risk than those working 35 to 48 hours a week), although they are the ones with the highest probability of living in poverty. Unlike the other years, in 2000 I did not find evidence of a difference in the likelihood of living in poverty between those working 35 to 48 hours a week and those working more than 48 hours. Such figures very slightly change when housing control variables are taken into account (Model 5).

I expected to find that the larger the enterprise the lower the risk of living in poverty. This pattern is clearly depicted by the bivariate relationship in the three years under study. However, the interplay with the other selected variables (Models 4 and 5) does not show such a consistent pattern. In 1993 and 1996 the estimates for those involved in large enterprises (51 or more workers) were highly

statistically significant and show that those households leaded by someone working in large enterprises were about 30% less likely to live in poverty than those in micro firms (up to five workers). The anticipated pattern - the larger the enterprise the lower the risk of living in poverty- was only observed in 2000, when Model 4 shows that those heads involved in micro enterprises (up to five workers) were the ones with the highest risk of living in poverty, whereas those working in the largest firms were the ones best positioned. The inclusion of housing characteristics in Model 5 for 1996 and 2000 did not considerably modify the coefficients obtained through Model 4.

When constructing the economic sector variable I expected that heads of households working in traditional industry, construction, retail sales, transport, and personal services would be in a more vulnerable situation than those in the social services and the other economic branches. The bivariate relationship shows the expected pattern more clearly than the models including the other variables. Retail sales stands out as the activities that more frequently lead a household to poverty throughout the decade, and in decreasing order personal services and transport are also highly associated with poverty. As control variables are added (Model 4 and 5), economic sector does not show such a neat pattern of the likelihood of living in poverty. In 1993 those households leaded by someone working either in transport or modern industry were less likely to live in poverty than households of those in the social services (Table 6.1). By 2000, modern industry has a similar effect to that in 1993, that is, offering a protection against the risk of poverty to the households of heads involved in such activities.

Opposite to what I expected, during the mid-decade crisis and in 2000 heads of households in transport and personal services were more protected from poverty than those in the social services (Tables 6.2 and 6.3). Producer services corresponds to what I anticipated, that is, offering better income than those involved in social services and hence a reduced threat of poverty, which is shown by the bivariate estimate in the three years and with a higher statistically predictive power in 2000 than in the other two periods.

Social protection of the household's head performs in the expected direction throughout the decade only in the bivariate relationship: those households where the head is protected –and presumably the family is too- are less likely to live in poverty (the assumption is that social protection is associated with job stability and better income). However, in the models that take into account the interplay of the control variables only in 1996 was the association between social protection and poverty a strong one with those domestic units where the head was protected being 35% less likely to fall below the poverty line. For the more economically stable periods there is no evidence to indicate whether the social protection of the head makes a difference to the likelihood of facing poverty.

6.1.6 The Effect of Housing

It was suggested by information displayed in Chapter 4 that those living in rented houses are less likely to be poor than those in owned houses, and logistic models offer some specific evidence for this suggestion. Since house ownership is fairly extended in Mexican urban areas, owners may either be poor or non-poor

families, that is, the face of being an owner says little about the economic conditions of the family. However, the other statuses depict clearer differences in terms of house tenure and household poverty. There is a differential risk between those living in a borrowed or in a rented house, with respect to owners. The bivariate relationship for both 1996 and 2000 was highly statistically significant and shows a considerably higher likelihood of facing poverty for those residing in borrowed households -58% in 1996 and about twice in 2000- as compared to the owners. In contrast, those living in rented houses are less likely than the former to fall below the poverty line -22% in 1996 and 16% by 2000.

Model 5 indicates that in 1996 (Table 6.4) those residing in a rented house had a 33% lower risk of being poor than those occupying their own house. This probability was very similar at the end of the decade (30% lower odds). Nesting families and borrowing a house –from a relative in most cases- is a frequent practice as well, but is more closely associated with poverty than the other two categories. Those occupying a borrowed house in 2000 were 39% more likely to be poor than owners (in 1996 there is no evidence strong enough to affirm there is a difference in the likelihood of living in poverty between owners and borrowers).

Housing and other attributes examined through this series of models suggest a complex accumulation of scarcities that affect the family well-being and makes more difficult overcoming poverty[77].

[77] Out of this series of logistic models the one that most considerably contributes to improve the fraction of the variance explained as control variables are added is Model 3 in the three years under observation, and the other is Model 4 (change in G2), which take into account the effect of head's education and employment attributes, respectively. I examined diverse interaction effects in these logistic regression models, but found no evidence statistically significant.

Table 6.1: Odds Ratios Showing the Effects of Risk Factors on the Likelihood of Household Living in Poverty, 1993

	Bivariate	Model 1	Model 2	Model 3	Model 4
Urban Area [Mexico City]					
Aguascalientes		0.929	0.910	0.856	0.892
Monclova		1.481***	1.430***	1.392***	1.408***
Demographic Characteristics					
Head's Gender [Female]					
Male	1.288***		1.270**	1.367***	1.721***
Head's Age [41 – 60]					
12 – 24	0.992		0.959	1.003	0.677**
25 – 40	1.163		1.141	1.486***	1.168***
61 +	1.035		1.067	0.845**	0.650***
Human Capital					
Head's Educat. [Compl High Sch]					
Incomplete Primary	2.685***			3.238***	3.068***
Complete Primary	2.778***			2.851***	2.596***
Complete Secondary	1.895***			1.778***	1.588***
Any College up to Any Graduate	0.381***			0.355***	0.472***
Labor					
Members in the Workforce	0.795***				0.704***
Head					
Occupational Class [Pett. Bourg]					
High-Service Class	0.147***				0.511***
Lower-grade Professionals	0.320***				0.701***
Routine Non-manual	0.695***				1.090
Skilled Manual	0.970*				1.109
Semi-skilled & Unskilled Manual	1.292*				1.376**
Low-Service Class	1.066				1.219
Weekly Working Hours [35-48]					
Less than 35	1.197**				1.283***
48 or more	0.937**				0.863***
Firm Size [Micro (up to 5 w.)]					
Small (6 to 15 w.)	0.722***				0.750*
Medium (16 to 50 w.)	0.618***				0.668
Large (51 + w.)	0.568***				0.723***

	Bivariate			Model 4 (cont'd)
Economic Sector [Social Services]				
Traditional Industry	1.648***			1.013
Modern Industry	1.255			0.850***
Construction	1.343***			0.662*
Whole Sale	0.746			0.661*
Retail Sales	1.772***			1.105
Transport	1.413**			0.787**
Producer Services	0.645***			0.817*
Personal Services	1.645***			0.888*
Social Security [Not protected]				
Protected	0.642***			0.891
Intercept	-0.181***	-0.266***	-1.161***	-0.160*
G^2	10144.1	10132.0	9185.5	8839.2
ΔG^2		12.1	946.5	346.3

N for all households = 7 384
[Reference category]
* p<.05, ** p<.01, *** p<.001
Source: Mexican Urban Employment Survey (ENEU). Second quarter.

Table 6.2: Odds Ratios Showing the Effects of Risk Factors on the Likelihood of Household Living in Poverty, 1996

	Bivariate	Model 1	Model 2	Model 3	Model 4
Urban Area [Mexico City]					
Aguascalientes		1.137	1.130	0.925	0.963
Monclova		1.176	1.156	0.954	0.959
Demographic Characteristics					
Head's Gender [Female]					
Male	1.283		1.263	1.525***	1.702***
Head's Age [41 – 60]					
12 – 24	1.172		1.137	1.194	0.901
25 – 40	1.156		1.130	1.598***	1.479***
61 +	1.082		1.110	0.737***	0.608***
Human Capital					
Head's Educat. [Compl High Sch]					
Incomplete Primary	4.459***			6.008***	4.362***
Complete Primary	3.628***			3.933***	3.039***
Complete Secondary	2.315***			2.161***	1.830***
Any College up to Any Graduate	0.466***			0.430***	0.615***
Labor					
Members in the Workforce	0.952				0.852***
Head					
Occupational Class [Pett. Bourg]					
High-Service Class	0.135***				0.513***
Lower-grade Professionals	0.225***				0.694
Routine Non-manual	0.548***				1.069
Skilled Manual	1.038				1.344**
Semi-skilled & Unskilled Manual	2.212***				2.699***
Low-Service Class	1.281				1.867***
Weekly Working Hours [35-48]					
Less than 35	1.100				1.277**
48 or more	0.952				0.932*
Firm Size [Micro (up to 5 w.)]					
Small (6 to 15 w.)	0.669***				0.702
Medium (16 to 50 w.)	0.634*				0.735
Large (51 + w.)	0.427***				0.688***

	Bivariate			Model 4 (cont'd)
Economic Sector [Social Services]				
Traditional Industry	1.868***			0.908
Modern Industry	1.449*			0.910
Construction	1.648***			0.661
Whole Sale	1.286			0.926
Retail Sales	2.082***			0.972
Transport	1.812**			0.860**
Producer Services	0.615***			0.642*
Personal Services	1.929***			0.700**
Social Security [Not protected]				
Protected	0.475***			0.651***
Housing				
Tenure [Owned]				
Rented	0.780***			
Borrowed	1.583***			
Intercept	0.338***	0.074**	-0.859***	-0.085
G^2	9287.6	9282.2	8054.8	7758.3
ΔG^2		5.4	1227.4	296.5

* p<.05, ** p<.01, *** p<.001
N for all households = 6 857
[Reference category]
Source: Mexican Urban Employment Survey (ENEU). Second quarter.

Table 6.3: Odds Ratios Showing the Effects of Risk Factors on the Likelihood of Household Living in Poverty, 2000

	Bivariate	Model 1	Model 2	Model 3	Model 4
Urban Area [Mexico City]					
Aguascalientes		0.789***	0.776***	0.738***	0.767***
Monclova		0.944	0.928	0.812***	0.807**
Demographic Characteristics					
Head's Gender [Female]					
Male	1.273		1.243	1.443***	1.734***
Head's Age [41 – 60]					
12 – 24	1.156		1.119	0.939	0.657***
25 – 40	1.232***		1.204***	1.433***	1.138**
61 +	1.116***		1.141***	0.864	0.656***
Human Capital					
Head's Educat. [Compl High Sch]					
Incomplete Primary	2.826***			3.540***	3.148***
Complete Primary	2.519***			2.777***	2.495***
Complete Secondary	2.069***			1.964***	1.743***
Any College up to Any Graduate	0.368***			0.366***	0.526***
Labor					
Members in the Workforce	0.762***				0.678***
Head					
Occupational Class [Pett. Bourg]					
High-Service Class	0.103***				0.393***
Lower-grade Professionals	0.254***				0.697*
Routine Non-manual	0.770***				1.370**
Skilled Manual	1.020*				1.384***
Semi-skilled & Unskilled Manual	1.673				2.141***
Low-Service Class	1.058				1.437***
Weekly Working Hours [35-48]					
Less than 35	0.961				1.205**
48 or more	1.054				0.995
Firm Size [Micro (up to 5 w.)]					
Small (6 to 15 w.)	0.691***				0.746**
Medium (16 to 50 w.)	0.578***				0.593***
Large (51 + w.)	0.476***				0.517***

	Bivariate			Model 4 (cont'd)
Economic Sector [Social Services]				
Traditional Industry	1.443***			0.722
Modern Industry	1.120			0.709**
Construction	1.697***			0.672*
Whole Sale	0.984			0.678
Retail Sales	1.752***			0.982
Transport	1.278*			0.642***
Producer Services	0.552***			0.561**
Personal Services	1.592***			0.695***
Social Security [Not protected]				
Protected	0.604***			1.042
Housing				
Tenure [Owned]				
Rented	0.841**			
Borrowed	1.985***			
Intercept	0.008	-0.447*	-0.876***	0.219**
G^2	11594.7	11568.3	10469.3	9913.0
ΔG^2		26.4	1099.0	556.3

N for all households = 8 382
[Reference category]
* p<.05, ** p<.01, *** p<.001
Source: Mexican Urban Employment Survey (ENEU). Second quarter of each year

Table 6.4: Odds Ratios Showing the Effects of Risk Factors on the Likelihood of Household Living in Poverty, Model 5, 1996

	Model 5		Model 5 (cont'd)
Urban Area [Mexico City]		**Economic Sector [Social Services]**	
Aguascalientes	0.958	Traditional Industry	0.925
Monclova	0.948	Modern Industry	0.892
		Construction	0.662
Demographic Characteristics		Whole Sale	0.947
Head's Gender [Female]		Retail Sales	0.999
Male	1.677***	Transport	0.873**
Head's Age [41 – 60]		Producer Services	0.652*
12 – 24	0.970	Personal Services	0.717**
25 – 40	1.546***	**Social Security [Not protected]**	
61 +	0.600***	Protected	0.646***
Human Capital		***Housing***	
Head's Educat. [Compl High Sch]		**Tenure [Owned]**	0.668***
Incomplete Primary	4.360***	Rented	1.123
Complete Primary	3.005***	Borrowed	
Complete Secondary	1.784***		
Any College up to Any Graduate	0.608***		
Labor			
Members in the Workforce	0.847***		
Head			
Occupational Class [Pett. Bourg]			
High-Service Class	0.525***		
Lower-grade Professionals	0.713		
Routine Non-manual	1.090*		
Skilled Manual	1.353**		
Semi-skilled & Unskilled Manual	2.747***		
Low-Service Class	1.940***		
Weekly Working Hours [35-48]			
Less than 35	1.253**		
48 or more	0.935*		
Firm Size [Micro (up to 5 w.)]			
Small (6 to 15 w.)	0.710		
Medium (16 to 50 w.)	0.738	**Intercept**	-0.024
Large (51 + w.)	0.688***	G^2	7723.9
		ΔG^2	34.4

* p<.05, ** p<.01, *** p<.001
N for all households = 6 857
[Reference category]
Source: Mexican Urban Employment Survey (ENEU). Second quarter.

Table 6.5: Odds Ratios Showing the Effects of Risk Factors on the Likelihood of Household Living in Poverty, Model 5, 2000

	Model 5		Model 5 (cont'd)
Urban Area [Mexico City]		**Economic Sector [Social Services]**	
Aguascalientes	0.789***	Traditional Industry	0.714
Monclova	0.845*	Modern Industry	0.718**
		Construction	0.665*
Demographic Characteristics		Whole Sale	0.680
Head's Gender [Female]		Retail Sales	0.979
Male	1.690***	Transport	0.635***
Head's Age [41 – 60]		Producer Services	0.562**
12 – 24	0.697***	Personal Services	0.716***
25 – 40	1.149***	**Social Security [Not protected]**	
61 +	0.645***	Protected	0.987
Human Capital		***Housing***	
Head's Educat. [Compl High Sch]		**Tenure [Owned]**	
Incomplete Primary	3.186***	Rented	0.699***
Complete Primary	2.509***	Borrowed	1.385***
Complete Secondary	1.748***		
Any College up to Any Graduate	0.537***		
Labor			
Members in the Workforce	0.677***		
Head			
Occupational Class [Pett. Bourg]			
High-Service Class	0.396***		
Lower-grade Professionals	0.689*		
Routine Non-manual	1.379**		
Skilled Manual	1.365**		
Semi-skilled & Unskilled Manual	2.111**		
Low-Service Class	1.410***		
Weekly Working Hours [35-48]			
Less than 35	1.205**		
48 or more	1.008		
Firm Size [Micro (up to 5 w.)]			
Small (6 to 15 w.)	0.767*		
Medium (16 to 50 w.)	0.625**	**Intercept**	0.248**
Large (51 + w.)	0.523***	G^2	9869.8
		ΔG^2	43.2

N for all households = 8 382
[Reference category]
* p<.05, ** p<.01, *** p<.001
Source: Mexican Urban Employment Survey (ENEU). Second quarter

6.2 LONGITUDINAL PATTERNS OF FALLING INTO OR ESCAPING FROM POVERTY

6.2.1 Data, Measures, and Methods

Data. In order to observe the effect of time over the household's exposure to the risk of living in poverty, I will analyze longitudinal –panel type- information provided by ENEU in this section. In the ENEU one fifth of the sample is replaced every quarter. These new cases plus the remaining 80% constitute five independent panels. Each panel is followed during five consecutive quarters, which allows the researcher to construct longitudinal data sets over one year (INEGI 1998). Just to illustrate the way panels used in this section were constructed I present the following table, which shows the creation of the panel that starts in the second quarter of 1995 and ends in the same period of 1996[78].

Table 6.6: Panel Information Construction, ENEU

Interview Number / Quarter	First Interview	Second Interview	Third Interview	Fourth Interview	Fifth Interview
1995-2					
1995-3					
1995-4					
1996-1					
1996-2					

Source: Cerrutti 1997, Figure A1, p. 302

Though the observation time-window is short, it provides a longitudinal dimension of vulnerability to poverty. Aiming to survey approximately the same

[78] For more specific information regarding the construction of rectangular data sets required by the longitudinal methods used in this section, see the methodological appendix.

moments during the nineties that have been examined so far in chapters of Part II, I constructed three panels: 1993-2 to 1994-2, 1995-2 to 1996-2, and 1999-2 to 2000-2. Those periods were selected to depict household economic conditions previous to, during, and after the mid-decade economic crisis. The spatial focus is the same group of cities in question: Mexico City, Monclova, and Aguascalientes.

Next I show a table with some specific information regarding the sample size for each panel that will be analyzed in this section.

Table 6.7: Sample Size of Panels Used: City and Occasions of Measurement Pooled Information, ENEU

Panel	Σ Followed Observations	Attrition %	Observations in the Panel	Missing Cases	Observations Used	Subjects (HH) Modeled
1993-1994	8329	4.0	7999	971	7028	1510
1995-1996	8269	4.8	7875	1007	6868	1475
1999-2000	9712	3.8	9341	1222	8119	1725

Source: Mexican Urban Employment Survey (ENEU).

The total number of followed up observations is the group of households visited during the consecutive five quarters, summed up for each visit. Once the attrition effect is subtracted[79], we obtain the next column that contains the number of observations that correspond to the same domestic units in each panel. The missing cases are those that do not provide information about the response variable, but I did not eliminate them because these models can be constructed using unbalanced information, that is, this method takes into account the

[79] The cases in which the variable "*hogar mudado*" ("moved household") in ENEU is not zero, code that indicates is the same interviewed since the first visit. Therefore, cases where hogar mudado was 1 and above were eliminated, giving the proportion of the second column.

contribution of any observation registered irrespective of whether a specific case has information in the five consecutive occasions. Finally, the number of subjects is the actual number of households included in the series of individual growth models analyzed below, thus a subject is a household followed up through five quarters in ENEU. Their exposure to the risk of poverty will be modeled in this section.

Measures. The exposure to the threat of poverty takes place continuously over time. Since I seek to identify and assess those household factors that more precisely predict the relationship between time and the vulnerability to poverty, in this section I introduce two main variations on the previous analysis: the inclusion of time as one of the explanatory variables and a different treatment of the response variable.

The series of explanatory variables are basically the same as have been utilized throughout the quantitative analysis. The main difference is that in this case *time* intervenes as another independent factor of vulnerability to poverty and is treated correspondingly. Time is coded 0 to 4, where time 0 is the onset and from 1 through 4 represent the consecutive interviews carried out quarterly.

The response variable is treated in a continuous fashion rather than discrete as in the case of the cross-sectional analysis. I call this variable *gap*, which is the distance between a household's total income and the poverty line. Since in this research I focus on those living under difficult economic conditions, the assessment of deprivation in a continuous fashion will allow me to identify those who event though are located above the poverty line by a small distance

does not imply that the household is free of the threat of poverty. Using a continuous distribution of household position relative to the poverty line shows that a discrete definition of poverty may be misleading or at least provides only partial information. An important proportion of households that are above the poverty threshold are actually not that far from it, which places them in an insecure position. This approach helps us understand poverty as a dynamic rather than a static phenomenon. Vulnerability to poverty is a changing position over time and deprivation has diverse levels of intensity (see the theoretical discussion in Chapter 2). Therefore, the terms in which the dependent variable, gap, has been set, represents the household's relative deprivation based on income from employment.

The relevance of treating income gap as a continuous variable relies on the possibility of identifying those households that are close enough to the poverty threshold to be constantly threatened by poverty. Income Gap is measured in pesos of 1994 (comparable through the whole period). The way I constructed this variable implies that a value of cero means that the household income is equal to the amount needed to live out of poverty. Thus those with a positive gap will be above the poverty line, or below if the value is negative. To describe the performance of the response variable in the three panels used, I present a table with a summary of this information, I will also discuss a test of ranges, and a graphic distribution of the median income gap during every period of measurement.

Table 6.8: Description of Income Gap by Panel: City and Periods of Measurement
Pooled Information, Pesos of 1994

	1993-2	1995-2	1999-2
Maximum Value	90887.7	31090.0	75153.8
Q_3	1034.0	622.1	768.4
Median	64.0	-144.5	-41.5
Q_1	-550.0	-639.8	-545.4
Minimum Value	-3120.4	-4727.4	-4137.5
Stand. Deviation	2894.5	2105.5	2243.2

Source: Own calculations based on the Mexican Urban Employment Survey (ENEU).

Following Table 6.8, a brief characterization of the income gap based on the median indicates that only in 1993 were more than 50% of the households above the poverty line. In the second quarter of 1995 when the mid-decade crisis was in its peak more than half of the households fell below the poverty line and the deficit was greater than that of the second quarter of 1999 in which period more than half of the households were still below the poverty threshold.

Two other interesting features are the distance between the best and worst positioned households in this distribution of relative deprivation based on employment income, and the concentration around the poverty line. The largest distance (absolute value of difference between the maximum and minimum value) between the poorest and wealthiest domestic units is found in 1993, which narrows during the crisis and expands again at the end of the decade. This supports the hypothesis proposed by Cortés and Ruvalcaba (1991) about the reduction of inequality due to a generalized impoverishment of Mexican households in during crisis periods. The interquartile ranges show that 50% of the households are around the poverty line. Since zero is equal to the poverty line,

those located between the first and third quartiles, Q_1 and Q_3, are close to that threshold according to Table 6.8. That is, households located at the first quartile, for instance in the period 1993-2, had a deficit of $550 pesos to be out of poverty and those in the third quartile were above the poverty line by $1 034 pesos. In that period of 1993-2 (before the onset of the crisis) those households located from the median point to the third quartile disposed of a larger "extra" amount beyond the poverty threshold. The opposite happened during the crisis, and at the end of the decade the monetary resources present before the crisis had still not been reached.

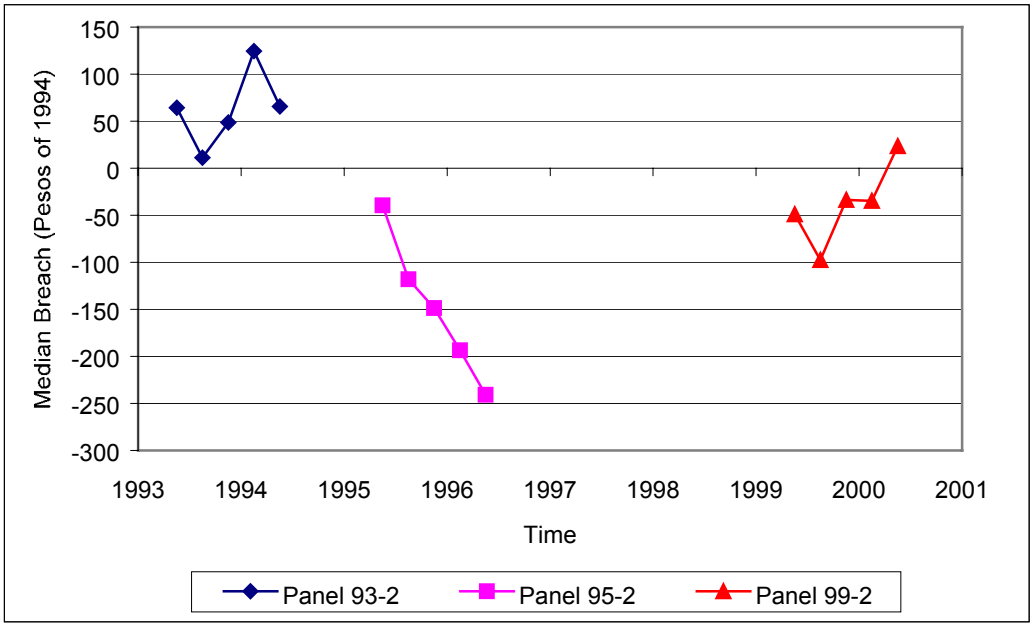
Besides this visual description, I carried out a test[80] to check whether the difference of the ranges was statistically significant. Evidence supports the rejection of the null hypothesis, therefore the ranges of the three panels were not equal ($p<.005$). This means that the differences just described between the minimum and maximum income gap points are statistically significant.

So far the description of income gap was realized with pooled data –i.e. joining the data for the five quarterly measurements for each panel. Next I show the distribution of the median[81] income gap, but displaying the information for every quarter that households were followed.

[80] The Kruskal Wallis (ANOVA one tail) for ranges. This test can be applied for not normal distributions where the variances are heterogeneous, as in the case of the variable income gap (Gutiérrez Espeleta 1995).

[81] Given the distorting effect of extreme values while analyzing income, the median may be more suitable. That is why I decided to use the median to better describe the distribution of the gap.

Figure 6.1: Distribution of the Median Income Gap through Time by Panel



Source: Own calculations based on the Mexican Urban Employment Survey (ENEU).

This figure illustrates the population median --of Mexico City, Monclova, and Aguascalientes together-- relative to the distance between a household's monetary resources and the minimum monthly requirements to avoid poverty, that is, the income gap.

In the period that goes from the mid-1993 to the mid-1994, more than half of the households remained above the poverty line. The excess was not great, however. Particularly in the second wave (July-September 1993) the midpoint of the population was located at 11 pesos a month above the poverty line (3.6 US dollars of the time). Nonetheless, the striking effect of the mid-decade crisis on the household's economic situation is shown by the distribution of the median income gap of the second panel. During the whole period more than half of the

households lived in poverty and the distance below the poverty line increased over the period. In the second quarter of 1995, half of the households lacked about 40 pesos a month to fulfill their very basic needs (approximately 5.7 US dollars), but by the middle of the next year the distance had increased to 241 pesos (34.7 US dollars).

Since Figure 6.1 does not capture the performance of the income gap during all the years between 1993 and the end of the decade, we cannot see when the recovery started, but there was a change in the direction of the income gap in the last period observed. In the second quarter of 1999, the median household needed 49 pesos a month (about 15.4 US dollars) to reach at least the poverty threshold. In the next quarter the situation worsened because the gap between a household's income and the poverty line increased to 98 pesos (30.7 dollars)[82]. In the next two quarters the income gap was reduced, but only at the end of this panel –in the second quarter of 2000- were half the households above the poverty line. Note, however, that even though the distribution of the income gap suggests a better economic situation for households at the end of the decade relative to the crisis period of the mid-nineties, the amount in excess of the poverty threshold did not attain the levels reached before the crisis.

Methods. The exposure to the threat of poverty can be assessed through *individual growth models,* specially designed for the study of longitudinal phenomena. In this subsection I will utilize this methodology. As Willet, Singer, and Martin (1998) state, an important assumption in the construction of individual

[82] For all these figures I utilize the average rate of change Mexican pesos-US dollars valid for the months April 1993 through June 1994, the period of the first panel.

growth models is that the trajectory of each subject -household in this case- has the same distribution (functional form), but specific parameters for each one may have different values (p. 398). Households are assumed to be independent of each other. This approach first requires creating a household-period data set so that each household has one record for every time-period (quarter) when the household is observed[83]. Willett (1997) as well as Willet, Singer, and Martin (1998) emphasize that the attributes of the response variable must be continuous and equivalent over occasions of measurement (every quarter in this case) for the period of observation. The response variable used for this analysis, income gap, fulfills these requirements.

One of the main attributes of this type of model is the opportunity to grasp the importance of two levels of analysis: the first level represents the same individual over time, also called "within individual"[84] parameters, this is properly measuring the effect of time on the individual change in the income gap –distance of household's income from the poverty threshold. Level-2 corresponds to "between-person" or inter-individual differences, which will allow me to answer the question of what are the different individual characteristics that also influence changes in the income gap (Willett 1997; Willet, Singer, and Martin 1998). In these models the two levels of analysis are linked: time is a structural predictor of changes in the exposure to poverty of a household (level-1), and level-2 connects the initial status and rate of change with contextual characteristics.

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[83] In the methodological appendix I explain how such data sets were constructed for the three panels I used.

[84] Individual or person in this terminology equates to household in this analysis.

According to Singer (1998), individual growth models were designed for exploring longitudinal data (on individuals) over time. The structure of longitudinal growth models has two basic components: fixed and random effects. I will describe them using two equations, one that is an unconditional linear growth model, and a second, which takes into account the influence of covariates. Except for occasion (every quarter) that I call t (for time), I follow Singer's (1998) notation. The author differentiates within-person and between-person parameters using π and ß, respectively.

The unconditional equation assesses the effect of time:

$$GAP_{it} = \pi_{ot} + \pi_{1t}(TIME)_{it} + r_{it} \qquad (1)$$

where $r_{it} \sim N(0, \sigma^2)$

and:

$$\pi_{ot} = ß_{00} + u_{ot}$$

$$\pi_{1t} = ß_{10} + u_{1t}$$

where $\begin{pmatrix} u_{ot} \\ u_{1t} \end{pmatrix} \sim N \begin{pmatrix} 0 \\ 0 \end{pmatrix}, \begin{pmatrix} \tau_{00} & \tau_{01} \\ \tau_{10} & \tau_{11} \end{pmatrix}$

i is the household

t is the occasion of measurement

and written in a combined form:

$$GAP_{it} = [ß_{00} + ß_{10}\, TIME_{it}] + [u_{ot} + u_{1t}\, TIME_{it} + r_{it}] \qquad (2)$$

This model contains two fixed effects (for the intercept and for the effect of time) plus a random part constituted by three terms (random effects for time,

time slope, and within person residual r_{it}). With this statement both the intercept and the slope are treated as random effects. Also, there are no level-2 covariates. Fitting an individual growth model permits us to include the intercept and the slope for time as two sources of variation additional to the default within the person random effect (r_{it}).

While exploring the effects of covariates on the variation of the intercept and slopes, the following model will be fitted:

$$GAP_{it} = \pi_{ot} + \pi_{1t}(TIME)_{it} + r_{it} \qquad (3)$$

where $r_{it} \sim N(0, \sigma^2)$

and:

$$\pi_{ot} = ß_{00} + ß_{01}\, COVAR_t + u_{ot}$$

$$\pi_{1t} = ß_{10} + ß_{11}\, COVAR_t + u_{1t}$$

where $\begin{pmatrix} u_{ot} \\ u_{1t} \end{pmatrix} \sim N \begin{pmatrix} 0 \\ 0 \end{pmatrix}, \begin{pmatrix} \tau_{00} & \tau_{01} \\ \tau_{10} & \tau_{11} \end{pmatrix}$

However, according to Singer (1998), this model would imply that the fixed effects for $ß_{00}$ and $ß_{10}$ represent the case when the covariate equals 0. Since the covariate does not approach 0, this model can be modified centering the covariate on its grand mean. Therefore:

$$GAP_{it} = \pi_{ot} + \pi_{1t}(TIME)_{it} + r_{it} \qquad (3)$$

where $r_{it} \sim N(0, \sigma^2)$

and:

$$\pi_{ot} = ß_{00} + ß_{01}\,(COVAR_t - MEANCOV) + u_{ot}$$

$$\pi_{1t} = ß_{10} + ß_{11} (COVAR_t - MEANCOV) + u_{1t}$$

where $\begin{bmatrix} u_{ot} \\ u_{1t} \end{bmatrix} \sim N \begin{bmatrix} 0 \\ 0 \end{bmatrix}, \begin{bmatrix} \tau_{00} & \tau_{01} \\ \tau_{10} & \tau_{11} \end{bmatrix}$

Following these statements, $ß_{00}$ represents the average intercept in the individual growth model, and $ß_{10}$ represents the average slope. Substituting the level-2 model into the level-1, the new model would be:

$$GAP_{it} = ß_{00} + ß_{10} (TIME)_{it} + ß_{01} (COVAR_t - MEANCOV) + ß_{11} (COVAR_t - MEANCOV) (TIME)_{it} + u_{ot} + u_{1t} (TIME)_{it} + r_{it} \quad (4)$$

This also allows the exploration of the interaction of the covariates with time.

This series of models implies that the variance and covariance take a particular form. An assumption is that r_{it} and u_{ot} are independent. Besides, the combination of the variance of the two random effects into a matrix will give a highly structured covariance diagonal matrix. Such terms are represented by: τ_{00} is the variance for intercepts (u_{ot}), τ_{11} the variance of the slopes (u_{1t}), and τ_{10} is the covariance between intercepts and slopes.

The models that will be discussed next were constructed utilizing SAS version 8.2, more specifically through PROC MIXED procedures[85]. I will first

[85] For a detailed explanation of the functioning of these procedures, see Singer (1998).

present the assessment of the time effect and afterwards will discuss the effect of covariates.

6.2.2 The Effect of Time

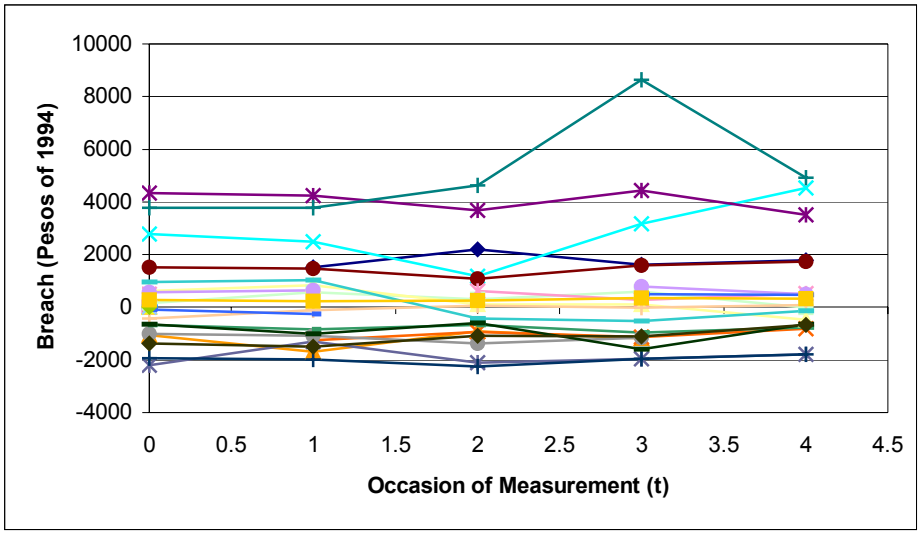
Time is the key explanatory variable in longitudinal growth models because it describes the shape of the income gap's trajectory. In the models, time was defined as a continuous variable in which 0 is the initial status up to 4, the last occasion of measurement (a three-month period between one interview and the next)[86].

Figure 6.2 illustrates the relationship between income gap and time. The aim of this figure is simply to show the diversity of household trajectories that can be observed individually and that will be analyzed using longitudinal growth models. Each line is a household trajectory. Cases were taken randomly from three segments of households: those in the bottom quartile, those in the interquartile range, and others located in the top 25% of the distribution of the income gap. All of them correspond to the panel 1993-2 to 1994-2. This figure suggests the relative concentration around the poverty line (shown by the household trajectories near the cero value, that is, the poverty threshold). It also indicates that the cases have a different variability along the five times that they

[86] This is not the only way time can be treated, that is, an option is to center the time in which case it would represent the average status. Another option is to start the analysis with the final status to observe the effect of time backwards (Singer 1998). Using different scales for time is an additional option allowed by this methodology.

are followed up. In order to assess this variability and the factors that intervene on it is helpful to utilize growth-curve models.

Figure 6.2: Some Individual Trajectories of Household Income Gap by Period of Measurement, Panel 1993-2



Source: Own calculations based on the Mexican Urban Employment Survey (ENEU).

At the end of this section I present some tables that show the results of the individual growth models corresponding to the three panels. They display the coefficients of the effect of time[87] and diverse covariates on income gap, that is, the distance between household's income and the poverty line. Table 6.9 indicates that when no covariates are included in the model, the average intercept for households at the initial point of Panel 1993-2 (their position relative to the poverty line at the second quarter of that year) was 735 pesos above the poverty line, and through time they improved their position relative to such threshold 54

[87] The coefficients represent linear effects in these models. I tried but did not find quadratic term effects in any panel.

pesos per quarter. The effect of time remains relatively stable regardless of the series of covariates that are included in the subsequent models for this panel. Not surprisingly –given the highly skewed distribution of income in Mexico- the variance of the intercept is large (UN 1,1). The variance of the rate of change (UN 2,2) is smaller than that of the intercept, meaning that the rate of change for these households varies less than their position. The covariance between the intercept and the slope (UN 2,1) is positive, which suggests that the average improvement in the relative position of households was achieved by both those domestic units below and above the poverty threshold. It also indicates that those domestic units at the top of the distribution increased their distance from the poverty line faster than those at the bottom.

In the case of the crisis period of the mid-decade, Table 6.10 is quite revealing. The average intercept of household's income gap at time 0 (second quarter of 1995) in the unconditional model was 702 pesos above the poverty line, but in each subsequent period of measurement (every quarter) the distance relative to the poverty threshold declined an average of 102 pesos per quarter, indicating the household's economic deterioration during the crisis. This rate of change becomes slightly smaller when covariates are included in the other models, but still shows the adverse effects of the crisis. The variance of the intercept (UN 1,1) is larger than in the panel 1993-2 period, before the crisis. In this case the variance of the slope (UN 2,2) is smaller but is not statistically strong. The covariance between the intercept and the slope (UN 2,1) is negative, suggesting that the average decline in the distance of a household's income from

the poverty line did not affect households uniformly since those households located at the bottom had a steeper decline.

The picture showed by the Panel 1999-2 is less dramatic. The average intercept of household's income gap at initial time 0 was 469 pesos above the poverty line (the lowest position out of the three panels), with a positive rate of change of 73 pesos per quarter. In this case the rate of change is slightly modified as the covariates are included in the subsequent models, but the direction remains the same. The variance of the intercept (UN 1,1) is the smallest of the three panels suggesting that the position of households relative to the poverty threshold is closer –and less unequal- than in the previous periods examined. The variance of the slope (UN 2,2) at the end of the decade is positive, statistically significant, and the smallest of the three panels, meaning that the trend of relative recovery after the crisis did not vary largely amongst households. The compounded effect of the intercept and the slope (UN 2,1) was positive again, as in the panel previous to the crisis, which indicates that the households at the top of the distribution of the income gap were the ones most favored by the change, namely, they have a faster increase in the distance from the poverty line than those households at the bottom of the distribution.

6.2.3 The Effect of Diverse Covariates

Most of the explanatory variables in the individual growth models perform in the same direction as they did in the logistic models discussed in section 6.1. However, the input offered by the longitudinal models complements the latter

because they provide information about the average "fraction" by which these covariates influence the position of the households relative to the poverty threshold through time.

Except for the panel at the end of the decade, Model 1, which includes city as well as head of the household's gender and age, does not improve the predictive power of the unconditional model –the one that only takes into account the effect of time on a household's income gap. Model 1 for Panel 1999-2 indicates that the average decline in a household's income is higher and statistically significant in those households headed by the elderly. However, the evidence regarding the elderly is not consistent with the other models.

Overall Models 2 and 3 agree with the corresponding logistic models: in the period 1993-1994 living in Aguascalientes had a protective effect on the likelihood of living in poverty (about 300 pesos above the poverty line on average), whereas for those residing in Monclova their position was about 240 pesos below the poverty threshold ($p<.05$). With respect the age of the head, Model 2 shows that those households headed by someone between 25 to 40 were worse off as compared to domestic units whose head was aged 41 to 60. Model 3 offers a highly statistically significant coefficient that indicates an average gain of 488 pesos relative to the poverty line as compared to the reference category. In the mid-decade crisis the coefficients obtained by Models 2 and 3 are smaller but have the same direction. At the end of the decade these two models do not offer strong evidence for the direction of change among elderly household heads, but Model 2 suggests that households with young heads (aged 25 to 40) are in a

vulnerable position relative to the poverty threshold when compared with those households whose heads are 41 to 60 years old.

The coefficients related to education of the household head and employment show similar results to those found in the cross-sectional analysis. Educational level of the head is a strong predictor of household poverty. These coefficients show the contribution that education makes to a household's distance from the poverty line. The higher the schooling is the more protected households are. In the 1995-2 Panel those heads with the least schooling were less negatively placed in terms in poverty than they were in 1993. At the end of the decade when employment characteristics are taken into account in the model, the coefficient of education is similar to that at the middle of the decade. In the case of those heads with the highest level of educational attainment, they resist the negative impact of the crisis on the household's economic situation since their coefficients are very similar to those before the crisis. However, in the 1999-2 Panel the protective effect of high education is smaller than in the previous years.

Employment is an important predictor of a household's relative poverty if all employed members of the household are considered in the model. Its effect is robust and shows a protective nature with a smaller magnitude in 1995 than in the other two periods, suggesting that the availability of employment is important but not enough to avoid poverty since each additional member's contribution to the household's economy was lower than in the other more economically stable periods. Statistically strong evidence for the effect of head's occupational class was only found for those in the upper two positions and for semi and unskilled

manual workers. Heads working in the high-service class in the three periods showed a considerable distance from the poverty line for their households – although at the middle of the decade this margin was smaller. Proportionally being involved in lower-grade professional activities had a less significant protective effect, but still their occupation contributed to some extent to avoiding poverty (in this case, the coefficient is not statistically significant at the end of the decade). In the case of the two bottom occupational classes, the evidence is statistically strong enough in the third panel to claim that these occupations result in poverty.

The predictive power of the number of hours worked weekly is stronger in the more economically stable periods. Households where the head worked less than 35 hours were more inclined to be below the poverty threshold and those where the head worked more than 48 hours, above it. The size of the firm is statistically important only in the last panel, showing that the bigger the firm in which the head worked, the greater the distance a household had from the poverty threshold .[88]

[88] Regarding the improvement of the prediction power of these models, Models 2 and 3 explain a larger proportion of the variance than the unconditional one. Model 1 does not show a considerable improvement as compared to the unconditional one. I examined possible interaction effects between time and any covariates, but did not find any statistically strong ones.

Table 6.9: Longitudinal Growth Models of Gap, Panel 1993-2 to 1994-2

	Uncondit.	Model 1	Model 2	Model 3
Time	54.0**	54.0**	46.1*	56.4**
Urban Area [Mexico City]				
Aguascalientes		220.6	336.6**	288.1**
Monclova		-257.9	-241.1*	-230.8*
Demographic Characteristics				
Head's Gender [Female]				
Male		211.7	38.2	-129.5
Head's Age [41 – 60]				
12 – 24		-218.0	-368.0*	-10.2
25 – 40		92.6	-380.2***	-132.9
61 +		-40.3	283.4	487.5***
Human Capital				
Head's Educat. [Compl High Sch]				
Incomplete Primary			-1126.9***	-1035.9***
Complete Primary			-932.5***	-810.7***
Complete Secondary			-507.3***	-410.8***
Any College up to Any Graduate			1703.8***	1140.1***
Labor				
Members in the Workforce				260.0***
Head				
Occupational Class [Pett. Bourg]				
High-Service Class				1507.0***
Lower-grade Prof.				458.2**
Routine Non-manual				-171.3
Skilled Manual				5.7
Semi-skilled & Unskilled Manual				-243.6
Low-Service Class				-200.3
Weekly Working Hours [35-48]				
Less than 35				-196.5*
48 or more				272.2***
Firm Size [Micro (up to 5 w.)]				
Small				242.0
Medium				424.5**
Large				218.0
Social Security [Not protected]				
Protected				49.2
Intercept				
UN (1,1)	735.3***	538.9***	1175.3***	327.6**
UN (2,1)	2322027***	2315690***	959117***	574381***
UN (2,2)	447602***	439492***	397044***	348324***
G^2	97444**	96118**	95038***	101861***
	130056.4	129971.5	129449.2	129076.3

N subjects (households) = 1 510; N observations used = 7 028; [Reference category]
p<.05, ** p<.01, *** p<.001; *Source:* Mexican Urban Employment Survey (ENEU). Panel 1993-2

Table 6.10: Longitudinal Growth Models of Gap, Panel 1995-2 to 1996-2

	Uncondit.	Model 1	Model 2	Model 3
Time	-102.3**	-103.3***	-98.1***	-96.3***
Urban Area [Mexico City]				
Aguascalientes		-284.5*	-148.2	-161.2
Monclova		36.3	226.9*	227.1*
Demographic Characteristics				
Head's Gender [Female]				
Male		54.9	-70.8	-117.3
Head's Age [41 – 60]				
12 – 24		81.3	-76.7	37.6
25 – 40		58.0	-287.3***	-221.9***
61 +		-97.4	167.0	259.5**
Human Capital				
Head's Educat. [Compl High Sch]				
Incomplete Primary			-872.6***	-835.5***
Complete Primary			-708.1***	-652.5***
Complete Secondary			-365.3***	-305.4**
Any College up to Any Graduate			1512.6***	1119.1***
Labor				
Members in the Workforce				133.2***
Head				
Occupational Class [Pett. Bourg]				
High-Service Class				972.7***
Lower-grade Prof.				358.4**
Routine Non-manual				-22.5
Skilled Manual				11.3
Semi-skilled & Unskilled Manual				-91.2
Low-Service Class				-33.0
Weekly Working Hours [35-48]				
Less than 35				-148.2*
48 or more				117.9*
Firm Size [Micro (up to 5 w.)]				
Small				77.1
Medium				141.3
Large				158.6
Social Security [Not protected]				
Protected				-106.9
Intercept				
UN (1,1)	702.0***	703.3***	1003.9***	625.3***
UN (2,1)	4186789***	4169959***	2911195***	2650180***
UN (2,2)	-241524***	-240906***	-202757***	-184790***
G^2	6804.2	6848.7	5428.6	4601.9
	121354.0	121277.4	120732.8	120440.3

N subjects (households) = 1 475; N observations used = 6 868; [Reference category]
* p<.05, ** p<.01, *** p<.001; *Source:* Mexican Urban Employment Survey (ENEU). Panel 1995-2

Table 6.11: Longitudinal Growth Models of Income Gap, Panel 1999-2 to 2000-2

	Uncondit.	Model 1	Model 2	Model 3
Time	73.4***	77.4***	67.7***	70.3***
Urban Area [Mexico City]				
Aguascalientes		-104.1	-9.9***	-15.2
Monclova		-239.4*	63.9	95.9
Demographic Characteristics				
Head's Gender [Female]				
Male		204.5*	-7.9	-181.0*
Head's Age [41 – 60]				
12 – 24		-281.8*	-378.7**	-128.1
25 – 40		-257.3***	-437.2***	-273.9***
61 +		-401.0***	-144.9	35.3
Human Capital				
Head's Educat. [Compl High Sch]				
Incomplete Primary			-1008.2***	-825.6***
Complete Primary			-825.4***	-674.9***
Complete Secondary			-573.7***	-447.8***
Any College up to Any Graduate			1043.0***	598.5***
Labor				
Members in the Workforce				225.8***
Head				
Occupational Class [Pett. Bourg]				
High-Service Class				1259.0***
Lower-grade Prof.				114.5
Routine Non-manual				-201.1*
Skilled Manual				-142.0
Semi-skilled & Unskilled Manual				-356.6***
Low-Service Class				-318.3**
Weekly Working Hours [35-48]				
Less than 35				-136.2*
48 or more				241.6***
Firm Size [Micro (up to 5 w.)]				
Small				475.2***
Medium				522.4***
Large				634.0***
Social Security [Not protected]				
Protected				-167.1*
Intercept				
UN (1,1)	469.3***	564.6***	1002.1***	293.9***
UN (2,1)	1782658***	1751689***	989571***	724743***
UN (2,2)	277625***	274043***	230619***	198163***
G^2	26233**	25965***	29352***	28234***
	145685.0	145585.7	145095.9	144562.5

N subjects (households) = 1 725; N observations used = 8 119; [Reference category]
* p<.05, ** p<.01, *** p<.001; *Source:* Mexican Urban Employment Survey (ENEU). Panel 1999-2

6.3 DISCUSSION AND CONCLUSION

In this chapter I have presented an assessment of a household's likelihood of falling below the poverty line. The three urban areas on which I have focused are Mexico City, Aguascalientes, and Monclova and I have utilized both cross-sectional and longitudinal approaches.

In the cross-sectional analysis I relied on a series of logistic regression models created in a stepwise fashion to grasp the importance of different sets of household attributes. The variable city of residence was expected to assess the regional impact of macroeconomic changes in Mexico. Its effect changes throughout the decade. The results I presented confirm that by 1993 Monclova's recession meant a higher likelihood of facing poverty for those residing there than in the other two cities. Comparatively Mexico City was in a better situation, but people living there were not as well off as those residing in Aguascalientes, which showed the lowest likelihood of falling below the poverty line. However, in the models constructed for the mid-decade period I did not find evidence that indicated whether there was a different likelihood of living in poverty according to the city of residence. The re-composition of economic opportunities brought by the recovery after the crisis implied different role for the cities. In 2000, out of these three urban areas Mexico City was the one where vulnerability to poverty was more frequent than in Aguascalientes or Monclova.

The demographic characteristics of the household –other than age and gender of the head- were not included in the models constructed for this analysis because the assessment of poverty has been adjusted by the number of members

as well as by the age and gender of each member. Therefore, adding such attributes to the models would create multicollinearity. The results of the logistic models presented in section 6.1 reveal a consistently higher risk of living in poverty for male-headed households throughout the decade. Interestingly, controlling for the head's human capital and employment accentuate these effects, which suggests that both mediate the effect of the head's gender on a household's poverty. It is worth highlighting these finding because there has been a debate among specialists in Mexico supporting either hypothesis: that female-headed (González de la Rocha, 1994) or male-headed households (Boltvinik 1996) are more frequently affected by deprived living conditions. The coefficients in this series of probability models favor the latter.

In terms of the head of the household's age, the logistic regression models confirm the pattern suggested by the descriptive information presented in Chapter 4: comparatively, the domestic units worst positioned during the whole period are those headed by someone between 25 and 40 years old. The stage in the family life cycle in which these households are –raising children who are enrolled in school and/or are not yet old enough to be involved in economic activities- seems to be crucial in determining their economic potential. In all three years the inclusion of the head's education in the model (Model 3) accentuates the vulnerability of this group of households, but adding the employment and housing control variables diminishes such odds. Not having strong credentials at this stage of the family life cycle especially affects these domestic units. Employment in relatively stable macroeconomic conditions (1993 and 2000) reduces the

likelihood of facing poverty to some extent, but in difficult moments such as the mid-decade crisis households whose head is between 25 and 40 years old cannot avoid falling below the poverty threshold. In 1996 these households were the most vulnerable to poverty irrespective of the inclusion of the control variables.

Contrary to what I expected, those heads aged 41 to 60 are not the best positioned in the age structure, since the households of elderly heads offer a better performance throughout the decade, mainly when employment (Model 4) and housing (Model 5) characteristics are added to the models. As suggested in Chapter 5 and elsewhere (Gonzalez de la Rocha 1996), female-headed households are mostly households in a relatively advanced stage of the family life cycle when the domestic units have members other than the heads able to work. That explains, at least partially, why households led by the elderly are not necessarily the most vulnerable to poverty in the cities under study.

The relevance of educational attainment of the household's head is quite clear. The more education that both the head and the spouse have the less likely it is that the household will face poverty. The head's education shows coefficients statistically robust and has a very consistent pattern throughout the decade: the higher the level of education attained, the lower the risk that his or her household will live in poverty. The magnitude of the odds obtained through the bivariate analysis and the models that include the control variables differ into some extent, suggesting that employment moderates the effects of education on the determination of household's poverty. Nonetheless, the gap in the likelihood of

falling below the poverty threshold between those who have achieved different levels of education is noticeable, favoring those with the highest attainment.

During the mid-decade crisis the head's education was less significant in enabling household's escape v poverty as is seen by the higher odds at all levels of education. Even those with the highest educational attainment were at a higher risk of living in poverty than in 1993. At the end of the decade all education categories showed higher odds of living in poverty when compared to 1993, showing the continuing effects of the mid-decade crisis.

The characteristics of employment included in the logistic models show the importance of economic activities in determining household poverty. Except for the number of households members in the labor market, I focus only on the head's employment due to both a technical and a substantive reason: there is a high correlation between the head's and the spouse's economic participation and taking account of other members' participation becomes cumbersome because more than one member can be employed. Also, as seen in Chapter 4, only a small proportion of spouses are employed, which makes it very difficult to classify households based on the occupation of both the head and the spouse. The results of this analysis show that head's economic participation is still a valid axis to observe social differentiation.

The allocation of an extra household member into the workforce has a clear protective nature for those households that have members of working age who are not economically active. However, during the crisis period, the availability of extra labor was not enough to escape poverty. In a stagnant

economy there simply were not enough well-paid jobs to go around. Table 6.2 shows that in the crisis period labor was still an important asset, but not as powerful as in the other two relatively more stable periods.

The head of the household's occupational class position utilized to assess the likelihood of living in poverty shows the large differential risk between those at the top position and the other groups. The former (high-service class) consistently shows the least likelihood of falling below the poverty threshold, whereas the three bottom positions (manual activities) are constantly threatened by the risk of living in poverty, especially those households headed by someone involved in semi-skilled and unskilled manual activities.

These models indicate that all other things being equal the longer the hours worked weekly by the head the less likely that his or her household will be poor. Although at a first glance not working long enough would seem a factor in poverty, these results do not necessarily imply that all those heads performing long working hours can prevent their households falling below the poverty line.

As expected, the larger the firm size the less likely it is that the worker's household will be poor. However, this pattern is only observed in 2000. In the case of economic sector, only the bivariate analysis depicts the pattern I expected: traditional industry, construction, retail sales, transport, and personal services provide less protection for households whose heads are involved in these activities, than do the social services and the other economic branches. Assuming that social protection is associated with job stability and better income, I expected that households where the head is protected by social security –and where

presumably the family is too- would be less likely to live in poverty. Only the bivariate relationship and the corresponding models for 1996 offered evidence in that direction.

I selected only tenure of the household in the analysis because overcrowding –the other characteristic shown in the descriptive survey of Chapter 4- was highly correlated with large families. Since the size of the household was already taken into account in the assessment of poverty, I decided not to include overcrowding to avoid multicollinearity. Tenure, on the other hand, might be more directly related to poverty than the physical capacity of the house since it has to do with monthly expenses. According to the bivariate analysis and Model 5 for 1996 and 2000, those who live in a rented house are less likely to face poverty as compared to owners and on the contrary, those who live in a borrowed house have a higher risk of falling below the poverty line than the former.

In the second section of this chapter I approached poverty through a longitudinal analysis. Since the design of ENEU allows the researcher to construct five-wave panels in which the selected households are followed up during five consecutive quarters, I constructed three panels: 1993-2 to 1994-2, 1995-2 to 1996-2, and 1999-2 to 2000-2 trying to focus on the same periods observed in the cross-sectional analysis.

I utilized longitudinal growth models, which permitted me to assess the influence of diverse factors on household exposure to poverty over time. Individual-household trajectories were modeled as the variable time was included in the set of explanatory variables and the relative deprivation of households was

approached through a continuous dependent variable: income *gap*. Income gap was calculated as the distance between household income and the poverty threshold. Seeking to better understanding poverty as a dynamic rather than a static phenomenon and thus vulnerability to poverty as a changing position over time I constructed income gap as a continuous variable.

Since distribution of income in Mexico is skewed, I briefly described the performance of the median income gap in each panel and found that most of the households are concentrated around the poverty line, which puts them in a vulnerable position. This means that even those above the poverty line are not poverty risk-free if the distance from the poverty threshold is a small one because they are likely to fall below it. I also found that during the mid-decade period, the peak of the crisis, the median income was below the poverty line and as time passed the distance from the poverty line increased.

Time is a critical factor. In 1993 to 1994 the average rate of change is positive which means that the position of households relative to the poverty line improves as time passed (quarter by quarter). In this period the average improvement in the relative position of households was achieved by both those domestic units below and above the poverty threshold. However, those domestic units at the top of the distribution increased their distance from the poverty line faster than those at the bottom. On the contrary, during the mid-decade period the rate of change was negative suggesting that the distance relative to the poverty line increased (below such threshold). In this case, the average decline in the distance of household's income relative to the poverty line did not affect them

uniformly since those households located at the bottom had a steeper decline. The panel at the end of the decade shows a recovery since the average rate of change was positive again, but as in the period before the crisis households at the top of the distribution of the income gap had a faster increase in the distance from the poverty line than those households at the bottom.

Overall the set of covariates perform in the same direction as in the logistic regression models. The results of the longitudinal growth models complement the former because the magnitude of the effect is the amount by which any specific variable contributes (either positively or negatively) to the distance of the household's income from the poverty threshold. In this way the biggest impact on household's income gap is given by the education level of the head and employment.

Both perspectives, the cross-sectional and the longitudinal, show different aspects of the household's exposure to poverty. This information suggests a complex combination of cumulative disadvantages that households vulnerable to poverty have: demographic, education, and labor attributes that lead to poverty or make it more difficult to overcome.

PART III. THE SOCIAL VULNERABILITY OF WORKERS AND THEIR HOUSEHOLDS IN DAILY LIFE: A QUALITATIVE APPROXIMATION

Chapter 7: Workers and their Households: Gender Roles, Labor Careers, and Economic Hardship in Monclova and Aguascalientes

Part III offers information gathered in the field on the social vulnerability that workers and their families experience on a daily basis. This data cannot be either extracted or inferred from quantitative analysis. At the same time, however, it cannot substitute for the latter. The idea of including an ethnographic account arose from the recognition that large data sets have inherent limitations in providing evidence on actors' interpretation of their economic situation and of the struggle to make ends meet. My purpose is to add to the quantitative survey presented in Part II by exploring the meaning that actors place on the struggle to make ends meet.

In this chapter and the next one, I suggest further hypotheses about the risks of falling into poverty and the importance of household resources. Though my interest while carrying out fieldwork was to survey the assets portfolios held by vulnerable households, I mainly focused on the interplay between the labor market and the household economy. The rationale was that employment income is crucial to the well-being of Mexican working-class households, given the absence of an unemployment insurance system.

The questions that will guide this chapter are: How do women and men define their own roles in household organization? To what extent does this

definition determine their involvement in employment, the level of household revenues, and the distribution of intra and extra-domestic duties? What kind of economic difficulties do these households face? What are the timing and causes of such critical moments? What are the specific conditions that lead households to use different means to solve their material needs?

In order to elucidate these broad questions, the first section of the chapter focuses on gender roles and on the internal and external pressures that lead male and female household members to different types of involvement in the workforce throughout the lifespan. Afterwards, I will identify some economically critical moments for these domestic units. These moments are related to either macro economic changes or intra-household dynamics, or to a combination of both. Once this panorama is laid out, I will explore the utilization of household resources more concretely in the next chapter.

7.1 GENDER ROLES AND DIFFERENTIAL ECONOMIC PARTICIPATION

The gender differential in participation in the labor market is closely related to household responsibilities, the social construction of which is rooted in a sexual division of labor that has historically confined women to household duties and child rearing (Benería 1979; Rendón 1990). Although Mexico is not unique in such a gendered division of labor, given the strong patriarchal structure of family power, both men and women are usually socialized to follow the same pattern as previous generations -that is, reproducing the traditional gender roles.

The achievement of higher levels of education and the increasing presence of women in the workforce may introduce changes in Mexican culture. But such

changes, if any, are slow. Female economic participation is lower than in some other Latin American countries and far from rates in industrialized nations. Furthermore, women in the workforce have been segregated and must cope with the double day of work (*doble jornada*) implied by their domestic and extra-domestic tasks. In sum, in the increase in women's employment has not necessarily meant more egalitarian power relations inside the household (González de la Rocha 1986; Benería and Roldán 1987; García and Oliveira 1994; Pedrero et al. 1997; Cerrutti 1997; Casique 2001).

In this section, I do not aim to survey exhaustively the reasons for the gender differential in employment. Rather I wish to highlight some factors that discourage women from involving themselves deeply in the labor market; that prevent men and women from having similar employment trajectories; and that, in the long run, obstruct a more egalitarian gender division of labor in domestic and extra-domestic activities. I will focus on attitudes and practices of working-class couples with respect gender roles and their engagement in two important arenas for the daily functioning of the household: domestic tasks and labor.

None of the 40 couples approached in Aguascalientes and Monclova declared that the women was the head of household. Therefore, in the account I present next, all the heads are men, and women adopt the status of spouse. At the moment of the interviews all heads were working, as were half of the spouses (10 in Aguascalientes and 8 in Monclova were employed).[89] In all the cases the head's income is considered the principal source of the household's revenues.

[89] Working women are overrepresented in my sample as compared to data from representative large surveys (i.e. ENEU). This issue will be discussed below (7.1.2) and in the conclusion to this chapter.

7.1.1 Domestic Tasks

"When a woman gets married, it is to devote herself to her husband and children" Flor's mother used to repeat when Flor was single. And Flor[90] (31 year-old, married to Eduardo (33), Aguascalientes) agrees with her mom.

In general, both women and men from working-class households in Monclova and Aguascalientes conceive of taking care of the man as the woman's prime obligation. Most were raised in large families where the main economic support came from their father's income and where traditional gender roles were the norm. These couples were taught that women are homemakers, the keepers of the family, and responsible for the well being of their partners and offspring.

Not all women interviewed had work experience before marrying[91], but most of them helped with housework since they were very young, some were in charge of all domestic chores at an early age, due to two main reasons: either their mothers left home or died, or because they had a large number of male siblings. In the case of the couple we just met, when Flor and Eduardo were about to marry, she was 19 and worked as a sales clerk, but he decided that she should quit working. Flor's mother agreed with Eduardo's decision and thought it would be a good chance for her to learn how to do some of the household chores: "it's alright that he told you 'quit working' so during this time, before you marry, you can get ready all your stuff and get to know what are your household duties…"

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[90] All the names of my interviewees that I will utilize are pseudonyms.

[91] Among my interviewees 8 women from Monclova had no employment experience before marriage, as well as 5 from Aguascalientes (see Table 8.1).

And what were the tasks that Flor should learn –or rather refine, since she had helped out with them previously? Among the diverse activities required for the daily functioning of the household that weigh on women's shoulders are: housecleaning, tidying up, dishwashing, grocery shopping, cooking, doing the laundry, ironing, transporting the kids to school, supervising their homework, and taking them to the doctor when needed.

But beyond those routine duties, one of the key responsibilities of these women is managing the household income. This assignment can only be learned on the job by getting involved in their family dynamics, receiving the housekeeping allowance (*gasto, raya* or *chivo*) provided by their husbands, and deciding on what priorities to spend that money.

It is not an easy task, though. They have to be creative in securing and allocating what is usually a meager amount of cash for their families to meet at least the most basic needs. Spouses basically try to adjust the pattern of consumption to the amount of money they get.

The case of Gema and Gabriel is illustrative. She is a housewife, aged 49, and he is 48, a skilled blue-collar worker at AHMSA in Monclova. He gets paid every Saturday. They have four children (aged 23, 22, 17, and 14), all of who live with their parents. Two of the children are already working and contribute to the pooled income, but Gabriel's income is still the principal source of sustenance. Gema says she does her best to get the most out of her dwindling budget and feed the family:

> … maybe eating a little less, not real well … so long as we've got beans, potatoes, chorizo, that's what I tell [Gabriel]. At the very least, a little

chicken, a little meat; I tell him to get fruit sometimes, whenever we can … it's OK, you know, if we don't [eat well ourselves], if they [the children] eat more, a balanced diet.

Later on during the interview, Gema and Gabriel comment on their difficulties in making ends meet, reflecting their anguish as they attempt fulfill the respective roles of housekeeper and breadwinner:

Gabriel: Yeah, there are times we can't make ends meet, when it's one or two days left till payday. [I tell] my old lady [Gema], you know, see if you can borrow ten pesos [about $1.10 in 2000], we've really got to come up with something now, if not … yeah, we sometimes make it to the end of the week, right, the way things are going for me.

Gema: The money almost doesn't last.

Gabriel: No.

Gema: No, as much as you stretch it out, it doesn't last, not the way they pay him sometimes, a little here, a little there, I mean … just going shopping, when you go shopping, you spend money … well, you can run I tab at the corner store, I tell him, but it's the same, you pay and then you borrow again. I tell him [Gabriel], because that's what he always says to do, don't run a tab, I say, it doesn't matter if I've got 100 pesos [about $10] left because they'll just get spent on whatever, water, tortillas, milk, and sometimes they also say "give me a soda, mama" and I say no. You know, don't think I don't have to say, well, I'll buy this but not that. I mainly just say what we need here the most, because you've got to watch after it, as hard as they [husband and children] work and then to go throw it away, just like that … what I mean is where … I mean, if, if you [Gabriel] want, I'll leave you alone for a week and let's see what you do with the money, let's see if, like you say, you're paying here, paying there and …

Gabriel: It doesn't go far enough, we can't make ends meet.

Gema: That's why I say I think that maybe if we all worked, you know, I don't think even then would we make ends meet, things are so expensive, I don't know …

In another household, in Aguascalientes, Joel (35, skilled blue-collar worker) very eloquently recalls that in 1995 he was looking for a job and his family did not have enough money even to eat, but his wife Rebeca (30, retailer and housewife) found ways to keep the family going:

> There were a lot of times when I'd go to look for work worrying, darn, she's only got 10 pesos left [about $1.50 in 1995] and I would get home and find a tasty plate of refried beans and a fruit salad and some tostadas fried up in the *comal* or something, it was … a treat!

In the case of Genaro (44, construction foreman) and Josefa (39, housewife and domestic servant) also from Aguascalientes, have three children (aged 15, 11, and 6; none of whom works). Genaro gets paid every Saturday. In the following account, they give an idea of how they get by pooling their income:

> Josefa: … look, he gives me just 400 pesos [about $40], I tell him, just give me 400, and I've already spent it by Sunday, or sometimes by [Saturday]. For today, I don't have any money, but because I buy everything for the whole week and, depending on what's left over, I … maybe I run out, but it doesn't matter to me because since I earn money, I'm spending and saving a little, because I've got my kitty [*tandita*][92] of 200 pesos, and I say I've already got my kitty together, anything else is the least of it.
>
> Genaro: How she spends! Four hundred pesos on Sunday, because she buys fruit for the kids for the whole week.
>
> Josefa: I buy fruit for the week, plus cereal, meat, I buy everything for them …

[92] The *tanda* is a community method of pooling and saving income. The *tanda* works as follows: A person is responsible for periodically gathering a certain amount of money (every week or every other week, typically) from all the participants, one of whom gets the total amount all at once. Recipients of the total amount are rotated.

Genaro: And she, out of what she makes for the week, will buy this, that, different things … but she tells me just 400 pesos because I … so that I can also be buying material [to continue building their house].

Josefa: Because, you know what? Our share of the kitty, our share of the kitty we can use for, like, if the gas bill comes and we don't have enough, I say, well, for now, grab from the kitty. Well, yeah, or go buy a little cement, or something.

Genaro: I mean, we put 400 pesos into the kitty every week between the two of us, but we know that we're saving it up, they'll give it to us and let's see.

Josefa: So they might ask for something in the school—see, they sometimes ask for things in the school there—so he might give me something, or maybe I'll do it, if he's got money, he gives it, if I've got some on me, I'll pay … 'cause, look, last month the electricity bill came, the electricity bill came at the same time as the water bill, you know, and the electricity was, like, a hundred pesos, so I told him "you pay the electricity" and I said "I'll pay you for the water", since the water bill was lower, I was going to pay lower! [laughs]

Genaro: Yeah, she sticks me with the expensive stuff, that's what she does.

Josefa: That's how we do it, like now, the gas still hasn't run out, but it's about to, so he says "we've got to take some of the candy money[93] to buy gas, let's buy some gas already, so yeah …

Genero: Like, you keep your eye on what you still need …

Both the head and the spouse agree that whether or not the economic situation is complicated, the role of the housewife in handling their income is fundamental for a well functioning household. As Moisés (35, skilled blue-collar

[93] The family sells candy outside their house to make some extra money.

married to Genoveva, 34, housewife, Aguascalientes) states it: "[I]t's that I have a wife who is a very good manager."

Though these couples' relationships are mediated by negotiation and are not conflict-free, women, overall, do not seem to contest their subordination to their husbands. Only in one of the interviews from Aguascalientes, Benito (38, skilled blue-collar) recognized that during a period of time they could not make progress on building their house because he was frequently drunk. His wife, Rosario (33, domestic servant and housewife), said he used to spend his weekly wage on alcohol and "girlfriends", so she had to start working because sometimes he did not give her any money. Nonetheless, this couple was still together and she spoke about this problem as something they had already overcome. This suggests that, among other factors, the reproduction of traditional gender roles depends on the degree to which women have internalized the predominant culture, and whether or not they feel they would be able to head a household by themselves.

Except for the decision of how household resources are allocated in face of economically critical moments and to meet basic needs of daily life, I did not make an extensive survey of power relations within households. Thus, I am not able to assess to what extent traditional gender roles are changing in working-class households. The ideology of housewife and breadwinner as almost synonymous with woman and man tends to prevail among my interviewees; and, in practice, women depend on their partners' economic contribution. However, this ideology is not static or intact.

Contrary to what I expected and to what has been reported in some studies of control over economic resources (Benería and Roldán 1987; Narayan 2000), husbands and wives discuss the best way to stretch their income. There are some examples of agreement over this issue. Josefa and Genaro, introduced above, are one such case. Another is the couple formed by Flor and Eduardo. Flor (31, housewife) and Eduardo (33, supervisor of a paint store) have sometimes sold different products in order to get some extra money that has allowed them to buy uniforms and school supplies for their children (they have three kids aged 11, 8, and 3). They were also able to trade in the old "lemon" (*carcacha*) for a newer car, and they have constructed some more rooms for their house.

Joel (35, skilled blue-collar) and Rebeca (30, retailer and housewife) have three children (aged 18, 14, and 4) and see themselves as hardworking (*luchones*), as many of the couples interviewed described themselves. Joel says he relies on his wife to manage the household income and on her criteria about how to allocate it. He does not like to override her on those decisions:

> Joel: I mean, none of this "this is my money, that's yours", no. None of this, you took out such and such, let's see how much. I mean, I'm not one of those guys who says, here, take your expense money and the rest is mine. No, sometimes she takes the card and gets money out of the bank, and there's trust that I took out so much, there it is, and when she worked, too, it was like, I took out this amount, there it is, what should we do … She's in charge of the money, but when I need some, hey, we've got to pay this, we've got to do that, [sometimes] I'm short for bus fare, give me some bus money.
>
> Rebeca: There aren't any boundaries like your money is yours, my money is mine, how much money are you going to give me every day, I'll keep the rest. [Here], we're all equal, sometimes, like he says, he'll have to ask me for bus fare because he practically gives me everything, or I'll take all

he has, yeah, but there aren't any limits, like, this much but nothing more …

These accounts of income allocation reveal three findings: First, gender roles among these couples operate as segregated rather than joint (Jordan et al. 1992; Lindón 1999). Thus, it is taken for granted that men's and women's respective principal responsibilities within the household are those of breadwinner and housekeeper, and they behave accordingly. As a consequence, they tend not to question traditional gender roles. Second, exerting "control" upon a meager income does not give the housewife a great deal of power, since it may mean living in constant anguish over trying to make ends meet. All women agree that being the caretaker is not an easy task. Third, the discussion on the best way to allocate the household income suggests a common strategy for expenditures, but it is not necessarily accompanied by an agreement on employment, in the words of Jordan et al. (1992). That is, there are shared decisions about how to spend household revenues, but job decisions are not made jointly, as will be shown next.

7.1.2 Men and Women in the Workforce

In the same way that both women and men agree on the household as the woman's main arena, there is a consensus among my interviewees that men are responsible for providing the family's livelihood. Since at the time of the interview all heads of household were employed and had longer, quasi-uninterrupted labor trajectories, I will concentrate on them first, examining spouses' participation afterwards.

Most heads started working at an early age (see Table A.1) and contributed to the pooled income of their paternal household for some time. In some cases, they saw the need to work themselves –i.e., their parents did not ask them to work- and they decided to take any job that would allow them to get some extra money. At five to seven years old, a child can only supposedly do menial tasks such as bag groceries, shine shoes, sell popsicles and newspapers, clean houses, run errands for neighbors, and recycle cardboard. At that age, "I did anything that came up" says Ernesto, who started working at seven (39, now a taxi driver, married to Adela, 36, Aguascalientes). But still, their jobs allowed them to buy their own school supplies, to get other items they wanted (i.g., clothes and shoes), and to give some money to their siblings or mothers.

Other cases were more dramatic, though. For instance, Ciro (43, transport micro-entrepreneur, married to Amalia, 43, Monclova), started working when he was five years old. However, his father died when he was 10 years old and he had to take on the responsibility of being the main male provider at that age. He helped his mother, who then started working as a washerwoman. He was the second oldest of nine children (the eldest was a female). Thus, when his father died, he literally did whatever he could to get some extra money, even begging on the streets. Less extreme situations, but still limiting to a child's development were the cases of Oscar (53, retailer, husband of Manuela, 50, Monclova), and Genaro (44, construction worker, married to Josefa, 39, Aguascalientes) both of whose fathers were peasants. Oscar and Genaro recalled that their parents

"rented" them out (i.e. received payment for their children's work) to help as farmhands during sowing time or to tend somebody else's cattle or goats.

Their work changed as they grew up. Ciro and Genaro for instance, were construction workers at 11-12 years old. At that age, some other men worked as messengers, car washers, gas station attendants, ice factory workers, smiths and miners. The general education level of my interviewees is low, varying from no formal schooling to technical diplomas (Table A.1), but those who entered the workforce early and could also get some schooling did both activities simultaneously.

My interviewees tended to marry young (mean age at marriage of the head of the household both in Monclova and Aguascalientes was 21 years old, see Table A.1).[94] Although the degree of attachment towards their socially expected responsibility as breadwinners may vary among men, Eduardo (33, married to Flor, 31, Aguascalientes), for instance, says that contributing to the household income since an early age actually helped him when he got married:

> It's like not, not hard to get used to handing over the money, since I already did it when I was a kid.

Social construction of the breadwinner role is associated with two tasks around which heads of households define themselves: earning and providing (Jordan et al. 1992). Since there is no unemployment insurance system in Mexico, the only way for my interviewees to provide the household livelihood is to remain in the labor market, doing any kind of activity that allows them to earn some

[94] This average corresponds to the first union

money. However, in the context of a generalized worsening of wage levels, trying to fulfill their prime obligation of being the household provider can be traumatic for these men. The moral principles attached to the role of breadwinner, which is hard to fulfill in their circumstances, put men under stress since they cannot do what is socially expected of them. For instance, it is a matter of dignity for the head not to "ask" anybody in the household (i.e., wife or children) for help. Besides, he feels that he maintains his authority as long as he can provide at least the minimum amount necessary to meet the household's basic needs.

In the case of Ernesto (39, married to Adela, 36, Aguascalientes) who now works as a taxi driver, the responsibility of providing for five people (they have three children, aged 11, 10, and 8) led him to remain in a bartending job that did not pay enough to cover the household's needs while seeking another option. He recalls:

> … I was still working in the bar, but, I mean, I … the idea was that I wanted to get out of there, but I didn't want to get out because my wife wasn't working yet. You know, everyone was counting on me. So I didn't want to quit work and not have anything left, so I went looking …

In this same household, Adela is now working at home as a seamstress for the garment maquila industry. When I inquired about the reason why she works, Ernesto was explicit about how he felt:

> It's like I, I couldn't, I couldn't do it, I mean, I didn't want her to work; in fact, I never expected her to work. I mean, what am I good for then? Nothing. Only the time came when I said, no, you know what? Well, yeah, better if you help me out.

When they had fallen on hard times, Adela "negotiated" with him –a euphemism to say that she asked permission- to undertake work that would allow them to earn more money. At first Ernesto did not want her to work because from his perspective, her working implied a failure in fulfilling his duties. Only when he could not stand the situation any more, did he finally *accept help* from her.

The Mexican social security system has been highly selective and has favored workers in the formal sector. Thus, in the case of the households I approached where the head and his family are not covered, specific situations such as expecting a birth can be economically threatening for the household. Genaro (44, married to Josefa, 39, Aguascalientes), a construction foreman, cannot always get social benefits. When one of their three children was about to be born and he could not find steady work that would let them meet everyday needs, Genaro asked a former boss to keep his name on the payroll so he –and therefore, his wife- could receive social security when Josefa gave birth:

> There wasn't much work and we were going through hard times. We were working from time to time, so they would give us odd jobs and the little that I earned, I had to stretch out another week. You say, I've got to find something for next week … I worked in other, other … other jobs, but I told [his former boss], "You know what? Don't be a jerk, don't take my wife's Social Security away because she's going to get better."

In Mexico, construction is *per se* an unstable economic sector. Typically, construction does not provide written contracts and jobs are temporary. Genaro says he has found jobs where he receives social protection coverage most of the

time, but on that occasion (1994) he had to ask his former boss for the favor and he was fortunate to get it. According to his narration, he lived through a period of anguish then because he was responsible for providing for his household. He therefore tried to "augment" his income and had to make sure that his wife would have medical assistance when needed.

Evidence offered by my interviewees supports the hypothesis that the difficulties men face in fulfilling their roles as economic providers are partly responsible for the increase of female economic participation. However, as was pointed out in the previous subsection (7.1.1), there seems to be an agreement between the couple on household expenditures, though such is not the case regarding employment (Jordan et al. 1992).

Since gender roles tend to be segregated among the working-class couples in my sample, the head of the household searches for any job that allows him to better fulfill his responsibilities as provider. But there is no discussion about the number of hours that the spouse works or the amount of money to be made, nor is a different distribution of household tasks negotiated (which corresponds to the findings of Jordan et al. (1992) for the U.S.). In that way, the decision to work is left to the spouses themselves, depending upon their ability to meet their domestic responsibilities first. It is not unexpected then that working-class women's labor trajectories are intermittent and subordinated to the household's needs, as has been reported elsewhere (Cerrutti 1997).

According to my interviewees' accounts, once women live with their partners, it is taken for granted that men are responsible for the household

subsistence. Thus, the conception of their own involvement in economic activities is subordinate lateral to their husband's. There tends to be a convergence then, since both husband and wife conceive of a woman's income as a "help" to the head of the household. For instance, Eduardo (33, married to Flor (31), Aguascalientes) states:

> … So I say to my wife, as long as I can work and we have food on the table, we're fine just like that and whenever I'm disabled or something, and I can't work, you know, I say, "OK, help me out here." There are ways you can work at home, ways you can work, let's invest a little money, I'll work at my job, you make a little money on the side.

Likewise, Josefa (domestic servant, 39, married to Genaro (44), they have three children aged 15, 11, and 6, Aguascalientes) says why she works:

> So now we're going to put ourselves to work, 'cause we need to, not because we feel like it. Him, say, what he makes, you know, doesn't make ends meet and, you see, I said "just to help you a little bit", so I always work a little while in the afternoons.

In the case of this same couple, Josefa says that when she suggested it would be better for them that she took a paid job, Genaro's answer was straightforward: "if you think you can, go ahead". Genaro's approach is the prevalent one among my male interviewees. The head of the household's position about his spouse's employment reflects the segregated gender roles aforementioned and the lack of a joint agreement regarding employment. In the case of Eduardo and Flor who have three children, aged 11, 8, and 6, he works as supervisor (*encargado*) in a paint store and says that they have not faced an

economically critical period so far. When Flor and he have talked about the issue of employment, his thinking is this:

> "If I'm able to work, what point is there in you working?" … it's not machismo, eh, I've seen women that work … even with small children … Supposedly, they're working because they don't have money to, to pay for childcare, right? With the little extra, you know, that she earns, I mean, barely … and for them to have a little better time, then they don't have anyone to look after the kids, and the kids … they don't have their meals like they should, I think the [household] gets neglected a little …

As has been reported elsewhere (Benería and Roldán 1987; Cerrutti 1997), I found that when working-class women explain their decision to get a job, they refer to other household members' needs. Although only six women in each city declared a paid occupation when I first approached them, the number with jobs turned out to be larger (10 in Aguascalientes and 8 in Monclova). In addition, others occasionally work to make some extra money[95].

All my female informants give priority to their household responsibilities, so that they are part of the workforce while still realizing their housework –and hence, they undertake a double working day (*doble jornada*). For working-class women there are tenuous boundaries between the position of housewife and that of economic provider, implying that the roles of housewife and breadwinner are not necessarily mutually exclusive.

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[95] In the appendix I present the instrument I used to assess the household structure as I started the interview. I inquired about the occupation of each member of the household. In that cell I only registered six women engaged in a paid job; however, as the interview evolved, I realized that more women worked for pay. This under-reporting of paid work is common in large surveys and is why the proportion of women working is larger in my sample than in large representative surveys (ENEU, for instance). Below I discuss some of these cases.

Next I present María's case. She is 43, lives in Monclova, is married to Leopoldo (50, a skilled blue-collar worker at AHMSA), they had six children and four still live with them (aged 24, 18, 17, and 16). The other two already got married and moved out. She explains how she managed her double burden, ensuring that the household responsibilities were fulfilled and done alongside her paid work. When her children were very young she did all the household chores plus the extra-domestic work. Now one of her daughters helps her at home:

> When they got older, they didn't need so much from me, they could do it themselves, they started studying, they were working … it's not the same as when they're little, you've got to have them at your side all day long. I, with my daughter, the youngest one, she's 16 years old, I would take her along and they let me in to work with her. The others were a little older, so I left them their food and laid out their clothes and [I would say to them], "I'm off to work already, you eat and go to school" … That was how we did it every morning, them all in school and me off to work, we would come and go almost all of us at the same time because a only worked till one or two in the afternoon and I checked to make sure the kids got out so when they got home, there food was there. So I wasn't like I left them uncared for, no, no and now that they're bigger and my little girl here, however she wants, at times I go to work and she stays, she knows how to do everything, so she says, no, mama, you go, I'll do it …

When I asked women about their daily organization to carry out both their intra and extra-domestic tasks, their narrations were similar: exhausting working hours preparing meals and clothes for every one every day, plus working at least some hours to "help" their husbands. This evidence coincides with other studies (i.e. González de la Rocha 1994). Amongst the female accounts, María was not the only spouse who emphasized that she first took care of her household duties,

particularly stressing that she did not overlook her children –as if by asking I suddenly became a social judge.

The range of opportunities in the labor market for these women is not wide. Their two main limitations are their household responsibilities and a low level of education. As Welti and Rodríguez (1997) state, while analyzing women's involvement in economic activities, it is crucial to take into account that the female labor supply is different from the male one because of women's household responsibilities. As the authors suggest, it is important to remember that women's position within the household ties them to their place of residence. Thus the lack of mobility outside their households also implies that their information about alternative jobs, as well as the possibilities of making contacts are rather limited.

In my female sample, all but five cases in Aguascalientes and eight in Monclova had work experience when they got married[96]. Not all of them quit working at marriage, but the presence of children intervened in their labor careers. The lack of child-care services has represented the main obstacle for them. Out of those women with no working experience at marriage, six from Monclova and three from Aguascalientes started working afterwards because of their household's economic needs.

Out of the 40 women I approached, eight in Monclova and ten in Aguascalientes were part of the workforce at the moment of the interview. Except one, all work in the informal sector –domestic servants, retailers, subcontracted in

[96] Only two women in Aguascalientes and three in Monclova had no working experience at all (before and after marriage). See Table A.1.

the garment industry- and, in general, they do not see their jobs as personally rewarding beyond enabling them to contribute to the household income.

There are three more issues worth highlighting. On the one hand, there are the cases of women who are employed, but who, either themselves or the husband, did not mention their jobs at the initial inquiry. During the interview I realized that they were working and what I inferred is not that they were trying to hide information, but rather that their paid work is somehow "invisible" for themselves and for their husbands.

One of these cases was Maria's, who is from Monclova and is 43. When I interviewed Leopoldo (50), he said his wife's occupation was "housewife", but when I talked to her, she provided details about her duties inside and outside the household. Another case was Adela's, who lives in Aguascalientes and is 36. In both her's and Ernesto's (her husband, 39) accounts an activity did not appear that she has carried out ever since they got married, selling jewelry. However, it was crucial for them when he had a spell of unemployment and when she wanted to buy her own sewing machine (that eventually allowed her to get *maquila* work in the garment industry). When I pointed out during the interview this missing information, she only said: "well, then I have always worked, I guess". One more case is Claudia's, from Aguascalientes as well. She does some sewing at home but declares herself as a housewife. Trying to find out whether she occasionally works, I found that she makes some money every week and she devotes several hours to this activity. Therefore, she qualifies as part of the labor force by the criteria of large representative surveys, such as ENEU. In this household,

interestingly, her husband (Hugo) emphasizes that his income is complemented by hers.

Another outstanding issue is how women's enrollment in the workforce is evaluated for household well-being. Such assessment is sometimes divergent between husband and spouse. Ernesto and Adela were interviewed separately. Ernesto thinks that Adela's contribution to the household income is very important. He affirms that her support (to him) is shown when she pools her earnings with no restrictions, that is, she collaborates with all her money –both Ernesto and Adela make approximately the same weekly amount. Ernesto's proportion of the household income is devoted to their daily food, and with her contribution she clothes their children and gets school supplies.

In a joint interview Genaro and Josefa declared that they also pool their income and resolve their needs from the pool. This couple was introduced above. They are the ones that use *tandas* as their main way to save money and to keep building their house. In their narrative they emphasize how between the two of them they have improved their house and level of consumption:

> Genaro: We'll take from the kitty and say, "Come on, let's go shopping."
>
> Josefa: We'll get together and then go out shopping. We didn't have a color TV, so we even got one between the two of us, you know, and we had another dining room set so we got this set between the two of us, and we've also bought material to do a little building between us.
>
> Genaro: Yeah, you know, we'll take from the kitty and say, "buy a thousand bricks, or let's buy cement and limestone and we've got it".
>
> Josefa: We didn't have this little living room set. We bought it, too!

> Genaro: In the next, in the next kitty we're going to buy other things to make it, to improve it, so we're doing it …

In the case of some other couples, however, the husband said that his wife's contribution was a "little help" (*ayudita*), but when I asked her about the importance of her contribution, she suggested that her income was not supplementary, but, rather, crucial to the household standard of living. That is the case of Benito (38, skilled blue-collar worker) and Rosario (33, domestic servant, Aguascalientes) whose interview was carried out partially jointly. Rosario stated that for her it was clear that her input was important because otherwise they could not have been able to make progress in the construction of their house, she emphasized that she could even physically see the product of her work.

Finally, a common characteristic of heads and spouses in both cities is that they share a moral responsibility as parents to provide for and take care of their children. This moral commitment underlies the way that they construct the definition of their own roles within the household. For instance, Genaro states that they decided to have only three children because "… para que vamos a darles una vida que, que nosotros ya la vivimos, que supimos como se sufrió…". Gema (49, married to Gabriel, 48, Monclova) and Claudia (34, married to Carlos 31, Aguascalientes), and some other wives coincide that when money is not enough they try to make sure that their children will eat –or will have any item they need- before their parents.

In sum, though women and men are expected to accomplish the traditional gender roles, earning and providing are not easy tasks for the head of the

household in a context of a general deterioration in income levels. Therefore, (as Albelda and Tilly (1997) found for the US), in their character of breadwinner Mexican working-class men face a contradiction: they are expected to provide the household livelihood, but the labor market offers neither the positions nor the salaries that would allow them meet the household needs.

Through a negotiation in which women take the responsibility of fulfilling their domestic responsibilities as well as of doing paid work, they contribute to the household income, but at the cost of the double working day (*doble jornada*). This implies a certain tension within the household and a slow process of change with respect traditional gender roles. Nonetheless, this change only partially reflects the flexibility that a household is forced to have in order to overcome the range of economic difficulties that it may face.

7.2 Economic Difficulties and the Life Cycle

While carrying out the fieldwork my target households were those who were poor and vulnerable to poverty. However, to gauge poverty and vulnerability prior to the interview was not straightforward. In this section I aim to show the relative position of working-class households in face of the external environment, based on their own accounts of economic hardship. In order to survey what kinds of events intervene in the household's economic stability, I asked about any tough episodes that they had experienced, and how the household members have handled either shocks or economic difficulties in general.

The complexity of assessing economic hardship is related to the individual (head of the household and spouse)'s own conception of what has been a difficult event or period, as well as of what household's daily needs are essential[97]. These couples construct their notion of economic hardship on their experience of what is a "normal" level of well being for their household and identify the presence of striking events that have disrupted such normality. Or they may not recognize a breaking point but describe their situation as a chronic scarcity that constantly threatens household subsistence. Thus the relativity of the notion of economic hardship has to do with their particular conception of regularity taken from the trajectory of their own household or from comparing themselves to other people. Relative normality can be disrupted at any time by events such as job loss, serious illness or the death of one of the providers, which may imply that not even the most basic needs such as food or shelter can be met.

In this section I examine household economic hardship from the perspective of the actors, who are all working-class couples[98]. Based on the information provided by them I decided to classify the "main cause" of the

[97] Though I could have assessed if a household was poor similarly to the way I proceeded in the quantitative analysis -i.e. inquire about a household's total labor income summing up individual earnings of those in the workforce, calculating the total number of equivalent adults in the domestic unit and then determining if the household was below the poverty line, my procedure was different. As we saw in the previous subsection, in some households the economic participation of some members (mainly the spouse) is overlooked, so the interview seemed a richer source of information on income. In the field I wanted to reconstruct the household's particular history of economic hardship from the actors' narrations and thus "rescue" to some extent information not usually captured in available large data sets in Mexico (ENEU for instance).

[98] Since I interviewed only the couple, I fail to capture all the members' interpretation of what has been a difficult period or event. Elder and his colleagues (1974, 1992a, 1992b, and 1994) as well as McLoyd (1989) have shown for the US that each member may have a divergent conception and way to adapt to the household's adverse times.

household economic scarcities as: a) economic dependency within the domestic unit -associated with the stage in the family life cycle; b) macro-economic changes; and c) a combination of both. This is an artificial division created only for analytical purposes. In most of the working-class households I visited during the fieldwork it was evident that they struggle every day for their living (*viven "al día"*). Therefore, in general, the macro economic sphere seriously restricts their capability to make ends meet. At the same time, however, the severity of such constraints is mediated by the stage in the life cycle of the household, meaning that the family time and the industrial time intersect (in Hareven (1993)'s words). The life cycle perspective will be helpful in grasping the interplay of both spheres, since changes in the macro arena permeate all cohorts, but affect them according to each individual's particular trajectory.

The individual accounts of the household's economic hardship that will be presented next have a gendered nature. They derive from the men's and women's interpretations of the role that they are expected to fulfill: either as provider or income manager. From their standing points they narrate what are the economic difficulties that their households have faced, as well as when and how they have handled them.

7.2.1 Economic Dependency within the Household

A key issue in the understanding of the household's relative economic hardship is the recognition of it as a unit composed by producers and consumers[99]. The dependency ratio and the level of earnings of those members in the labor force (plus any other source of income) will determine the economic well-being of the domestic unit. Thus it will vary through time (Selby, Murphy, and Lorenzen 1990; González de la Rocha 1994).

The expansion phase of the household can be very critical for couples because the dependency ratio tends to be high: new members are being born; therefore, more consumers are added to the household. In the previous section of this chapter I showed that most of my interviewees worked for pay from an early age. Nonetheless, there was no case in which their own children had worked so young. In these households the status of consumer lasts longer than in their paternal one, either because they are trying to accomplish their moral obligation of economically supporting their offspring, or due to the social demand of keeping the young in school for a longer period. The fact is that no child member of these households worked at the moment of the interview or had ever worked. The youngest members working that I detected were teenagers (15-16 year old). During this stage of the family life cycle, in the absence of accessible child-care facilities, women face the responsibility of fulfilling diverse time-intensive domestic activities (child-rearing and household organization).

[99] All the cases in which I carried out an interview were family-related households. As families reproduce, children will be an economic burden in addition to the adults that do not participate in the provision of funds for the household.

I asked my interviewees about the period(s) of economic difficulties for their families. Then relating their answer to the periods of crises in Mexico, I asked them if both coincided. One of them, María (43, married to Leopoldo (50)), very vividly spoke of the difficulties they faced when their children were young. They were born one after another at a time when Leopoldo did not have a stable job (he worked in construction). They were building their house (over a piece of land that they got in a shanty town in Monclova), three of their seven children were already born, one of them was frequently sick (the kid eventually died and they got help from neighbors to cover the funeral costs), and there was not enough money for the household needs. Her rationale is very insightful as to why needs related to the stage in the family cycle are not necessarily associated with macro economic issues:

> I say, you know, whatever Mexico might be lacking, here you just get along however you can. As long as you work, you eat, if there's no work, you don't eat, I think that's what you're asking, isn't it? If the man says I worked all week, well, we'll eat very well, if he only worked two days, it's, like, impossible, you don't eat as the same. Yeah, yeah there were rough years, but when they were young, that was when they came one right after the other, like a step ladder of kids, so there was no way that, you know, we had anything extra … if we didn't have money, sometimes we just couldn't find any, what could we do? But we found a way out somehow, asking for some here, getting loans there, and we somehow got out of it, right?

María and Leopoldo started raising their children during the seventies (one of the golden periods in Monclova). However, as she emphasizes, regardless of the general prosperity of AHMSA and Monclova's surrounding region, if her

husband had no stable job their family did not have a secure livelihood. Like them other couples said that the economically most critical time in their household's trajectory was when their kids were growing.

Edith's (housewife, 39) and Jorge's (construction worker, 41) case is very illustrative. They got married very young (14 and 16, respectively) and started having children at once. Edith recalls:

> Well, when we were with his [Jorge's] mom … we, yeah, lived there and they loaned us the kitchen and that's where we stayed and I was pregnant with the oldest boy, and we already had the girl, you know, we just had a blanket … After there, we lived separately, but right there, I mean we rented a little room, like in 1978 we began to rent it because my daughter was about a year old … then, we cooked with wood because we didn't have a stove, then we bought a little petroleum stove, and then we got a dish rack and we had our clothes in sacks, so we put up some bars, like a closet, and so I began to wash other people's clothes and iron them, to sell soil for plants, and then he would come and bring me prickly-pear cactuses to sell, and between the two of us, we began to work, we began to buy a little dresser, buy the kids a little bed … we started, little by little …

Edith and Jorge had eight children in total, but only six survived. The previous episode corresponds to the end of the 1970s, in Aguascalientes. During that time the country was in the midst of the oil boom, a period of increasing public debt, but at the same time the last years of government subsidies for basic products and services. Despite that, the daily struggle at this stage of Edith's and Jorge's family life, was to survive and keep building up their still very meager possessions.

The last case that I present in this subsection corresponds to a couple for whom the most difficult period was when their children reached the age to enter secondary school through higher levels of education because the demands of education increased in terms of school supplies, tuition[100], and the usual need to feed and cloth them. This difficult period has not finished for them. This couple says that at this stage their economic difficulties are evident. Mauricio and Susana (both aged 52, he is a skilled blue-collar worker and she is a housewife) state:

> Susana: Our expenses are, you know, getting to us, with [their youngest child] studying, it's a load on our minds. Right now we're trying, right, it's a matter of having to save up now that she's enrolling, because she's working right now. She says, you know, I'll help out, too, but I can't do it alone, papa, I can't pay all by myself, [I need] my papa to help out." It's rough right now, it's looking really hard …

> Mauricio: Well, obviously, I'll start to have some extraordinary expenditures once my children start middle school, right? So high school, no, junior high school already starts to get very expensive.

Since households do not develop in abstract, their context is the specific environment in which those responsible for getting the household livelihood find either opportunities or obstacles to meet their daily needs.

[100] The system of public education in Mexico has demanded from parents a contribution for schooling, establishing a specific amount per household at the beginning of the academic year. Regularly such revenues, extra official "tuition" –called "*cuotas*"- are used by each school, and even though they are normally a modest amount in primary and secondary school, it is a threat for many households as came out in my interviews. Public high schools (preparatorias) and colleges – except for the National University in Mexico City- demand very high tuition (per student, not per household), as compared to the *cuota* paid for primary and secondary levels.

7.2.2 Macroeconomic Sphere

According to Roberts (1991a), the macro sphere in which households are engaged –plus the characteristics of the domestic unit and its members- will determine their capability to manage their own resources and meet their needs. The author suggests that the main elements that shape the household's external environment are: economic restructuring and industrial transformation, labor demand, the participation of the state in the provision of welfare, and the demographic transition.

In this regard, Aguascalientes and Monclova have differed considerably in recent decades as was discussed in Chapter 3. Without going into further detail, the most outstanding differences are the opposite direction taken by the local economic structures and by the characteristics of the jobs generated. Also, there has been a more active participation of the Aguascalientes' government in public investment in services and the search for external capital –national and international- as compared to government in Monclova. One of the consequences of residing in these two cities has been a contrast in the availability of opportunities or restrictions for these households.

The two cases that I will present next were selected because they reveal how the specific contexts led the households into a period of economic difficulties. Ernesto (39, taxi driver) and Adela (36, maquiladora sewer, jewelry retailer and housewife) from Aguascalientes agree that after he had to switch from his job as bartender to his current job, their household has faced serious difficulties in trying to make ends meet. Ernesto recalls that he was very fond of

his former job, it was satisfying and he made decent earnings –he fulfilled his role of breadwinner. He has had for a long time relatives working in the United States who suggested that he join them, but he refused because the job he held was rewarding. He thought that he had just to keep working to be able to meet his family's needs.

However, the economic boom of Aguascalientes, which began first in manufacturing, reached other sectors such as entertaining. Ernesto says that the business in which he worked for about 13 years could not stand the competition in the first half of the 1990s –"bars started appearing everywhere, like mushrooms" he says- plus some new requirements imposed by the local government. His bar closed in 1996, when he was 36 years old. Since he had experience in the area, he looked for a similar job. Although it was not easy to find one, he was eventually hired. But it was never the same: the position he got offered no social security, longer working hours, and a lower salary. Besides he had no seniority in his new job, which in the former job had allowed him to claim a higher pay. In his new post not even the tips were as generous as they used to be. After a period of two years he could not stand the situation. He was no longer able to feed and clothe his family. Originally he had refused "help" from Adela, his wife, but finally he gave in. At the moment of the interview he had spent about a year and a half as taxi driver, but said that he was seriously considering migrating to the United States. He said he would have to wait to save or get a loan to pay a *coyote* (the guide to cross the border, whose charge can go up to $1,500).

Ernesto's working situation as a taxi driver puts him in a vulnerable situation: he rents the car and no matter what he earns, he has to pay a certain amount every day to the owner. Since he has no contract or another form of guarantee of his job, if the owner decides not to rent the car to him anymore, he would lose his job. He said that if he were the owner of the taxi, he would not even think to leave his family and migrate. When I inquired why after loosing the job in 1996 he did not try to enter a factory (in general manufacturing enterprises are actively recruiting in the city) he was emphatic "I only studied primary school and they require secondary at least, besides, I was too old for them."

In this household Adela, who had been a jewelry vendor ever since they got married, looked for another source of income. With her savings from the sales, she was able to buy a sewing machine. Since she had some experience - acquired before marriage, she decided to take a job as a seamstress for the *maquila* garment industry. Adela works at home, where somebody delivers a load of work every week and picks up what she has done. They measure the time a piece takes and assess how many pieces can be done in one hour. She gets paid by piece and when I asked how many hours she devoted to this activity her calculation was about eight hours a day. At the moment of the interview her main contribution to the household's income were her earnings as a seamstress through which she make about the same money as Ernesto does, 400 pesos (about $40) a week. Adela and Ernesto have three children (aged 11, 10, and 8).

The other case is the household leaded by Oscar and Manuela in Monclova. Oscar (53, retailer in a grocery store) worked between 1968 and 1991

in AHMSA, the main enterprise in the surrounding region. During that period his salary was enough to meet his family needs and due to his job, his family was covered by the social security system. It seemed that his household's livelihood was guaranteed. The internal adjustment process in AHMSA started during the 1980s and in its first phase ended in 1991 with the privatization of the firm. Amongst other changes, this process –also called internal modernization- brought the reduction of employees in several areas. According to various testimonies, a worker who was notified that he would get "readjusted" (meaning that he would lose his job but would receive a proportional compensation to his seniority in the firm), could opt in most of the cases to exchange with a co-worker. In such cases the other person was readjusted and he kept his position.

When Oscar was notified he would be readjusted, he thought that the severance pay was very high and decided to take it –during the interview, which was partially done separately, it came out that there was not an agreement between him and Manuela on this issue. Since Oscar did not have a plan to invest that money, he only spent it during the first year –his father was sick and he paid part of all the expenses; he also enlarged their house. It was about a year and a half after he got readjusted in AHMSA that they started running the grocery store that they had as their main source of income at the moment of the interview.

When Oscar was readjusted he was 41 years old. He says that he did not look for another job in Monclova immediately; his reasoning was that he had spent 23 years working hard and he did not deserve to keep doing the same for the rest of his life. He thought that he could move to Monterrey with his family, but in

the end that did not happen –because he took no action towards such a goal. I sensed during the interview that the issue of the readjustment and its outcome was a matter of friction between Oscar and Manuela. He took some time to decide how to invest the money that was still left in 1993. But like him, many other people who were readjusted by AHMSA invested in small businesses like theirs and as result, profits are rather small –it is not difficult to find more than one convenience store in a block in their and many other neighborhoods all around Monclova. I asked Oscar how much was their weekly income he said about 800 pesos (about $80), but Manuela intervened immediately to say that it definitely was not such a high amount. Her assessment was, at the most, 500 pesos. At home, two daughters and three grand-children live with them. Manuela and one of their daughters work also in the store. The other daughter occasionally works.

When I enquired if in retrospective accepting the readjustment –versus looking for an exchange- had been the right decision, he thought it was not. He said:

> No, well, maybe I should have stayed there, because you've got to work anyway, you've got to work anyway, because the expenses just keep going up … in AHMSA, you know, you had benefits, you had vacation time, you had a savings plan, you had the Christmas bonus, so that was a big advantage for us, it still is for those that are still working there … I mean, I think it was better when I was still in AHMSA.

In these two cases, external factors led to "private adjustments" in the words of González de la Rocha (2000). Changes in the main source of the household's revenues modified the internal household dynamics, but despite the economic participation of the spouses, these households are still struggling to

reach minimal levels of well-being. Although they have responded to the challenges imposed by the environment, the economic dependency ratio within the household remains a significant economic limitation. External and internal arenas are difficult to isolate from each other.

7.2.3 The Combination of Intra and Extra-Domestic Factors

Though the above cases help identify the weight of either internal *or* external causes of economic hardship, the artificiality of separating the two factors was more evident when I realized that most of the households in my sample were a combination of internal and external conditions. As Roberts (1991a) argues, economic restructuring has run parallel with the withdrawal of the state, which exposes households more sharply to market forces. These external factors affect the domestic units according to their stage in the family life cycle and their particular capabilities of efficiently managing their resources. Therefore, the two elements interact.

The peculiarity of the case that will be discussed next rests on having to face simultaneously a problem imposed by an external agent and troubles created by the internal dynamics of the household. This household suffered a shock, which acted as the leading cause that led the household into a difficult period. However, the combination of both external and internal factors appears not only in the triggering event, but in the magnitude of the disruption that makes the household's vulnerability more evident. Though I am presenting only one case, there were at least three households in which the effect of the deep crisis during the mid-1990s joined with specific internal family problems. –A serious illness or

the death of one of the spouses made it necessary to reallocate the resources of the household to stabilize the situation. If the domestic unit fails to efficiently manage its assets or has none, the danger is not only a deeper economic instability but that the household as a group ceases to be viable. In the various cases where economic hardship was linked to a combination of factors there was not a fixed order of appearance (i.e. first the external agent or otherwise), but both were present and difficult to dissociate.

The selected story refers to the domestic unit leaded by Enrique (45) and Yolanda (38) from Monclova. Like many other individuals born in adjacent cohorts, Enrique aspired to enter AHMSA since an early age because it was a source of employment in his home city, bringing good salary, a stable position, social security, and possibilities of scaling the hierarchy within the enterprise. Both Enrique's and Yolanda's fathers were respectable people in Monclova, and their prestige had to do with their position as blue-collar workers in AHMSA. Back then, the couple recalls that people all around the region associated a guaranteed livelihood with jobs offered by that enterprise. Enrique's father was one of AHMSA's founding workers, when this firm was established in Monclova during the 1940s. Through an agreement between the union and the enterprise, senior workers could "recommend" two of their children (direct relatives only) to the firm. Enrique and one of his brothers were hired by AHMSA as soon as they turned 18 years old –the minimum age accepted by law (they actually wanted to get hired before, but were denied).

This second generation of skilled blue-collar workers did not have the same good fortune as their predecessors. At least not all of them did. As in Oscar's case, Enrique was notified that he would be readjusted and, against his brother's advice, he did not look for a co-worker to exchange his readjustment, deciding to accept the severance pay. He had worked in AHMSA during 17 years, from 1973 through 1990. He thought he would use the money to improve his house and since he was still young (35 years old), he would seek another job. Thus he invested in the enlargement of his house and was hired by a sub-contractor who did the same kind of activities as those done on his former job, but the firm was smaller and was actually sub-contracted by AHMSA.

The working conditions Enrique found in his new job were not as rewarding as they were on the old job: longer working hours, consecutive temporary contracts, and lower pay. According to their account, Yolanda proposed in 1992 that she should get a job because his earnings were not enough. Enrique at first refused, but later on challenged her to get a paid job only if she was able to fulfill her duties at home. She was eventually hired as a domestic servant. With both wages, they could barely get by. Their children were growing. Thus, the expense to feed, clothe, and educate them demanded that both keep working. However, their household suffered a blow in 1995 because of an accident that Enrique had at work: a machine erroneously activated by a co-worker grabbed his right arm and he lost it. This unexpected event became a transforming point for him and his household.

Since Enrique was hired only temporarily, an administrative confusion complicated his situation. At the moment of the accident he was not carrying with him written proof that he had the right to medical service, and subsequently he was told that he was not registered yet. Yet, they claim, one of their children had obtained medical assistance some days before, meaning that Enrique was in fact actually registered. Both spouses claim that they, like others in similar situations, were victims of the devious functioning of the social security system. On the grounds that he was not registered, Enrique was refused the compensation pay corresponding to his lost arm. Moreover, the paper work for him to start getting paid the pension that he was entitled to lasted eight months. When I interviewed him he said he still receives the pension, but "it doesn't count, it's very small". Their main source of income is a grocery store they started in 1996, some months after the accident.

Both Enrique and Yolanda were very emphatic about their dissatisfaction with their job. "We are forced retailers" she stated. When I enquired how they had recovered after this shock, their recall was vivid. Right after the accident, Yolanda stopped working because Enrique had to be in the hospital and somebody had to take care of him. She also needed to look after their children. Additionally, she was sick (anemic) –the doctor had suggested she should not undertake heavy tasks because she was very weak. However, their household had to keep going. Since Enrique went through several surgeries and had to rest, she worked again as a domestic servant. Their three children were in school (then aged 15, 14, and 9), and after the accident they went through a deep depression

that harmed their academic performance. External support was crucial for them in that period. There were mainly three people who helped them: her father, one of Enrique's brothers, and one neighbor. The neighbor himself had a convenience store and during the months of the paperwork to get the pension, their neighbor allowed them to run a tab at the store. Enrique's brother gave them part of his own salary every week or every other week; and her father gave them 1000 pesos, an amount that let them start the grocery store they now have as their main source of income.

In this case, Enrique's accident disrupted the household's normal functioning, removing the main source of income, changing the intra-household division of labor, and in general altering the expectations each member of the household had. According to their own accounts, the heaviest burden during the "recovery" relied on Yolanda's shoulders. Their three children were too young to start working. Enrique recalls that right after his first surgery he got psychological support at the hospital, but he says that he was emotionally not as shocked as he was about his household and his children's future:

> I didn't have time to think about [his arm], because what worried me was the kids, how I was going to get them ahead in life, feed them, that's what I was worried about, not my arm … emotionally, I wasn't unbalanced, but we were economically, for more than a year …

This episode in Enrique's and Yolanda's household history coincided with an economically stagnant period all around the country. However, the disruptive force of his accident was so strong that the household suffered a combination of a

general economic crisis, internal loss of the main source of their livelihood, and a high ratio of economic dependency – as none of their children worked yet.

Households where the additive effect of adverse conditions cannot be counterbalanced by a limited set of coping resources are seriously threatened. The testimonies of other couples suggest that the impact of a crisis such as that experienced at the middle of the decade affected various age cohorts, but when external crisis is combined with the lack of social protection provided by the state, and high ratios of economic dependency, households only have a narrow margin for response.

7.3 DISCUSSION AND CONCLUSIONS

In this chapter I have addressed from a qualitative perspective the gendered differentials in employment amongst working-class couples and their assessment of household economic hardship.

On the one hand, the social construction of traditional gender roles prevails amongst these couples. Namely, they do not tend to question that men's and women's core responsibility within the household is respectively breadwinner and housekeeper. Correspondingly, social expectations of male's and female's roles impose a considerable restriction on women that in practical terms prevents her having a similar participation in economic activities as have men. Women's prime responsibilities imply developing diverse time-intensive activities that combined with an absence of accessible child-care facilities confine them to their

households. At the same time, the social construction of gender roles demands from men the fulfillment of two main duties: earning and providing. However, this expectation is stressful for those Mexican working-class men who find no options in the labor market –the main source of their household's income- that allow them to guarantee household subsistence. Working-class couples' accounts regarding the allocation of household income show that gender roles operate in a segregated fashion (Cf. Jordan et al. 1992 and Lindón 1999). This segregation is observed through the lack of a joint decision over the employment of both the head and the and through the division of labor within the household. However, in a context of a general decline in income, working-class women tend to participate –even if occasionally- in economic activities, but fulfilling first their household's duties (therefore realizing a double working day –*doble jornada*- as they try to "fit" all their responsibilities). As the working-class women interviewed at different moments in studies realized in Mexico City (Benería and Roldán 1987; Cerrutti 1997) and those I interviewed in Aguascalientes and Monclova have intermittent involvement in labor and regularly have low-quality jobs.

Other sets of issues are the different types of economic difficulties resulting from unlike local contexts and amongst households leaded by couples born in different cohorts. The reconstruction of household histories from the couple's narratives sheds light on gendered interpretations of both: a) a difficult period in their lives and what are the most pressing daily needs of the household in this period and b) the notion of economic hardship, which has to do as well with their particular conception of normality taken from their household's

trajectory. Despite the gendered interpretations, there are three main sets of factors related to household economic hardship: the economic dependency ratio within the household, which is closely associated with the expansion stage of the household (this can be a relatively long period, from children's birth to the time when they are able to work); external agents, mainly changes in the macroeconomic arena; and a combination of both. My analysis revealed that although the former two factors have their specific weight, the intermeshing of both is what matters.

My cases show that households do not develop apart from their context. Thus, economic restructuring, the industrial transformation, labor demand, the participation of the state in the provision of welfare, and the demographic transition influence the household's economic performance. At the same time, depending on the household stage in the family life cycle and the available resources, they will more or less successfully cope with external agents.

When the economic dependency ratio is the heaviest burden within the household, it tends to be associated with the expansion stage of the household, suggesting an age effect. The macro sphere changes will tend to show a period effect if they influence all cohorts –as was the case in the middle of the decade. But if the macro changes or the combination of external and internal factors, define a different set of alternatives between one generation and the other –as between Enrique and his father in Monclova- there will be a cohort effect. Irrespective of these three situations, the main consequence of economic hardship in family life is the configuration of each individual's future trajectory.

In the next chapter I will further analyze the utilization of diverse household's resources and will propose a classification of working-class domestic units according to their level of relative deprivation. There will also be a more extensive discussion of the local differentials between Monclova and Aguascalientes.

Chapter 8: Working-class Households Facing Economic Restructuring in Monclova and Aguascalientes

In the previous chapter I discussed the gendered differentials in labor participation among working-class couples and their assessment of household economic hardship. The ideology of gender roles permeates all spheres of daily life and thus determines socially sanctioned behavior regarding economic participation and the functioning of domestic units. Households are entities forced to be flexible because their resources and the scope of social security coverage are limited. In this chapter, I seek to complement the findings presented in Chapter 7 and in Part II, the three chapters of the quantitative analysis- by adding to the discussion of the rationalities mediating daily decision-making by surveying the types of resources working-class households have and how such assets are mobilized to face economic difficulties. Also, I will examine the heterogeneity of poverty by suggesting a categorization of relative deprivation within the working-class based on household living conditions.

The questions that will guide this chapter are: How have working-class households adapted to economic hardship? What are the resources available to these households? Why can working-class households be in about the same stage in the life cycle and possess quite diverse sets of resources? How do working-class households manage their assets in the face of crisis as well as in normal times? Is living in poverty different in either Aguascalientes or in Monclova?

To approach these questions in the first part of the chapter I will assess the resources available to working-class households and the extent to which these

resources can be utilized to cope with economic hardship. The household assets portfolio that will be surveyed corresponds to Moser (1998)'s classification, which was discussed in the quantitative analysis presented in Part II. The aim of examining the availability of resources from the qualitative perspective is to understand how working-class couples perceive their resources and the ways in which they utilize them. As Selby, Murphy, and Lorenzen (1990) and Roberts (1991a) have stated, I argue that the margin of action left for working-class households is very restricted, whether they face a crisis or during relatively more stable times.

The second part of this chapter will be devoted to depicting the diversity of economic conditions under which these families live and the best ways that they have found to adapt to external challenges. I will examine the outcome of the process of adaptation to economic difficulties and how, despite belonging to the same social strata, poverty and vulnerability to poverty are not uniform among working-class households.

A question that was partially addressed in Chapter 7 and that will also guide this chapter has to do with the interpretation of household economic difficulties. Through these couples' narrations the differential needs of working-class households are exhibited, which become the basis of the classification scheme that will be discussed in the second part of this chapter. I will argue that though there is some variation in the opportunities offered by Aguascalientes and Monclova –namely, local labor markets with differential participation of the state

in the provision of social protection- there are some conditions common to deprived households in both cities.

8.1 Mobilizing Resources: Assets Used in Coping with Household Economic Hardship

Economic difficulties obligate households to implement those activities that help them diversify sources of income, maintain about the same level of well-being (belongings and consumption), and remain together. Nonetheless, all working-class households do not have the same resources and do not necessarily utilize them in a similar way.

The urban household assets portfolio includes, according to Moser (1998), both material and non-material goods: labor, human capital, productive assets, household relations, and social capital. I suggest that migration should also be added to the household's portfolio. Based on the in-depth interviews carried out in Aguascalientes and Monclova, I aim to identify how each of those resources is used and when. As has been pointed out in the literature regarding household strategies in coping with economic hardship (Selby, Murphy, and Lorenzen 1990; Roberts 1991a; González de la Rocha 1994), I find that there is not necessarily a consensus among household members regarding the utilization of resources. Two key aspects that I will address in the analysis of household resources are: their availability and the possibility of actually mobilizing them as desired or needed

by the domestic unit.[101] Since the set of resources is not unlimited and can eventually erode (González de la Rocha 2000), I will also discuss some of the trade-offs implied by the use of household assets.

8.1.1 Household Assets Portfolio

Labor. According to Moser (1998), one of the principal differences between rural and urban areas is the "*commodification"* of urban life, which gives labor a preponderant role in the generation of income, either as wage (in the case of salaried employment) or profits (via the production of goods and services). Such income permits the household members to afford food, shelter, and other needs. The importance of labor as the main resource of working-class households was initially addressed in the previous chapter. In this chapter, the aim is to assess the weight of additional factors that, besides gender ideology, also determine the availability and possibility of utilization of this asset.

The lack of an unemployment insurance system means that the main way to obtain a livelihood for the bulk of the population in Mexico is to carry out any activity that allows them to obtain an income. Thus, the principal channel to increase and diversify the sources of household revenues among working-class households is through the transformation of its members into workers.

The stage in the family life course is crucial to the availability of labor within the household. Besides the number of members of the household, the position of each member within the domestic unit, as well as each member's

[101] In Sen's (1985) terms this corresponds to the difference between disposing of resources and having *command* over them.

qualifications, all determine the chances that the household has to overcome economic hardship through the labor market.[102]

The findings presented in the quantitative analysis demonstrated that households at an early stage in the life cycle (the expansion phase that lasts up to the time at which children are grown up and likely to become producers) have a high risk of living in poverty. Evidence from the field, as seen in the previous chapter, confirms that those families face two simultaneous limitations that leads to a high dependency ratio: the reproduction of the household brings more consumers into the household, and the wife cannot participate in economic activities because her duties within the household become more demanding. The stage in the family life cycle is important because child-rearing is a time-intensive activity; thus, as children grow up the wife has more time available that allows her get paid work, and children will eventually be able to get a job or help her with diverse chores within the household. Among the women I interviewed, the main obstacle between their household responsibilities and a job is the lack of child-care facilities. Those women that are part of the workforce are emphatic about the difficulties in organizing their time so they can work at least some hours while at the same time not overlooking their children. When I asked those women who are not working about the reason for not doing so, the most frequent answer was that they do not have somebody to look after their children in their absence.[103]

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[102] The type of jobs to which household members can aspire is closely related to their qualifications and health conditions, that is, to human capital. This aspect will be analyzed below with more detail.

[103] Another reason, given by two women in each city, was that their husbands would not allow them to work.

The position within the household is also a strong determinant of economic participation. At the time of the interviews, all the heads of households were engaged in paid work. As has been reported elsewhere (Cerrutti 1997) most working-class spouses ask permission of their husbands to work and, according to the information I gathered, they tend to do so when they cannot meet the households needs with the meager allowance they periodically get. Even though it is relatively common that husbands are reluctant at first (and in some cases they deny such permission), spouses do paid work and at the same time they fulfill their domestic responsibilities. In most of the cases in my sample, spouses participate in the workforce before the offspring do. Children, on the other hand, are generally considered old enough to "help" with the household daily expenses once they have achieved at least complete secondary education or get a technical diploma.[104] However, if children quit school before the expected time it is very likely that they will be required by their parents to do "something useful" instead of just "slacking" at home. In some cases they develop both activities –studying and working- to assist the breadwinner with part of the household expenses.

The participation of other members –apart from the spouse and children- in economic activities depends on their characteristics such as age, their position within the household, and a calculation of where they can be a more effective resource (either in the household or into labor). One of the cases from Aguascalientes provides an illustration. In the household headed by Jorge (41,

[104] This is an historical change between different cohorts in Monclova and Aguascalientes. In the previous chapter I demonstrated that most of my interviewees started working at an early age, but not their offspring. The youngest household members in the workforce that I identified were teenagers.

construction worker), his brother in law (aged 35) joined Jorge's family. His brother in law works as a custodian in a hospital and regularly contributes to the household pooled income. Jorge's wife, Edith (39, housewife) has been an street seller ever since they got married, but at the time of the interview was not working because her daughter (21) saw the need of getting a paid job after her husband migrated to the U.S. Edith said that they decided that she would take care of her daughter's son while her daughter worked because her daughter had a better chance of getting paid more than Edith.

The significance of household size in the availability of labor within the household can be better understood if it is associated with other factors, namely, the stage of the family life cycle and the position within the domestic unit. Thus, during the consolidation phase of the household (when children become producers) a large household represents an important asset because more than one person can participate in the labor force, but a big family at an early stage means a high dependency ratio and a further complication for the wife in terms of participating in economic activities, given the time-consuming tasks she has to carry out in the household.

An interesting case in my sample involves a household headed by Joaquín and Alicia, from Monclova. Their household is entering the consolidation phase, but is large enough to still have a high dependency ratio because most of the children are very young. They have seven children still living with them. Their two older children were working at the time of my interview and the third one was about to start working. Alicia said she would like to work but nobody would

take care of their young children, so she and Joaquín rely on their older children to help them.

Beyond availability, a key element to overcoming economic difficulties is the possibility of actually mobilizing the available resources (having *command* over resources, Sen (1985)). A question that emerges from the information I gathered in the field is to what extent households are able to utilize their resources, either amidst a crisis or during "normal" times.

Crisis periods are particularly difficult to deal with. In the previous chapter I introduced the case of the household headed by Enrique and Yolanda from Monclova, but that was not the only example I detected of a household that went through disruptive times. I identified two more cases from Aguascalientes that experienced a crisis during 1995. In one of them, labor was available (Joel and Rebeca), in the other (Hugo and Claudia), it was not.

In the former case a series of events had deleterious effects. Joel's first wife died in 1993 and his two children remained with him. He and his wife had "household-nested" at his in-laws, thus all of them lived with Joel's mother-in-law, who, after Joel's wife death, took care of the children while he was working. Back then they lived in Mexico City. However, some months after Joel's wife died his son spent some time in the hospital because he was seriously sick; later on, his daughter tried to commit suicide. Joel had a sister living in Aguascalientes who encouraged him to take his kids to a different environment. In the second half of 1994 his children moved to his sister's in Aguascalientes and he waited

until the end of the year to receive his Christmas bonus before resigning from his job.

The onset of the deepest crisis in Mexico's recent history coincided with Joel's decision to take his kids away and change his job. In his narration he said at the time of making his decision he could not have foreseen how difficult this period of anguish and uncertainty was going to be. When Joel moved to Aguascalientes he had some savings, which lasted only a few weeks. He and his family had no house and he had no employment connections, but desperately needed a job because he had to settle his family. Some of his sister's acquaintances were not able to help him because the impact of the recession was so strong that it affected all types of businesses. By that time, he had qualifications and experience in industrial activities, but had to practically beg for a job. Finally, after two months he found a position in the factory in which he was still working when I interviewed him.

Human Capital. The mobilization of labor is closely related to human capital. I was able to survey this aspect more extensively in the field than through the information provided by ENEU (which only allowed me measure education). Human capital in my in-depth interviews was considered in a broader sense: educational attainment, general and specific on-the-job training, labor experience, and health status. In sum, human capital was assessed as the various potentials possessed by the individual when at work.

In general, the education level achieved by my interviewees is low, varying from no formal schooling to a technical diploma (see Table 8.1). Some of

them recognized that they did not "like" school and because of that they quit before completing elementary level. However, most of them recall that they wanted to keep studying but it was not possible given the economic constraints their families faced. The number of siblings they had, the place they occupied within their family, and gender also intervened in their educational achievement.

Two cases in which the ideology of the traditional gender roles influenced school attainment are those of Amalia (43, married to Ciro) and Manuela (50, Oscar's wife) from Monclova. From their parents' perspective, educating girls was not worthwhile since they would eventually marry and then would only work at household chores. Therefore, investing in their education was seen as a waste of time and money. Manuela studied up to fourth grade and Amalia got some technical education after primary school (grade school).

More frequent, however, were the cases in which my interviewee was one of the eldest siblings and he or she quit school to work and help the family, or those households in which none of the siblings had the opportunity to study at least primary school. Next is Leopoldo's case (50, married to María, Monclova). Like many other interviewees, Leopoldo barely finished elementary school because when he was a kid, his family's main revenues came from mining and thus his family used to move from one ranch to another in the search of minerals (in Cuatrociénegas municipality's surrounding area, northwest of Monclova). He was part of the family workforce, thus school for him and his siblings was not a priority:

Q: And your brothers and sisters also went to school?

> Leopoldo: Some yes, others no … it's that up there in Ciénegas, we're all hacked up, we didn't finish our studies, only the youngest one got more schooling [technical education] … and so on with all of us, at times we went to school, at times I left it; it wasn't something like, I mean, it is now for my children, where if you leave it's because you didn't want to study. No, we followed my papa from one mine to another, and we never managed to finish out the year.

The attitudes towards both the job search and the completion of a school level are difficult to assess. However, they also influence the goals set by my interviewees. Most of them define themselves as "hard-workers" (*luchones*) when they refer to the search of income generating activities, but that attitude can also be applied to school and on the job skill acquisition.

For instance, in the same case just mentioned, Leopoldo did not finish primary education when he was young, but later on he participated in a nationwide program especially devoted to education for the adult population. In that way he completed secondary school (junior high). Another of my interviewees, from Aguascalientes, Claudia (34, married to Hugo, 31) studied in the same program. Claudia had just gotten her diploma from secondary school a week before my interview. She stated "I mean, I wanted to do it, but as I said, we were many [siblings] and none could keep studying because nobody actually had the chance. But I always liked studying." Claudia explained that having her four children to take care of, her household duties, plus some sewing jobs she occasionally gets, made finishing her ninth grade of education a difficult goal to reach.

In relation to "know-how", only the skilled blue-collar workers I interviewed received formal on-the-job training. Most of my interviewees carry out semi or non-qualified tasks, which means that they learned these tasks by doing them. Attitude was important as well. For instance, Joel (35, married to Rebeca, Aguascalientes) is a skilled blue-collar worker. In one of his jobs he was required to have a technical education or prove that he had the equivalent knowledge in order to get promoted. He only studied secondary school, but he learned some specifics of industrial work partially by asking his workmates (most of whom had some engineering studies) and partially by self-instruction. He took a test and eventually was promoted.

There is another case from Aguascalientes as well. Genaro (44, married to Josefa), did not receive formal education, but he became a construction foreman. He recalled:

> … then [my boss] made me foreman, and I began to pick up on things right away, I taught myself, he also taught me a lot: blueprints and all that, how to read blueprints, I can understand blueprints and everything now, even though I don't know how to read, but I understand them all … yeah, well, I got started and kept working and working …

Keeping in mind that the quantitative analysis revealed high odds of living in poverty for those households in which the head (the level of education attained by the spouse is highly correlated to that of the head) only reached secondary school or lower , suggests that even when these couples try to improve their skills, without the credentials, the chances of them getting a well-paid work is negligible. Except among the skilled blue-collar workers, the qualifications of my

interviewees are very limited. Accordingly, the types of activities that they undertake do not demand high skills. When I asked Matilde (38, married to Raúl, Aguascalientes) if she had tried to change her job as a domestic servant for something better, she gave me a straight-to-the-point answer: "well, even if I wanted to work as secretary, how could I? I didn't study".

The mobilization of human capital depends at first on its availability, but it is mainly contingent upon labor demand. This can be illustrated with the difficulties Joel -qualified in industrial activities- faced in finding a position in Aguascalientes when the country was in the midst of a deep recession. Another example involves the formerly skilled blue-collar workers at AHMSA in Monclova, whose experience and qualifications as industrial workers became useless once they got "readjusted" and were no longer employed in manufacturing (e.g. Oscar's case, since he works as grocery retailer, or Ciro, who became a transport micro-entrepreneur).

An important factor in labor supply is an "acceptable" minimum level of health. Among my interviewees there were dramatic cases (like Enrique's, introduced in previous chapter), in which an accident meant that the household lost its main source of livelihood (Enrique, 43, married to Yolanda, from Monclova, lost his right arm and as a consequence his household's way of life changed).

There were other cases in which health problems imply expenses for the household -either because the family is not covered by the social security system or because public services are deficient and they resort to private attention. Poor

health also means that these individuals can no longer carry out activities that are crucial for their jobs. In another household from Monclova, Joaquín (40), who is a construction worker and has no social security, accidentally cut his right hand. He did not receive medical care and expected that this injury would heal by itself, but his hand did not recover full movement and strength. After his accident he has only been able to carry out light tasks ("*chambitas*") that do not allow him to earn the income he needs to provide for his family. Alicia, his wife (aged 37), has another health problem (related to the gall bladder). In a previous job, Joaquín had social security and she was able to get examined. She was told she needs surgery, but by the time her surgery was booked, Joel was taken off social security, so Alicia could not undergo the operation. Since they barely have enough money for the most indispensable things, she cannot afford private medical service and at the time of the interview she just hoped her health problem would not get worse.

Productive Assets. According to Moser (1998), even though the family can posses material goods that can be productively utilized (such as motor vehicles, sewing machines, and the like), housing is the most important asset for poor families. I argue that unlike rural areas, where a piece of land can be the principal productive resource, in the cities, a lot on which the house can be built is critical as a source of security which, eventually, can be utilized as a productive asset.

A house is an asset that is hard to get. Although Table 8.1 apparently suggests the opposite, given the high number of owners (11 out of 20 families in Aguascalientes and 16 in Monclova). A high proportion of house owners corresponds to the findings presented in the quantitative analysis, but behind the

statistics, there is a story of struggles to own a house. As I reconstructed the particular history of housing, I observed that working-class families tend to utilize any kind of resource to avoid paying rent and thus be able to use their total income for food, utilities, and other necessary expenses.

House-nesting (building extra rooms at a relative's place, frequently at the parents' or in-laws') and borrowing have been the most common practices among the families in my sample they were able to get a piece of land or a house of their own.[105] Approximately only a fourth of my sample rented a house prior to occupying their own lot.[106] These findings correspond to those presented in the quantitative analysis regarding the correlation between family poverty and house ownership. There is a relatively low likelihood of facing poverty if renting and high odds of being poor for those who borrow the house. Insights from the field lead me to infer that most renters either do not have the possibility of borrowing from a relative or they are apt to rent because renting does not take out a large proportion of their income.

The nature of public housing policies is basic to understanding the path to house ownership. Though my sample is biased because of the types of neighborhoods in which I carried out the interviews in each city,[107] the housing

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[105] The time my interviewees spent borrowing or household-nesting varied from some months to 17 years.

[106] In some cases, these families resort to house-nesting, borrowing, or renting back and forth, depending on particular circumstances, what they can afford or need to do. At the time of my interview none in my sample in Aguascalientes was renting a house, and there was only one case in Monclova. I found two borrowers in the latter city and three in the former. A mortgage was the housing situation for six cases in Aguascalientes and one in Monclova. See Table 9.1.

[107] As was described in Chapter 1, in Monclova I mostly concentrated my interviews in two neighborhoods: one was the first neighborhood founded by squatters (known as "*paracaidistas*" (parachutists) in Mexico) in the city; and the other neighborhood was mostly occupied by blue-collar workers' families. Due to some logistic problems in Aguascalientes, I selected my

experiences that these families have had is very similar. This implies a constant pattern among working-class families in Monclova and Aguascalientes.

In Monclova, the neighborhoods in which I concentrated the fieldwork were founded in the 1970s –the two are "models" of urbanization of that epoch-, one through illegal occupation of land and the other created on lots donated by AHMSA to the union, which was very strong at the time and which distributed the land among its affiliated workers. The local government had a limited role in the legalization of land and the provision of public services, which were not yet available for everybody at the time of my fieldwork (in 2000). The neighborhoods I visited in Aguascalientes were founded more recently. The State Institute of Housing (IVEA – Instituto de Vivienda del Estado de Aguascalientes) has designed a system of credit for low-income families, mostly devoted to informal workers (formal workers obtain credit for buying a house as one of their fringe benefits, as several skilled blue-collar workers in my sample did). Spread out red-brick neighborhoods are part of the local landscape, which have been created as part of a proactive policy on housing in the city.

One of the main issues emphasized by the couples in my sample is that owning a piece of land, regardless of the time it can take to build their house (or to pay for it in those cases that received a mortgage), gives them security over their own possessions. For them, it is very important not to depend on others, to have control over their property, and provide some resources for their children. As Genaro (44, married to Josefa, 39, Aguascalientes) states:

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interviewees in more than two neighborhoods, one in which families received credit from the local government to access a piece of land and some others in which the channel to get the house was different.

> If I'm going to put something [into the house], I already know that it's mine, eh, everything we're investing will be ours! … At least we're not going to go around bugging anyone or, for example, be in bed at midnight and the landlord comes and says, guess what, get out of here.

Once that happened to Genaro and Josefa. They had to move out overnight because they had a problem with the landlord. They were illegally renting (had no written contract) a small apartment, a couple of rooms built in a lot where the owner lived as well. Genaro and Josefa's kids had a fight with the owners' kids and they were asked to leave immediately.

Self-construction was the method of obtaining a house that was more commonly mentioned among my interviewees. These couples' description of how they got the plot and the way they self-constructed afterwards is very close to the pattern reported by Selby, Murphy, and Lorenzen (1990) for other Mexican cities: they occupied the land shortly after they were assigned it because otherwise it could be taken away; after that, they constructed at least a provisional room, a shack (*jacal*), then a high wall (*barda*) to protect themselves and to establish the limits between one plot and the other; and some time later they constructed brick solid rooms. The time spent between the moment of the occupation and the building of the first room depended on their savings. . In both of the cities some families took more than two years to start constructing rooms with solid materials (brick and cement), meaning that they lived almost out in the open for a long time. In general, they have spent several years slowly constructing the house.

The high proportion of proprietors among the working-class households that I interviewed supports what was suggested in Chapter 4 concerning the heterogeneity of owners. The high proportion of proprietors implies that the quality of the housing varies considerably between them. The relevant factors to take into account when assessing housing quality are: the materials used in the construction, the age and size of the unit, the services within it, and the number of occupants.

All the units I visited had running water, electricity, and sewage.[108] In Monclova, not all the streets of the neighborhood founded by squatters in the middle of the 1970s were paved by 2000. They have constant problems of water availability, mainly during the summer. Given the timing and characteristics of urbanization in Monclova, the neighborhoods where I carried out the fieldwork were older than those in Aguascalientes. The quality of the construction was very diverse in both cities. It is relatively frequent that these families live in plain brick houses, so the finishing is considered secondary as long as the family is not exposed to the elements. Given the characteristics of the houses where my interviewees resided, most of them would fit in the categories "good" or "very good quality" that I used in Chapter 4 because they are owned, have the basic services, were built with solid materials, and are not necessarily overcrowded. However, in most of the cases the quality leaves something to be desired.

Besides providing shelter, a house is important among working-class families due to its potential as a base for a family business. Thus, their constant

[108] In the Appendix I present the instrument utilized in the field when I started the interview. I gathered information about some of the characteristics of the house.

income-generating efforts can be more fruitful if a house is available. In all the cases in which the occupation of my interviewees is that of a retailer, the store is in the same lot as the house. It is relatively common for the wife or children to start selling some products (usually candies or fruit) outside the house in order to get some extra money, although those activities are not commonly declared in large surveys (i.e. ENEU). What stands out from the information gathered in the field is the extent of these supplementary activities. For instance, Genaro (44, construction foreman) and Josefa (39, domestic servant and housewife) do not have a store, but the small stand outside their house is their "*changarrito*" where they sell candies. They say that even though it is only a small amount they get from it, it is very helpful.

Out of the 40 couples I interviewed in the two cities, only one (Ignacio, 30, skilled blue-collar, and Alejandra, 28, housewife, from Aguascalientes) had another house. They were already the owners of the house where they live when he got the opportunity of getting credit for another house (one of his social fringe benefits) and they decided to buy it. They rented that other house and in that way "it's paying for itself" they said. In the field I could identify the use of other productive resources such as the two buses that Ciro (43, married to Amalia, 43, Monclova) has; and the sewing machines that Adela (36, married to Ernesto, 39, taxi driver) and Claudia (34, married to Hugo, 31, sales clerk) use to work at home in Aguascalientes.

Social Networks. Given the lack of data on social capital in large data sets like ENEU, the interviews provide the only information that I can utilize to assess

the availability of social capital and the possibility of mobilizing it. Since in the field I concentrated mostly on "substantive" resources of poor households, I failed to exhaustively survey the scope and the potential of social capital in the alleviation of poverty. Nonetheless, I did identify the importance of social networks in mediating a more efficient use of resources, that is, social support as an *instrument* for the better allocation of other household assets in order to cushion economic hardship. In my sample I found cases in which social networks were crucial to attaining the mere subsistence of the domestic unit at a certain moment (the outstanding example is the household leaded by Enrique and Yolanda from Monclova, after his accident in which he lost his right arm), but that is not the general pattern. Thus I argue that social capital (both its availability and its actual mobilization) is important for the household, but as a mediator between other resources of the household and the external environment.[109]

Social capital is tied to specific organizational forms and to specific purposes (Warren, Thompson, and Saegert 2001). Among working-class households it is a source of support from -mostly, but not exclusively- friends, relatives, and neighbors. For my interviewees, contacts have sometimes been the bridge to meeting household needs. Informal networks operate in the absence of formal channels, either in carrying out everyday tasks or to find other types of opportunities, such as jobs. They cannot substitute for institutional support mechanisms, but are especially helpful when the State withdraws from the social sphere, as in the Mexican context.

[109] Portes (1998), quoting Bourdieu (1985) suggests that a distinction between possessors of social capital, sources of it, and resources themselves is needed in the analysis of social capital.

What are the sources of social capital among working-class households? In what circumstances can those support nets be helpful for them? Membership in different social structures will help in obtaining a range of contacts. Since a characteristic of the social structure in Mexico is segregation, the probability that members of working-class households will make contacts among the upper classes is rather limited. However, wherever in the social ladder their acquaintances may be, they may facilitate the allocation of core resources of the household such as labor. They may also help increase the amount of goods, services, and occasionally cash.

Some of the specific circumstances under which social capital has been of assistance for households in my sample include the case that I previously referred to, involving the household leaded by Enrique (43) and Yolanda (38) in Monclova. When he suffered the accident that suddenly put their livelihood in danger, the help coming from their social network was vital because neither of them nor their children were able to work and therefore had no money to survive. At that time they relied on one of his brothers who periodically gave them some cash, one of their neighbors that had a convenience store where they ran a tab, and her father who provided the money with which they started the store they had at the time of my interview.

The most frequent needs that can be solved on a daily basis through help from people outside the household are child-caring and housing. Women who do not work at home look for somebody who can "keep an eye" on their children for some hours, usually between the time when the child is out of school and when

the mother gets back from work. A female relative or neighbor is usually the one who takes on that task. With regard to housing, the two issues in which social networks are key include self-construction, and house-nesting or borrowing. Relatives and friends commonly "teamed up" (*le echaron montón*) to do the construction. Building a house by their own means was a matter of pride as several of my interviewees stated: "this house is the fruit of our labor." Equally important is the fact of knowing that the family can rely on somebody, usually a close relative, if they need a place to stay.

Given the pre-eminent role of employment in the well being of the household, the mobilization of labor –and hence human capital- through a contact can be very helpful. Information and influence are the two aspects a contact can provide (Morris 1988). The contact person becomes the bridge between household resources and the external environment. According to Morris, even when the recruitment process follows formal channels contacts are important, but if jobs are not advertised, those connections are essential.

Not all my interviewees have obtained their jobs through social networks. For instance, Benito (38, married to Rosario, 33) says that the last two times he switched jobs, he resigned and the very same day he got a new one. He went to another factory, asked if there was a vacancy and got the post. However, even in Aguascalientes where Benito lives –where jobs are offered by radio spots in addition to an active recruitment of workers in the neighborhoods with cars equipped with loud speakers -, it is not always that easy to get a job that suits what the worker needs. Next is the case of Ernesto (39, married to Adela, 36),

who resorted to friends, acquaintances, and whoever could help him to find a job. But he was not successful. He recalled:

> I left every morning and didn't get back until late at night. I would look for such-and-such, and for thus-and-so … you know how it is, they tell you "whatever you need", like promises of, of politicians, right? In this case, "sorry, don't have anything now", "no, there's not anything, sorry I can't give you a hand" and I would go to such-and-such, and the same thing! I, I would return late at night, my head full of sorrow, I mean, well, I was desperate.

It can be a matter of having social support, but also essential are the human capital or the productive resources required to actually get a job. In this household, Adela bought her sewing machine planning to get paid work to do at home. A neighbor told her of a factory where she could ask for *maquila* work. She went there and having some experience and her machine, she got the job immediately.

There are some other cases in which relatives, friends, or neighbors have been the connection to get a job. I identified some cases in which in former state-owned enterprises the union was strong and had an agreement about hiring direct relatives of senior workers. Both in AHMSA in Monclova and the National System of Rail Transportation (Ferrocarriles Nacionales) in Aguascalientes, the father of my interviewee had some well-located connections to negotiate the entrance of his son. The mediation of such contacts smoothed the hiring process.[110]

[110] This was not done legally in all the cases, since the father had to "grease the contact's palm" (*le dio una mordida*).

Social networks provide differential access to opportunities and may ease the mobilization of core resources in the households such as labor and human capital. Those networks give the actors the ability to secure some benefits that ultimately help them to face challenges imposed by the external environment.

Migration. Changing the place of residence can happen at any time during life. It can happen more than once, and it can be either temporary or permanent. My interviews indicated that although migration is not a core resource for households, it is sometimes utilized as the last resource. Migration mostly has an instrumental function – as does social capital- in more efficiently allocating other assets.

I obtained information about both internal and international migration. The latter was to the United States in all the cases. The summary information displayed in Table 9.1 only includes internal migration. In most of the cases my interviewees were very young when their families moved to either Monclova or Aguascalientes, so it was somebody else's decision and afterwards they stayed there. Interestingly in both places such migration represented the flow of rural workers and their families in a period of industrial expansion, meaning that at a certain point both were cities "made" by peasants (in words of Roberts (1978)).

There are some other cases in which the couple migrated shortly after marrying. They used to live in surrounding towns and moved to the respective cities. The couple that came from the furthest place from Monclova were Matías (40, messenger) and Ana (41, domestic servant and housewife), who moved from a ranch in the state of Veracruz. The reason why all these couples migrated was

the search of better work opportunities. The two couples that at the moment of migration were the oldest in my sample, one in each city, were Horacio (60, construction worker) and Dora (62, housewife) who migrated to Monclova when they were 34 and 36 respectively. They had migrated after marrying from the Torreon region in the state of Coahuila to Monterrey (Nuevo Leon) and would have stayed there, had he not participated in the organization of a union and been fired from his job without the possibility of being hired again in manufacturing in the city.[111] They decided to move and chose Monclova because in the 1970s the city was booming. Joel (35, skilled blue-collar) and Rebeca (30, housewife) moved to Aguascalientes in 1995 for a different reason. Joel's first wife died and he moved looking for a different environment for his children, Rebeca agreed to be his second wife and moved from Mexico City after he did.

Among the couples in my sample, international migration is thought of as a last resort to solve economic difficulties. Out of the 40 couples I interviewed, there were two husbands in each city with experience of working in the United States, only in one case did the wife migrate for a short time with her husband (Silvia, 29, married to Pablo, 25, Monclova). Two more heads of household in Aguascalientes had plans to migrate in search of a job that allowed them to save some money and go back. Leaving for "the other side" -as the US side of the border is called- is mostly seen as the opportunity to send remittances to the household to meet specific needs. Such is the case of Antonio (47, retailer,

[111] He and other of his workmates were included in a "black list" (*lo boletinaron*).

married to Dolores, 46, retailer and housewife), from Monclova. He has been in the United States during two periods, in 1983 and 1999:

> Q: You've never left Monclova to work elsewhere?
>
> Antonio: Yes, yes I've been twice, two times in the United States, when we've fallen on tough times of, of debts or heavy financial commitments, yeah, I've had to go up there and work.

The two cases with similar experience in Aguascalientes are Raúl (39, smith, married to Matilde, 38, domestic servant and housewife) and Daniel (44, construction worker, married to Carmen, 42). Raúl migrated once, when one of his children had a serious health problem. He had no social security and the consecutive surgeries that his son went through were very expensive. Otherwise he says, he would not have been able to afford them. Daniel crossed into the United States on the second attempt, in 1998. He got a loan to pay the guide (*coyote*), and after saving to pay back, he got the amount needed to pay the mortgage of the house where they live now. They were in risk of losing their property. After saving what he needed, he went back to Aguascalientes.

It is significant that I did not find many cases among my interviewees in which migration was considered as a strong possibility. The reason might be self-selection, since those who consider it the channel to solve their economic problems (either definitely or temporarily) were not *in situ* at the time of my fieldwork. If they left, I failed to identify them because I approached only complete households.

8.1.2 Trade-offs: Some Implications of Household Assets Utilization

Household adjustments are a response to changes in the macro socio-economic structure (Selby, Murphy, and Lorenzen 1990; Roberts 1991a; Elder et. al. 1992; Moser 1998; González de la Rocha 2000). Households "defend themselves" by using the resources that they have at hand. Though some units are more resourceful than others, in general working-class households' goods are restricted. Because of that and due to their constant exposure to external pressures the utilization of such resources does not leave the stock intact. In fact, the very same notion of "mobilization" implies that there is a goal to be reached by the household –presumably a positive consequence-, which can mean the diversification or increase of goods. At the same time, however, there can be the negative consequences of using up some resources. In this subsection I take up some of the trade-offs that should be expected as households intensify the use of their possessions.

Household asset stocks are the net result of accumulation over time (Moser 1998). However, poor households are in need of finding a variety of income opportunities if they are to survive (Roberts 1991a). Thus, a common strategy of working-class households is to transform their members into workers as soon as possible. The main hazard of households that try to increase their income in the short-term is to use up their labor resource early –instead of keeping them at school (Moser, 1998; González de la Rocha 2000). The risk is to lose the possibility of accumulating human capital that in the long-term could be more rewarding given credentialism in the labor market.

In the field I identified some households in which the eldest children work and are an important support for the main breadwinners. However, they left school so early as not to find well-paid jobs. One case is the household headed by Joaquín (40, construction worker) and Alicia (37, housewife, Monclova). At the time of the interview, out of the seven children that live with them, two were already contributors to the pooled income, and one more was going to be soon. However, the main source of the household sustenance was still Joaquín's income because their children's earnings were low and they contributed only part of it to the household income. The eldest (aged 19) worked as a carpenter's assistant; the second (17) was a domestic servant; and the third one (14) would work as an assistant in a tortilla store. None of those children were studying and all had quit school when they were enrolled at the secondary level.

Another case was a household in Aguascalientes. Daniel (44, construction worker) and Carmen (41, domestic servant and housewife) had six children and all live with their parents. The two oldest children (aged 19 and 17) were sometime enrolled in high school, but they did not finish it and they were part of the workforce at home at the time of the interview. Carmen says that their children initially wanted to stay at school. However, it was very hard for them to be full-time students and full-time workers. So when they decided to quit she agreed, because, she wonders: "why would I want them to be killing themselves if later on they won't find a good job anyway?" From Carmen and Daniel's perspective it is good for them to get a little help from their children because it is difficult for them to make ends meet.

A further trade-off as household resources are mobilized is that such utilization represents a differential burden for household members. The clearest example involves the spouse's participation in the labor force. It has been documented elsewhere (González de la Rocha 1994; Cerrutti 1997; Casique 2000), and my evidence supports the case, that the spouse's participation in the workforce does not necessarily imply a different division of labor within the household. In practical terms this means more intensive work for the women.

Another source of inequality within the domestic unit is the proportion of earnings allocated to the pooled income. Spouses tend to contribute their total earnings unlike husbands and offspring. Most of the household heads in my sample say they put aside some money for their weekly expenses and the rest of their income is assigned to the household needs. My interviewees –both male and female- agreed in considering that their children's earnings "help" them because at least their children can clothe themselves and still contribute a small proportion of their earnings to the pooled income. However, they emphasized, that even though any help from their children is welcome, it is not their children's obligation to provide for the household.

Health is another resource that can be burnt out due to an intensive participation in the labor force. Daniel and Carmen, again, both have chronic health problems. Daniel worked during 14 years in a slaughterhouse where he was exposed to drastic changes of temperature. Although he was very young back then he thinks that such a job might be the reason why he has suffered from rheumatism in both arms for some years. Daniel knows he has to be under

medication to control the constant pain, but he cannot afford it (he and his family do not have social security which would give them access to medical attention and medicine). Carmen has not determined what her problem is, but she knows for sure that it is painful. Her health deficiency might be related to the back, the hip, or the knees. She does not know because she has not been examined due to the cost of private service. She cannot endure more than ten minutes sitting because she feels a strong pain from the hips to the knees that is only alleviated when she stands up. Carmen utilized a phrase that might reflect how many of these couples feel: "it must be that we are old, that we are worn-out by so much work."

The last examples of a trade-off that I will provide are related to housing. In one case, Antonio (47, retailer) and Dolores (46, retailer and housewife, from Monclova) sold their house in order to pay for one of their children's schooling. When their daughter (aged 24) decided to become a teacher and was accepted at school, they figured out that selling their house would allow them to invest in her education. Her school was not in Monclova but in another town and she was expected to live there for at least four years, so she would need to pay tuition and school supplies, plus regular expenses on clothes, food and lodging. They sold their house and deposited the money in the bank to guarantee that they would not misuse that money. At the time of the interview they were renting and trying to save to eventually buy a lot and build another house.

A different case is that of Jorge (41, construction worker) and Edith (39, housewife) from Aguascalientes. Their housing history is a difficult one. When

they could finally get a plot of their own, the down payment meant that they had to get rid of their few belongings. Jorge and Edith got married in 1975 (they were 16 and 14, respectively). After three years of living at his parents, they started renting here and there (during some periods they rented empty lots where they constructed a shack because that was less expensive than an apartment). They spent seven years waiting for a piece of land provided by the local government (which was provided in 1993). For the down payment they had to sell their few belongings (furniture and appliances). By then they had literally nothing but a piece of land. After two years and a half they started building a solid room.[112]

This discussion on the mobilization of household resources shows that even though workers and their families try to use them in the most efficient way, their margin of action is very restricted. It is difficult to have a long-term plan of resource utilization when surviving is the goal of the every day struggle. They do not have a wide set of alternatives and in order to subsist they utilize whatever means they have available, even if it may have negative or limiting consequences afterwards.

8.2 Economic Restructuring and the Aftermath: Hardship "Degrees" while Trying to Make Ends Meet

The previous discussion of household resource utilization suggests that working-class households are made up of active agents who try to adjust to external pressures. Such adjustments involve actions taken to resist economic hardship. I have already shown that those actions may involve losses for the

[112] Nine people live in this house (see Table 8.1), and it only had two brick rooms at the time of the interview, in 2000.

household as well as the creation of new risks. Despite the fact that all my interviewees belong to the working-class, the types of resources and the way they manage them are diverse. The questions that arose from this series of household stories are: What is the outcome of the process of adaptation to economic hardship? Is it the same for everybody?

Bane and Ellwood (1986) and Kaztman (1989) have called attention to the heterogeneity of poverty in the United States and Uruguay, respectively. Given the large proportion of poor households in Mexico (see Chapter 3) it is to be expected that there is some variation within that strata. My data shows that poor households are not uniformly poor. Next, I aim to examine the diversity of living conditions of working-class households as the outcome of a continuous process of adaptation.[113] I argue that the impact of economic misfortune at a specific period in the household trajectory will vary according to the *initial conditions* of the household –the stock of resources the domestic unit has at the onset of a difficult episode- and the *margin left* for them to act. Thus, poverty is not a permanent status and household members are active agents.

The adaptation to the external environment is historically bounded, it is not a terminated process, and the specific status of the household is the synthesis of the previous trajectory -the outcome of the adjustment- and, at the same time, the beginning of another round (Moen, Kain, and Elder 1983).

[113] It is important to keep in mind that the "snapshots" that I will discuss are only a part of the household trajectory. Thus, this information is selective –not fully observed- because the adaptation to the external pressures is a continuous process. In this account I fail to account for the whole trajectory of the domestic unit because such a trajectory, by definition, can only be known completely when the household no longer exists.

From the standpoint of the total resources that the household possesses (keeping in mind that such goods are not abundant), I propose a classification of households into three groups: a) better off; b) getting by; and c) worse than worse. As I stated in the previous chapter, I did not measure poverty in the field in the same way that I did in the quantitative analysis –determining whether or not the household was below the poverty line based on per capita income. In the field I surveyed other dimensions, seeking to grasp the meaning of facing poverty in daily life. Because of this kind of assessment, the classification may not be precise, since the boundaries between the groups are relatively diffuse. Nonetheless, I present the following classification of working-class households based on the economic hardship they face on a daily basis and the ways in which they respond to protect themselves, that is, the strategies that they pursue to overcome difficulties. Some household stories help to illustrate each category.

8.2.1 Better off

Longhurst (1994)[114] called "enduring households" those domestic units that maintain livelihood security on a continuing basis. The two cases that I will present here correspond to that profile. Even though they live modestly, they are the best placed among my interviewees.

Ignacio (30, skilled blue-collar) and Alejandra (28, housewife) are from Aguascalientes. Alejandra studied secondary school and at the age of 18 she

[114] Although Longhurst's (1994) research is focused on shocks and the possibility to recover afterwards, I adapt some his terms that are useful for the point I seek to make with this classification.

started working (as a sales clerk). She married Ignacio when she was 22. She kept working until their only child (aged 5 at the time of the interview) was born. Ignacio encouraged her to study something else so she would not only have to be devoted to her household chores and she got some technical education for computing. Between the child's birth and the time of the interview she did not work again.

Ignacio first worked at the age of 6 because he was the eldest of five children. Since there was not enough money despite the fact that both of his parents worked, he kept working and studying until he completed technical school (after secondary school). From 6 to 18 years old he was involved in diverse activities, but at 18, when he got his technician's diploma he decided to resign from his job of blacksmith because he thought he could aspire to something related to his studies of industrial engineering (machinery and tools), which would eventually be more rewarding.

It was not difficult for Ignacio to find a job right away, but soon he decided to resign because he thought that his knowledge was underutilized (he was asked to complete simple and repetitive tasks). His second job switch was not difficult either. In the newspaper he found an announcement of a vacancy. He took a test and immediately got the job. Beginning in 1988, he started working in the same factory where he was still employed at the time of my interview. He worked at one of the large transnational firms that have settled in Aguascalientes in recent decades. His first position was general assistant and he was paid the

minimum salary.[115] During the 12 years he has worked in that enterprise he has been promoted several times. At the time of the interview he was preparing himself to request another promotion, this time to the highest category for which he is eligible.

A key issue to the well-being of this household is that Ignacio has a stable job (tenure, *contrato de planta*), reasonable salary, and very decent fringe benefits. Among the set of benefits he is entitled to: social security (medical service for him and his family as well as a system to save for his retirement), paid vacations, credit for housing, distribution of profits (*pago de utilidades*),[116] Christmas bonus, and various other bonuses (productivity, attendance, multi-task[117]).

Even though the dependency ratio might be considered high because only one out of three members of his household work, Ignacio's income is enough to meet his household needs. I asked him:

> Q: Is your income sufficient to meet your family's needs?
>
> Ignacio: Yes, yes it's enough because besides my salary, I like to, I mean, I've always like to do other things, like selling, fixing electrical appliances, electronics and all that. It's a way to invest money besides my income, so I really don't feel a … I don't feel a crisis or anything like that

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[115] Ignacio emphasized in the interview that it meant he initially got a very low salary in that enterprise, regardless of his technical education. As was discussed in Chapter 3, the minimum salary in Mexico hardly allows a worker to meet his family needs (in 2001 for instance, the minimum salary was 37.57 pesos a day (eight hours of work), approximately $4).

[116] These benefits are mandated by the Mexican labor law. The distribution of profits applies to private enterprises –i.e. not for workers in the government- and means that the workers receive a share of the total profits made by the firm in a year.

[117] According to Ignacio, the multi-task bonus means that every time a worker is about to be promoted, in the meantime he receives in his check the difference of salary between his category and the one above. Once the higher category is reached, this amount is included in his regular check, so the worker stops receiving that bonus.

> for me to say we're really bad off, not really, maybe because of that, or maybe because we've administered it well.

From Ignacio's narration it can be inferred that he follows a "philosophy." He stated: "I've never liked to live on the edge, my thought is to keep always doing something". His principle is to keep looking for income generation options: when he was about to marry Alejandra he got a second job, with his savings and the income she still had back then they bought a piece of land. They house-nested at her parents for two years, which was the time it took to construct the house where they lived at the time of the interview. When they finished the house she was not working because the child had already been born, but he kept the two jobs for some time. Then he quit one but started selling various items such as clothes and electrical appliances. When he was offered credit for a house, Ignacio and Alejandra decided to take it and use the second house as another investment. Ignacio's plan is to save enough to buy machinery and set up his own firm.

This household had a very fortunate combination of resources: a small family, the couple was young and both were qualified enough to be rewarded in the labor market, everyone had good health status, and possessed some productive assets. Besides, they are constantly looking for the diversification of their income sources. In sum they had what Moser (1998) called the "*right mix*".

In the field I inquired about the sufficiency of the income to meet household needs, I also asked about economic difficulties on a daily basis ("heavy expenses"), and what the household members do to solve all those problems. Despite the fact that Alejandra and Ignacio's household have not faced an

economic crisis, they still make an effort to avoid difficult times. They implement what Corbett (1988) classifies as precautionary or insurance strategies, which are non-erosive (Waal 1989).

Next I will briefly outline another "successful" case because it is a different context and it involves a couple that are in another stage of the family life cycle.

Ciro (43, transport micro-entrepreneur) and Amalia (43, housewife) live in Monclova. Both Ciro and Amalia only completed elementary school (Amalia got some technical education as well). Ciro's difficult childhood was referred to in the previous chapter because even though he had started working at five, at the age of 10 his father died and took on the male provider responsibility. Ciro said in the interview that such difficulties might have made him marry very young: he and Amalia were 17 years old when they got married. Amalia had some working experience (as a sales clerk) when they married, but never worked again after marriage. When they got married Ciro was a carwasher, but later on he got hired by AHMSA, in 1973, when that firm "was strong" as Ciro recalled. He had a stable job, good salary and broad fringe benefits during the golden age of AHMSA and Monclova, when the steel workers of that industry were part of the so-called "blue-collar aristocracy" (*aristocracia obrera*) in Mexico.

Ciro was fortunate and did not get readjusted at the end of the 1980s or beginning of the 1990s. He said that his dream was to keep working at AHMSA. However, one day in 1994 Ciro had an argument with his supervisor, resorted to the union protection mechanisms and tried to change his area of work. He was

surprised when the next day, he was already taken off the payroll. Ciro affirmed that at that time the firm was trying to get rid of some workers, so the argument with his supervisor served as a good excuse. He recalled:

> Yes, it was quick, in less than ten days, they had let me go. I already had the check in the bank, and I went a month without knowing what to do, saying to myself, "Now what am I going to do for work?" I thought I would never find anything like when I was in AHMSA, so I though, but no, you've got to move on.

Ciro was scared that like many other former workers of AHMSA he would lose his livelihood. Since he had seen the experience of some of his former co-workers who did not invest their money, he decided to use it productively: "When I got readjusted (*cuando yo me reajusté*) I took the money and put it in the bank". First he bought a bus (the urban transportation in Monclova is private, so he only had to get a permit to drive his bus), which he himself drove. Then when he had enough savings he decided to get a second one for which he hired a driver. Evaluating the situation of his livelihood, he said:

> Yes, we live well, thank God … I've gotten ahead, you know, because what little AHMSA gave me, I been able to turn into three, four, five times that …

Ciro was the most successful case in my sample of those "readjusted" by AHMSA. He, as with the case of Ignacio, has been proactive in search of income generation activities. Ciro productively invested the money that was the fruit of his 21 years of labor. He is proud of having paid for the education of all his

children (including the ones that still live with him and Amalia and the ones who have left the household). The key element in his success was the accumulation of resources and further investment.

8.2.2 Getting by

To this category of households correspond those that even though they live way beyond the subsistence level still are very vulnerable to poverty. Most of my interviewees would fit in this category because they are located "in between": they neither possess a large and solid set of resources nor do they have to fight every day to just subsist. These households live in relative scarcity, but have some resources that will eventually help them to improve their current situation or face a crisis. For instance they can count on some goods such as the house, or have available labor. I only present one case, because this is the most common category and their situation is broadly similar.

Gabriel (47, skilled blue-collar) and Gema (48, housewife) live in Monclova and have four children (23, 22, 17, 14) that live with them. Like many other couples in my sample, they only managed to finish grade school because their families could not afford for them to go on to a higher level of education. Due to in the poverty of their paternal household, both had to work at an early age. Gema was 16 when she first worked and Gabriel was only 7 years old. When they got married Gema was 25 and Gabriel 24. Gema did not work anymore after marriage. Gabriel's trajectory in the workforce follows the pattern described in the previous chapter: he switched activities as he grew up, until he was 18 years

old (1971) when he was able to get hired by the main enterprise in the region, AHMSA. Gabriel was still enrolled in that firm at the time of the interview.

In the interview Gema and Gabriel identified the most severe period of economic difficulties, as occurring at the beginning of the 1980s. At this time, they already had three of their four children and Gabriel had the chance to obtain the house in which they were still residing by 2000.[118] Both thought it was a good opportunity for them because they would no longer need to house-nest at his parents (they rented for four years after marrying, but they found it a heavy burden and thus they stopped renting). However, he had to start paying for the house right away. The amount he had to pay was discounted directly from his check and they found the drop in his weekly salary a considerable loss. They recalled that they cut consumption as the way to handle the economic pressure, but cutting consumption was difficult due to the high dependency in the household (they had three young children and Gema did not work). During the eight years that Gabriel had to pay for the house, basic needs (feeding and clothing) plus the education of their children and the cost of utilities were barely met.

Later, even though their four children were growing and demanding more, Gema and Gabriel still felt that they were doing better than in previous years. The main support of the household has always been his job. Before they got

[118] Back then the union of AHMSA workers was politically very strong. The firm donated to the union a lot in which 500 houses could be built. The union raffled the lots among the affiliated workers and later on negotiated with a construction company credit for 200 houses. Gabriel was fortunate in getting one of the houses that had already been built because otherwise he would have had to construct at his own pace, depending on what he could save.

married he was already working in AHMSA and by the time of the interview he had been enrolled there for about 30 years.

Gabriel was emphatic that his household's welfare was highly dependent on what happens within the firm. For instance, he felt fortunate in not having been made redundant yet because he received all the fringe benefits to which he was entitled –social security, paid vacations, Christmas bonus among others-[119] and has a stable income. Nonetheless, he felt at risk. The constant threat that he faced, he said, was the possibility of being made redundant at any time because AHMSA was still laying off workers.

The other resource that this household could call on was the labor of its members (two of the children were already working). Gema encouraged their children to find a way to contribute to the household income because, she told them, "your daddy is getting old so he can't cope with all the expenses". Every so often they resort to the loans that Gabriel can get from the union founds, which has helped them mainly to handle their children's tuition (one of the "heaviest" costs they normally have to cover).

In a general evaluation of their economic situation, they said that they have offered their children better conditions than those that Gema and Gabriel had experienced. They recalled that at an early phase of their own marriage, they used to go on vacation out of town or go to parties, but both types of events are part of the past because they can no longer afford their costs. Gema synthesized:

[119] He stated that despite having a right to a share in the firm's profits, he had not received any for two or three years before the time of the interview. The firm's reason for not making a distribution had been the lack of profits.

> … we don't live very comfortably, but we've got the main necessities, right? Food, right? Anyway, I tell them we haven't fixed up the house because, you know, we don't have anything left over, right, it all goes to [daily expenses] and for them, but, but, you know, I say, the main thing is that we've got enough to eat and to pay for their studies, right, and the house can wait until they're grown up, if they want to do it then.

For households in this group, the trade-off for adapting to economic hardship is likely to mean the disposal of productive assets, which denotes an erosive form of coping.

8.2.3 Worst of the Worst

The households in this group have either faced a crisis at some point in their trajectories and have not been able to recover or have always lived on the margins. I will illustrate this category with one history. This was not the only case I identified in the field that would fit in this group, but I selected the household headed by Joaquín and Alicia from Monclova because relative to the bulk of my interviewees they were the worst of the worst.

Joaquín (40, construction worker) and Alicia (36, housewife) have been introduced before. They have the common characteristic of have been born to families where the head's occupation was that of construction worker and they were between the youngest and eldest children. Their birth order is likely to be the reason why, despite their parents' poverty, they did not work as early as some other people in my sample. Joaquín completed grade school and Alicia never received formal education. Joaquín started working at 12 and Alicia did not work

for pay before marriage. When they got married Joaquín was 16 years old and Alicia was only 12. They house-nested for two years at his parents' (until he reached the "*mayoría de edad*", that is, he became "legal")[120] and afterwards they heard about a squatter settlement in which they still were assigning lots to new settlers. It was 1978 when they got the lot.

In total they had nine children. Of these eight survived and seven were living with Joaquín and Alicia at the time of my interview. Alicia said that she was 13 when she first gave birth, but that child was premature and lived only for a short time. Their second child was born when she was 16 years old, and from then until the age of 34 she had seven more children. In the interview Joaquín said that he had suggested to Alicia that she get a permanent contraceptive method when they had their fifth child, but she was reluctant. In her interview –carried out separately- Alicia stated that she did not want to stop having children (following the ideology of the catholic church of "having the children that God sends"). It was not until she had a difficult pregnancy and her mother-in-law insisted that she should stop having children that she finally got sterilized.

This household was one of those which answered "always" to my question of when they had faced economic difficulties. Joaquín was emphatic that the economic crises in Mexico since the eighties had influenced the availability of work and the level of the salaries. He said that until the beginning of the 1980s they had lived in acceptable conditions. They constructed the house and even though they already had three children, his salary was enough to meet

[120] For those who intend marrying before 18 years old, the Mexican law demands a written permission from the parents of both contracting parties. Once individuals reach the age of 18, they become "legal" and parents' backing is not required.

his household needs: clothe and feed everybody and still there was something left to go out to eat or for some entertaining. He said:

> … it isn't what it used to be, because I wasn't around yet to know what a good peso was, back when it was really a peso.

Those relatively comfortable conditions ceased in the 1980s. Except for two periods in which Joaquín either had two jobs (overnight security worker (*velador*)) or waiter) due to the lack of work, he has always been a construction worker. Although it is an unstable sector (temporary, no written contract, seldom offers social security, no other fringe benefits), Joaquín said that previous to the privatization of AHMSA (1991), his situation had been better than at the time of the interview. Before the privatization, the blue-collar workers (or any other workers whose work was related to AHMSA) used to pay when they needed construction work. For some time, Joaquín could even hire four assistants because he had a lot of work. After the privatization, the now redundant AHMSA workers did not hire anybody and began themselves to carry out whatever work of construction they needed.

Joaquín said that in recent years he has had to charge less than he would normally do in order to get hired because otherwise he faced the risk of not earning anything. Moreover, about a year before the time of my interview Joaquín accidentally cut his right hand, which did not recover full mobility and strength, preventing him from carrying out hard tasks. The simple jobs for which he has been hired since then diminished even more the possibility of earning enough.

Alicia's and Joaquín's household depend on his income. Joaquín interprets his household situation and the chances he has of providing for his household as follows:

> ... I mean, it seems hard because, like I say, because there's not enough work here, and the work that is here is poorly paid, that's the heart of it, minimum wage … how much is it? Not even a bachelor can live on that.

Due to the instability and small amount of Joaquín's earnings, it was very hard to meet this household's daily needs. Therefore, cutting back of expenditures was the most frequent mechanism they utilized to adapt their consumption to the household's weekly income. They delayed medical care, postponed major purchases, deferred outstanding bills (they owed electricity, water, the school *cuotas*, and could not easily run a tab in their neighborhood stores because they owed everywhere). Alicia said that they frequently did not have enough money even to eat.

Besides Joaquín's income, the most important other resource that this household can count on is labor. Though the high dependency ratio is the main burden in this household, but, the grown up children become a resource when they can get a job. However, due to the lack of credentials they can only aspire to get menial jobs. The two oldest (19 and 17) of the seven children still at home already are part of the workforce (carpenter's assistant and domestic servant, respectively) and the third in the row was about to start working as an assistant in a tortilla store. None of these activities pays a good salary. A future limitation is

that none of these three children finished secondary school, which will eventually prevent them getting much better job opportunities.

Despite the face that this household has utilized its most important resource – labor -- this is not abundant or qualified enough to generate much income. The continuing economic disadvantage to which these households are exposed implies a long-term insecurity and restricted asset base. The households in this group live on a "fragile equilibrium" (Longhurst 1994).

Although the classification of households I have presented in this second part of the chapter is not a precise one due to the diffuse boundaries between categories, it allowed me to identify the salient characteristics of each group. According to their living conditions, the resources they have and the way that they utilize such resources to cope, I suggested three groups. *Better off*, are the ones with the highest degree of power over their resources. The risks that they face of living in poverty is the lowest among the interviewees. Their main resource is a stable job and/or income. *Getting by*, includes the households that are vulnerable to poverty. Even though they have some important resources (stable employment), they are constantly in danger of losing their livelihood. *Worst of the worst,* are the chronically poor (associated with an unstable source of household revenues). They face a long-term insecurity and restricted asset base.

8.3 Discussion and Conclusions

The two main issues that have been addressed in this chapter are resource utilization and the heterogeneity of living conditions among working-class

households in Monclova and Aguascalientes. Based on in-depth interviews I demonstrated that working-class households are made up of active members who try to adjust to and face up to external pressures. Domestic units in these two urban contexts are forced to be flexible. The way households adapt to external challenges is by the utilization of any resource available. However, not all working-class households are equally resourceful. Thus, the margin left for action is different and bounded by the assets possessed at a specific point in the household's trajectory.

Besides assessing the heterogeneity of resources among working-class households, another important element in this analysis is that the actual mobilization of such resources is not necessarily achieved as desired or needed by the domestic unit. It has been argued elsewhere (Moser 1998; Kaztman 1999) that the ability to convert resources into assets and combine them is highly contingent upon the opportunities offered by the external environment –i.e. labor market and the State. Therefore, possessing some resources is not enough to overcome economic difficulties. Being allowed to mobilize such resources is essential.

I have also argued that not all the household resources are equally important. Given the centrality of the labor market in determining the level and stability of household income –as well as the access of its members to social protection, labor and human capital are the core resources. Human capital is an inherent attribute of the individual and the labor market is the arena in which human capital is either rewarded or penalized. In urban Mexico the labor market mainly rewards those who have achieved educational levels above secondary

school (junior high). An acceptable health status (those who can fully utilize their physical and mental capacities) is also essential as is work experience or on-the-job training. These findings are backed both by the survey and the interview data. Ownership of housing gives security – against fluctuations in income and protecting material possessions. Housing can eventually be used as a productive asset. Social networks and migration are "instrumental" assets because they mediate the better allocation of other household resources (i.e. labor and human capital) in order to cushion economic hardship.

Since household assets are finite and therefore they may erode (González de la Rocha 2000), resource utilization imposes a cost. I discussed in this chapter as well that the notion of "mobilization" implies that the household pursues a goal –even when that goal is merely surviving. Through the use of its resources the domestic unit is exposed to positive and negative consequences. That is, there may be trade-offs in the intensification of the use of household resources.

The assessment of the adaptation process to external pressures cannot be done in abstract. At the onset of an episode of economic hardship households have different stocks of assets, which in combination with the macro structure (labor market and State provision of social protection) will lead to a net result: the heterogeneity of living conditions among working-class households.

I have proposed a grouping of households according to the assets portfolio that they have and the way in which they manage it: better off, getting by, and worst than worst. These categories imply different levels of control over their resources and different exposure to external challenges. Cases in the three

categories show the close relationship between work conditions – pay, contractual stability, and fringe benefits - of the head and the overall well-being of the household. This suggests that as long as the Mexican economy does not have the capacity of generating good job opportunities, the majority of households will remain vulnerable to poverty (or vulnerable to indigence for those who have lived in chronic poverty).

Though it has not been explicit, in this survey of the set of resources utilized and the outcome, there have emerged more similarities than differences between Monclova and Aguascalientes. In the two cities I identified households living in comparable conditions of relative scarcity and thus those cases could illustrate the three categories of living conditions that I have proposed in this chapter. The combination of scarce or not strong core resources as underlying initial conditions of the households can be found in both cities. The key difference, however, is that Aguascalientes has been a booming local economy in Mexico during recent decades. This means that the city offers opportunities of finding diversified sources of income for the household more frequently than Monclova does. Although this difference between cities does not mean that the opportunities or obstacles in the labor market are distributed equally among the individuals in each city (it is contingent upon human capital and social networks) as has been shown in this chapter. Thus, living in either city is important, but it is not as important as possessing the resources that are being rewarded by the labor market not only in Aguascalientes, but also everywhere in the country.

Table 8.1: Summary Information of Couples in the Sample (Pseudonyms)

MONCLOVA

Couple	*Age*	*Place of Birth*	*School*	*Age Marr*	*Age Migr.*	*HH Members*	*Age Work*	*Current Occupation*	*Housing*
1 *Pablo*	25	Palau, Coah.	Sec. compl	18	4	*2 children* Ages	16	Skilled blue-collar	Borrowed
Silvia	29	Monclova, Coah	Sec. compl	22	--	11 7 69 (father in law)	17	Housewife (After marr has intermittently worked as retailer, diverse products)	
2 *Enrique*	43	Monclova, Coah	Sec incompl	21	--	*3 children* Ages 20 19	13	Propietor of a small grocery store since 1996 (formerly skilledblue-collar worker)	Borrowed
Yolanda	38	Monclova, Coah	Sec. compl	15	--	14 21 (d. in law) 8 month (grand-s)	31	Propietor of a small grocery store Housewife (After marr. has also worked as domestic servant)	
3 *Joaquín*	40	Monclova, Coah	Primary	16	--	*7 children* Ages 19 17 14	12	Construction worker (always in the same activity)	Owned
Alicia	36	Monterrey, NL	No school	12	4	12 6 5 2	28	Housewife After marriage has worked some time as domestic servant (Currently not working)	

Couple	*Age*	*Place of Birth*	*School*	*Age Marr*	*Age Migr.*	*HH Members*	*Age Work*	*Current Occupation*	*Housing*
4 *Benjamín*	31	N. Rosita, Coah	BA incompl	26	9	*1 child* Ages	8	Skilled blue-collar	Owned
Verónica	34	Monclova, Coah	High sch com	30	--	3	15	Housewife No working experience after first child's birth	
5 *Horacio*	60	Coruña, Coah	Prim incompl	16	34	*3 children* Ages 42	8	Construction worker (Since 1974)	Owned
Dora	62	Torreón, Coah	Sec. compl	18	36	29 28 3 (grand-s)	16	Housewife (Before and after marr worked several years as secretary)	
6 *Gonzalo*	41	Cuatroc., Coah	Primary	18	18	*2 children* Ages 16 13	8	Bill collector (experience in similar activities since 1990)	Owned
Hilda	41	Cuatroc., Coah	Incomplete Secondary	18	17		14	Housewife She sells candies outside their house (after marr has also worked as domestic servant)	

Couple	*Age*	*Place of Birth*	*School*	*Age Marr*	*Age Migr.*	*HH Members*	*Age Work*	*Current Occupation*	*Housing*
7 *Ciro*	43	Abasolo, Coah.	Primary	17	6	*2 children* Ages 14	5	Transport micro-entrepeneur since 1993 (formerly skilled blue-collar)	Owned
Amalia	43	Abasolo, Coah.	Primary + some tech	17	11	4 5 m (grand-s)	15	Housewife No working experience after marr	
8 *Leopoldo*	50	Sierra M., Coah	Sec. compl	23	24	*4 children* Ages 24 18	8	Skilled blue-collar (Formerly construction worker)	Owned
María	43	Cuatroc., Coah	Primary	15	16	17 16	33	Domestic servant Housewife	
9 *Oscar*	53	Allende, N.L.	Secondary + Tech	20	21	*2 children* Ages 29 20	7	Propietor of a small grocery store since 1992 (Formerly skilled blu-collar)	Owned
Manuela	50	Allende, N.L.	Primary	17	19	8 (Grand-s) 5 (Grand-s) 3 (Grand-s)	42	Propietor of a small grocery store Housewife	
10 *Aurelio*	46	Monclova, Coah	Secondary + some tech	29	--	*2 children* Ages 15 14	16	Supervisor industrial activities (Since 1995; formerly skilled blue-collar worker)	Owned
Adriana	45	Monclova, Coah	Secondary + Tech	28	--		17	Housewife No working experience after marr	

Couple	*Age*	*Place of Birth*	*School*	*Age Marr*	*Age Migr.*	*HH Members*	*Age Work*	*Current Occupation*	*Housing*
11 *Antonio*	47	SanBuenav, Coah	Secondary + Tech	18	6	*2 children* Ages 24	11	Propietor of a small grocery store	Rented
Dolores	46	Saltillo, Coah	Primary	18	16	17 79 (m. in law)	16	Propietor of a small grocery store Housewife	
12 *Gabriel*	48	Monclova, Coah	Primary	24	--	*4 children* Ages 23 22	7	Skilled blue-collar	Owned
Gema	49	Sabinas, Coah.	Primary	25	9	17 14	16	Housewife No working experience after marr	
13 *Aníbal*	46	Ocampo, Coah	Primary + some tech	20	16	*2 children* Ages 20	14	Skilled blue-collar	Owned
Esther	40	Monclova, Coah	Primary	14	--	14	--	Housewife No working experience after marr	
14 *Felipe*	34	Monclova, Coah	Sec. compl	20	--	*4 children* Ages 15 12	15	Skilled blue-collar (experience in similar activities since 1986)	Owned
Liliana	35	Castaños, Coah	Primary	(1st) 18 (2nd) 21	--	10 7 months	12	Housewife No working experience after marr (Before marriage she worked in diverse activities: cleaning, sales clerk, etc.)	

Couple	*Age*	*Place of Birth*	*School*	*Age Marr*	*Age Migr.*	*HH Members*	*Age Work*	*Current Occupation*	*Housing*
15 *Adán*	27	Monclova, Coah	Sec. compl	25	--	*1 child* Ages	18	Skilled blue-collar	Owned
Blanca	23	Monclova, Coah	Sec + tech	20	--	2	17	Housewife No working experience after marr	
16 *Fernando*	39	Arteaga, Coah	Sec. compl	25	4	*2 children* Ages 13 1	8	Skilled blue-collar (experience in similar activities since 1987)	Owned
Sonia	33	San Pedro, Coah	Sec. compl	19	19		21	Secretary	
17 *Matías*	40	Papantla, Ver.	No school	15	22	*4 children* Ages 23 21 19	6	Messenger (in a drug store)	Owned
Ana	41	Papantla, Ver.	No school	16	23	17 34 (b. in law) 2 (grand-d) 8 month (grand-d) 25 (son in law)	24	Domestic servant Housewife	
18 *Valentín*	32	Monclova, Coah	Primary	17	--	*3 children* Ages 13	11	Mechanic	Owned
Lorena	32	Monterrey, NL	Sec. compl	17	8	10 5	--	Housewife No working experience after marr	

Couple	*Age*	*Place of Birth*	*School*	*Age Marr*	*Age Migr.*	*HH Members*	*Age Work*	*Current Occupation*	*Housing*
19 *Guillermo*	49	Monclova, Coah	Primary	(1st) 29 (2nd) 32	--	*2 children* Ages 17 12	7	Propietor of a small grocery store since 1990 (Formerly skilled blue-collar)	Owned
Rocío	52	Monclova, Coah	Primary + Tech	35	--		16	Propietor of a small grocery store Housewife (Before marr worked in a drycleaning service)	
20 *Mauricio*	52	Monclova, Coah	Incomplete Secondary	23	--	*4 children* Ages 28 25	12	Skilled blue-collar	Mortage
Susana	52	Monclova, Coah	Primary	23	--	22 21 1 (grand-d)	--	Housewife No working experience after marr	

AGUASCALIENTES

Couple	*Age*	*Place of Birth*	*School*	*Age Marr*	*Age Migr.*	*HH Members*	*Age Work*	*Current Occupation*	*Housing*
1 *Marcos*	35	Aguasc., Ags.	Sec compl	18	--	*3 children* Ages 16 13	16	Private security worker (Formerly driver in a factory)	Owned
Remedios	38	Aguasc., Ags.	Prim compl	21	--	8	20	Housewife Retailer: candies and some food outside their house	
2 *Benito*	38	Teopusco, Jal.	Primary	18	2	*2 children* Ages 14	12	Skilled blue-collar	Owned
Rosario	33	Aguasc., Ags.	Prim incompl	13	--	6	23	Domestic servant Housewife	
3 *Saúl*	45	Los Azulitos, Jal	Prim incompl	26	5	*4 children* Ages *16* *12*	8	Semi-skilled blue-collar (Formerly deliverer of bulk groceries)	Owned
Camila	36	Aguasc., Ags.	Prim incompl	15	--	*11* *3*	12	Cleaning (in an office) Housewife	Owned

Couple	*Age*	*Place of Birth*	*School*	*Age Marr*	*Age Migr.*	*HH Members*	*Age Work*	*Current Occupation*	*Housing*
4 *Jacinto*	34	Aguasc., Ags.	Primary	24	--	*4 children* Ages 9 7	12	Construction worker (Fromerly sales clerk: clothes)	Owned
Natividad	35	Aguasc., Ags.	Prim + some tech	25	--	6 1	19	Housewife (Formerly sales clerk in a furniture store. No working experience after marr)	
5 *Ernesto*	39	Betulia, Jalisco	Primary	25	7	*3 children* Ages 11	7	Taxi-driver (rented car) (Formerly bar tender)	Owned
Adela	36	Aguasc., Ags.	Primary	22	--	10 8	15	Seamstress (since 1998) (maquiladora, works at home) She is also a retailer (jewelry) Housewife	
6 *Edgar*	37	Loreto, Zac.	Primary	19	9	*6 children* Ages 15 10	5	Construction worker (Formerly worked in a brick factory)	Mortage
Lucía	37	Aguasc., Ags.	Prim incompl	19	--	9 8 2 1	12	Washwoman Housewife	

Couple	*Age*	*Place of Birth*	*School*	*Age Marr*	*Age Migr.*	*HH Members*	*Age Work*	*Current Occupation*	*Housing*
7 *Raúl*	39	Aguasc., Ags.	Prim + some tech	18	--	*3 children* Ages 17 14	7	Blacksmith (Formerly stayed a year in the USA working as a dishwasher)	Owned
Matilde	38	Aguasc., Ags.	Primary	17	--	10 70 (aunt in law)	20	Domestic servant Housewife	
8 *Jorge*	41	Pinos, Zac.	No school	16	15	*5 children* Ages 21 18 12	6	Construction worker	Mortage
Edith	39	Aguasc., Ags.	Sec compl	14	--	8 4 35 (b. in law) 7 m (grand-s)	16	Housewife (Has intermittently worked as ambulatory trader, birds) aves canoras de ornato	
9 *Octavio*	34	Lagos de M., Jal	Prim incompl	20	20	*4 children* Ages 12 10	6	Construction worker	Owned
Maricela	34	Aguasc., Ags.	Primary	20	--	9 6	11	Housewife No working experience after marr	

Couple	*Age*	*Place of Birth*	*School*	*Age Marr*	*Age Migr.*	*HH Members*	*Age Work*	*Current Occupation*	*Housing*
10 *Genaro*	44	El Llano, Ags.	No school	29	11	*3 children* Ages 15	6	Construction foreman	Owned
Josefa	39	Aguasc., Ags.	Prim incompl	24	--	11 6	10	Domestic servant Housewife	
11 *Eduardo*	33	Aguasc., Ags.	Prim & tech	21	--	*3 children* Ages 11 8	7	Supervisor (encargado) in a paint store (Fromerly skilled blue-collar)	Owned
Flor	31	Aguasc., Ags.	Secondary	19	--	3	15	Housewife (After marr has ocasionally worked as retailer, diverse items)	
12 *Daniel*	43	Aguasc., Ags.	Primary	21	--	*6 children* Ages 19 17	6	Construction worker Taxi-driver (when he can borrow the car)	Owned
Carmen	41	Guadalajara, Jal.	Incomplete Primary	19	1	16 14 10 4	7	Domestic servant Housewife (Since 1993 has intermittently worked in the same activities)	

Couple	*Age*	*Place of Birth*	*School*	*Age Marr*	*Age Migr.*	*HH Members*	*Age Work*	*Current Occupation*	*Housing*
13 *Abel*	32	Irapuato, Gto.	Secondary & Tech	22	16	*3 children* Ages 9	8	Skilled blue-collar (experience in similar activities since 1990)	Mortage
Clara	35	Tepezala, Ags.	Sec incompl	25	25	6 3	--	Housewife No working experience after marr	
14 *Víctor*	19	Aguasc., Ags.	Primary	18	--	*1 child* Age 5 months	14	Gas station attendant (Formerly worker in a maquiladora)	Borrowed
Lourdes	19	Aguasc., Ags.	Primary	18	--		14	Housewife (Formerly worker in a maquiladora)	
15 *Moisés*	35	F. Pesc., Zac.	High Sch. & Tech	21	2	*3 children* Ages 13 10	10	Skilled blue-collar (experience in similar activities since 1986)	Mortage
Genoveva	34	Aguasc., Ags.	Secondary & Tech	20	--	3	18	Housewife No working experience after marr	

Couple	*Age*	*Place of Birth*	*School*	*Age Marr*	*Age Migr.*	*HH Members*	*Age Work*	*Current Occupation*	*Housing*
16 *Emilio*	29	Aguasc., Ags.	Incomplete Primary	17	--	*2 children* Ages 11 6	7	Mecanico tractocamiones (experience in similar activities since 1990)	Borrowed
Ursula	28	Lerdo, Dgo.	Incomplete Primary	16	8		12	Housewife (After marr has intermittently worked in diverse activities: maquiladora, cleaning, etc)	
17 *Leonardo*	31	Luis Moya, Zac.	Incomplete College	27	22	*2 children* Ages 3 4 months	15	Electronics repairman (experience in similar activities since 1995)	Borrowed
Gloria	19	Aguasc., Ags.	Incomplete Primary	15	--		--	Housewife No working experience after marr	
18 *Ignacio*	30	Aguasc., Ags.	Sec + tech	24	--	*1 child* Ages 5	6	Skilled blue-collar (experience in similar activities since 1986)	Owned (have another piece of land)
Alejandra	28	Aguasc., Ags.	Sec + tech	22	--		18	Housewife	

Couple	*Age*	*Place of Birth*	*School*	*Age Marr*	*Age Migr.*	*HH Members*	*Age Work*	*Current Occupation*	*Housing*
19 *Joel*	35	Mexico City	Sec. compl	(1st) 17 (2nd) 30	30	*3 children* Ages 18 14	15	Skilled blue-collar (experience in similar activities since 1982)	Mortage
Rebeca	30	Mexico City	Sec. Compl	(1st) 20 (2nd) 26	26	4 20 (nephew)	18	Retailer: CDs and other items Housewife (After marr. has also worked as a semi-skilled blue collar)	
20 *Hugo*	31	Aguasc., Ags.	Sec incompl	18	--	*4 children* Ages 11 6	8	Sales clerk (tienda de colchas)	Mortage
Claudia	34	Aguasc., Ags.	Sec. compl	23	--	2 7 months	9	Seamstress (self-employed) Housewife	

Chapter 9: Conclusions

Neoclassical economic theory maintains that in a country with an abundant labor supply, the creation of industrial jobs through economic liberalization and export production would bring about a trend toward greater equality. The outcome in Mexico, however, has not corresponded to such predictions.

Starting hesitantly during the debt crisis years, and more clearly at the end of the 1980s, Mexico's industrial structure experienced a turning point: the adoption of an open market model, which has had several implications. Outwards, it has meant increasing integration into the global economy, since between 1993 and 2000 the share of GNP accounted for by goods and services traded abroad increased from 17.2% to 36.2%. In practical terms, it means that the Mexican economy is increasingly dependent upon international economic fluctuations, principally with respect the American market.

Internally, after 20 years of tentative reform, some changes have been institutionalized. The shift toward export production has changed the industrial map and has repositioned the role of social actors. Those entrepreneurs who have not been able to adapt to the requirements of the open market have been left behind. As for unionized workers, the tradition of state control of unions has facilitated the discretionary application of labor law and the introduction of flexible forms of labor utilization, which has been characterized as "corporatist flexibility" (Bensusán 1999). Though the welfare system in Mexico since the ISI

period was highly segmented and associated with formal employment, the last two decades have marked the transition from selective inclusion to greater social polarization. At the same time, relatively ubiquitous state intervention resulted in the design and implementation of narrowly targeted compensatory public policies.

As for the new economic geography, the territorial reconfiguration draws a new mosaic that includes surging new industrial centers, adaptation of existing centers to the demands of the global economy, and, in contrast, the fading of former boom centers. For this study, I selected three cities that illustrate each of those circumstances: Aguascalientes, Mexico City, and Monclova. The three cities have different population sizes and are of disparate political importance at the regional or national level. However, the three cities have all been the scenario of drastic changes due to implementation of the two successive industrialization models in Mexico since the 1940s.

Mainly due to its historical predominance in the Mexican urban system, Mexico City has been able to adapt to the transformation from the ISI model to an export-oriented economy. Although it has lost relative importance in the GNP, it is, by far, the most important economic center in the country. Another factor that makes Mexico City an important case is that given the concentration of population (about a fifth of the total inhabitants of the country), their level of well being influences the national trends of urban population, as shown, for instance, by similarities between trends of poverty in Mexico City and in a group of 35 cities during the 1990s (Chapter 4). Monclova and Aguascalientes are two prototypical cases of industrialization in Mexico. The former flourished during

the decades of the ISI model, is highly dependent upon the steel industry —a former pillar of industrialization in Mexico— but has not succeeded in finding its place in the global economy. Aguascalientes, on the other hand, is characterized by its "exceptionality" because it started booming when the rest of the country was in the middle of the debt crisis during the 1980s. In addition, the city has been very successful in attracting capital from outside the area during the two decades of the export-oriented economy. Each of these three cities would be an interesting case study by itself.

Two questions that arise at this point are: in what ways do the changes in both the labor market and government social policy influence social vulnerability in Mexico? What is the spatial differentiation of social vulnerability given the reconfiguration of Mexico's economic geography?

9.1 URBAN POVERTY IN THE TIME OF ECONOMIC RESTRUCTURING

This study has outlined an empirical approximation to poverty in urban Mexico using an approach that attempts to identify the resources that households have and use to confront economically critical situations. Mobilizing these different resources and converting them to assets reduces vulnerability to poverty.

I proposed the construction of a poverty line that was then compared to household income—the principal source of which is labor—to assess the trends of poverty and associated factors in urban Mexico. Since employment is the main source of revenue for most Mexican households, the economy of the domestic unit is highly sensitive to the performance of the labor market. There are two

findings worth highlighting with respect trends in poverty: on the one hand, one of the Mexican labor market's paradoxes is that the economy is relatively dynamic (compared to other countries in the region) but long-term poverty levels remain high. On the other hand, the mid-1990s peso crisis impacted practically all of the country and considerably increased levels of urban poverty. At the end of the decade, the average proportion of households living below the poverty threshold in 35 urban areas was 45%, which was slightly higher than that registered before the crisis (Chapter 3). This means that the jobs that are currently being generated are poorly remunerated and, therefore, do not manage to satisfy the material needs of about half of the urban population in Mexico.

The factors that create vulnerability to poverty have been approached from both quantitative and qualitative perspectives, taking the household as the unit of analysis. These perspectives enabled us to observe the same phenomenon from different dimensions. Both types of information demonstrate that not all household assets are equally important; rather participation in the workforce and education are the *core resources* that domestic units have to "defend themselves" against the risk of poverty.

Associating work and education with household well-being is not a particularly innovative research result. However, other questions surge forth: *how* do those households at risk of living in poverty deploy work and education? Is there any difference in the importance of these, and other, resources across time or between the cities under study? Are resources equally available to and capable

of mobilization by poor and non-poor households? How do more vulnerable households cope with economic difficulties on a daily basis?

The availability of resources is not uniform between poor and non-poor households. Poor households are more vulnerable to the market's ups and downs because they have fewer resources allocated to the labor market than do the non-poor and, therefore, their sources of income are less diverse. For this reason, economic instability may have a greater impact on poor households. Education, a characteristic intrinsic to individuals, is mobilized simultaneously with workforce participation; members of poor households generally have lower education levels. Throughout the decade of the nineties, those occupying higher positions in the labor structure were the ones who resisted job instability; thus, it is not surprising that more importantly than the rate of economic participation, the difference between poor and non-poor households rests upon the ability of people to avoid sharp fluctuations in earnings and to keep their jobs.

My analysis suggests a process of cumulative disadvantages that create vulnerability to poverty. Currently, the market allows families to convert the following resources into assets: higher education, employment in cutting edge economic sectors, and a relatively advanced phase in the family cycle—where the average age of the head of the family is from 41 to 60 years old—such that the family has several wage earners and has accumulated various material and non-material goods. Someone with those attributes has what Moser (1998) would call "the right mix", but how many individuals in Mexico are that fortunate? Or

rather, how many individuals and their families are excluded from the benefits of market because they do not hold those characteristics?

Household economic hardship can be caused by three main sets of factors: the economic dependency ratio within the household; external aspects, mainly changes in the macroeconomic arena; or the intermeshing of both. This was clear during the mid-decade crisis. Qualitative data illustrated the impact of each set of factors. The combination of external pressures with internal scarcity of resources was the most prevalent case among my interviewees. Some of the repercussions for households include more intensive use of resources, even if that means jeopardizing a more rewarding future utilization of them—e.g., putting children to work instead of keeping them in school.

Couples' narratives with respect the impact of the crisis on the household economy confirmed some of the findings from the quantitative longitudinal analysis. They showed that the position of households relative to the poverty line was an important reference in the assessment of household "resistance" to crisis: there was a general decline of household income, but those at the bottom (whose income gap with respect to the poverty line was larger) suffered a steeper decline. This means that while vulnerable households have a precarious "equilibrium" during relatively stable times, they have no means to resist shrinking incomes during crises. Recovery from those disruptive times is, as expected, slow and halting.

Based on qualitative information, I found that the ideology of traditional gender roles prevails among working-class households, permeating the criteria for

utilizing household resources. The most important aspect is that women's participation is subordinated to her husband's earnings and opinions, as well as to her household responsibilities. The narratives reveal gendered interpretations of household economic difficulties. The low earnings of most of working-class heads of households challenge the fulfillment of the traditional gender roles of breadwinner and housekeeper. I also found that the intensity of poverty is associated with security of control over household resources. This means that poverty is not uniform among working-class households and it depends on the availability of resources and the way that they have been utilized. Strategies or mechanisms for mobilizing resources are not arbitrary; however, they can imply some tradeoffs.

Turning to the importance of location, the household surveys showed that at the beginning of the 1990s, there was a differential risk of living in poverty due to place of residence. On the one hand, Monclova was experiencing a deep recession derived from AHMSA's readjustment; on the other, Aguascalientes's still expansive industrialization extended a "protective" shield over its inhabitants. There is, however, a convergence during the mid-decade crisis, and towards the end of the 1990s, Mexico City inhabitants were the most vulnerable. I suggest that one of the medium- and long-term consequences of economic globalization is a convergence towards more polarized social structures, irrespective of where one lives. In this context, the higher prevalence of poverty in Mexico City is likely to be due to its different industrial structure, meaning that better conditions would be expected in manufacturing-specialized cities—such as Monclova and

Aguascalientes--than in more diversified areas in which the tertiary sector is predominant, such as Mexico City.

Ethnographic information amplifies this point: for poorer households, the opportunities for allocating their resources are similarly restricted, regardless of where they are. Although the industrial structure might be more diverse and well positioned in the global economy—as in Aguascalientes—the market imposes minimum requirements on those who aspire to participate in the labor force. Both in Aguascalientes and Monclova, credentials, contacts, and youth are rewarded. However, Monclova is a case in which the industrial pillar has been dismantled and the region as a whole does not offer solid alternatives for employment. In contrast, Aguascalientes is a city where the economy is export-oriented and considerably more dynamic. This contrast could make a difference over the long run in families' abilities to deploy their resources and avoid poverty. However, up to now, in both cities poorer households face increasing and continuing economic disadvantages.

An important factor brought out by the fieldwork is the role of the state. The failure of the state to provide welfare leaves households on their own, more directly exposed to market forces. Only those heads involved in formal activities are covered by the social security system, which implies that those involved in informal occupations—and their families—do not have the right to medical care and, eventually, a pension after the worker is no longer productive (because of age, illness, or death). The state is also absent in the provision of child-care services, which is one of the main obstacles for women in securing stable, full-

time employment. Households are not protected from economic difficulties in ordinary times, but the circumstances are more challenging for them when they have to react to shocks that put their livelihood in danger. The way they respond to external challenges is to improvise and get along as best as possible. As one of my interviewees stated: "[to cope with economic difficulties] …we'll see what we can do" (*ahí vemos que hacemos*).

9.2 POLICY IMPLICATIONS

The ultimate objective of this research has been to offer information that can be helpful in defining policies that support households likely to experience difficulties as a result of economic fluctuations and adversity similar to those narrated by my interviewees.

The design of public policies to overcome poverty initially depends on the character of the state and the balance of social forces. The policy implications that I am going to delineate are based on the premise that the state, in principal, is obliged to guarantee the security of its constituents by transferring resources to eliminate the social inequality generated by the market. The goal that should guide public policy design regarding poverty is what Sen (1983) calls the absolute dimension of poverty, that is, the fulfillment of people's capabilities. Thus, the issue is not offering governmental charity, but cultivating the human potential of citizens.

The main form in which the Mexican state should intervene is in defining and implementing public policies that take into account the different needs, and

the potential resources, of families at risk of poverty. There are, then, two areas in which governmental action is necessary: the labor market and the provision of social benefits.

Regarding the labor market, the government must devise a medium- and long-term industrial policy that ensures that producers for the domestic market enjoy the same benefits as those that accrue to export businesses. Also, productivity should be increased through job training programs, as well as development of and adaptation to new technology, rather than by relying on low wages to ensure competitiveness. The state must search for mechanisms that guaranty workers stable employment and a recovery of real wages. In its role of promoting investment in productive activity, the government should impose worker-oriented requirements on businesses.

As for social policy, social goods such as education, health, and social security must be universally available. Living conditions for working families will not recover through government handouts; rather, citizens must be guaranteed basic levels of health and access to middle and higher education, which require much greater investment in the public sphere. To the extent that social welfare continues to depend on the market, more individuals will be deprived. Mercantile criteria for providing these benefits must be replaced by universalistic ambitions that would include all citizens.

9.3 SUGGESTED PATHS FOR FUTURE RESEARCH

The research agenda that derives from this study comprises three broad topics. The first is the reconfiguration of urban labor markets in different regions in Mexico. In order to characterize the cities, it will be necessary to assess changes in their productive structures (e.g. relocation of industries and industrial specialization) as well as their performance in the international economy. A contextual analysis would be helpful to elucidate whether city matters in determining the vulnerability to poverty.

The second topic is the relationship between labor markets and urban poverty, mainly the centrality of the labor market in the simultaneous mobilization of two "core resources": workforce participation and human capital. Also, a more thorough examination is needed on the longitudinal patterns of household poverty; in particular, an analysis of time-discrete transitions between poor and non-poor status would illustrate the absolute volume of households vulnerable to poverty and the patterns of such transitions.

And third, life trajectories, family formation, and household poverty should be investigated. The approach of how complete (two heads) or single-head households handle resources in the face of economic adversity, as well as households headed by persons from different cohorts or involved in different occupations, would shed light on how households deploy different mechanisms to adapt to external pressures. Studying the effect of economic hardship on each member's life trajectory would help understand future configurations of household resources utilization.

Appendices

A.1 Quantitative Analysis

A.1.1 Some Estimates of Poverty in Mexico

At the beginning of the 1980's, the Mexican governmental agency Coplamar[121] established the Standard Basket of Essential Goods (Canasta Normativa de Satisfactores Esenciales - CSNE), which includes categories such as aliments, housing, basic health care, culture and recreation, transport and communications, clothing, and footwear. Based on the CSNE, Coplamar defined the elemental necessities—including food, housing, minor health care expenses, and minimum educational materials—that constitute the so-called Sub-Minimum Basket (Canasta Subminima - CSM). Some estimates (Hernández Laos 1992, 2000) use the CNSE to identify families in poverty as those whose income falls below the basket's cost. Consequently, those whose income is less than the cost of the CSM find themselves in extreme poverty.

The basket of basic consumption articles and, thus, the poverty and extreme poverty lines evolve according to patterns of consumption. Some studies (INEGI-ECLAC 1993; Hernández Laos 1992 and 2000) have updated the PL and EPL.[122] Hernández Laos estimated that, at 1996 prices, the PL in Mexico was $7.30 dollars per day per person, or 65% of the official PL in the United States

[121] General Office of the National Plan for Poor Zones and Marginal Groups.

[122] Given underreporting of income in household surveys, Hernández Laos (1992 and 2000), as well as INEGI-ECLAC (1993), adjust household income according to the corresponding percentages in the National Accounting System.

and more than three times the figure of $2 calculated by the World Bank for poor countries (2000: 98).

The following table illustrates the differences between existing estimates of poverty in Mexico.

Table A.1.2.1 Magnitude of Poverty in Mexico According to Different Sources

Source	Hernández Laos		INEGI-CEPAL		Boltvinik	Levy	Alarcón
Year	Poor Population (Thou.)	%	Poor Population (Thou.)	%	%	%	%
1963	29,835.4	77.5					
1968	32,827.7	72.6					
1977	36,740.8	58.0					
1984	44,559.4	58.5	30,400	43.5	69.8		
1989	47,781.3	59.0	37,800	47.7	73.8	81.2	
1992	61,720.0	73.4	37,200	44.0	75.1		79.3
1994	65,792.6	73.7					
1996	73,615.6	79.5					

NOTE: Poor population (both absolute and percentage) includes poverty and extreme poverty

Sources: Hernández Laos (2000: 115, Table 6)

In all cases, the authors measure poverty based on the ENIGH for the years indicated. The figures given represent the poor population in rural and urban zones. The most complete series found is that of Hernández Laos (2000). Boltvinik (1998) measures poverty using the MMIP, while the other authors use the PL method. The INEGI-ECLAC (1993) study yielded the most conservative calculations. The study differs from the others not only concerning the magnitude of poverty in Mexico, but also regarding the tendency: it is the only study which

sustains that poverty diminished—in both relative and absolute terms—in the beginning of the 1990's.[123] Notwithstanding the diversity of the estimates, and excepting the official figures, a consensus exists among the studies that a large proportion of the Mexican population lives in poverty. Unfortunately, not all the sources provide an absolute number of poor people in the country. Nonetheless, judging from Hernández Laos's (2000) calculations, not only the percentage but also, given population growth, the absolute number of individuals experiencing economic deprivation multiplied during the 1990's. In his estimation, more than three-fourths of the Mexican population were poor both in the 1960's and in the mid-1990's, but these percentages represented 29.8 and 73.6 million people, respectively.

Poverty is more intense in rural areas, but due to the concentrations of people in cities, the incidence—that is, the volume—of poverty is greater in the urban areas. Although calculations vary here as well, the figures cited by academics tend to agree upon the national distribution of poverty. Between 41% and 48% of the poor are located in rural areas, with the remaining 52% to 59% in the urban ambit. In other respects, though, calculations of poverty are quite disparate, depending on the source consulted. According to Hernández Laos, urban poor totalled 49.6% of the population in 1984. The World Bank put the urban poverty rate at 14.1% in 1989, but Alarcón's estimate for the same year was 70.7%. In 1992, the INEGI-ECLAC figure was 36.7%, whereas for Boltnivik, also in 1992, the urban poor population in Mexico was 66% (1999: 92, Table 2.2).

[123] For a detailed and ferocious critique of the INEGI-ECLAC (1993) procedures and conclusions, see Boltvinik (1999: 90-118).

Among the main limitations of the National Household Income and Expenditures Survey (ENIGH) is lack of comparability of data across the series, which the INEGI began in 1984, due to changes in sample design. Furthermore, the information can be broken down geographically into only totals for rural and urban areas in the country. Finally, those located at the extremes of the income distribution are not captured in the survey (Cortés 2000).

A.2 QUALITATIVE ANALYSIS: INSTRUMENTS

A.2.1 Consent Form

University of Texas at Austin

"Cuando yo me reajusté …": Vulnerability to Poverty in a Context of Regional Economic Restructuring in Urban Mexico. Three Case Studies.

CONSENT FORM

My name is _____ and I'm participating in a study coordinated by the University of Texas in Austin on employment and poverty in some urban areas of Mexico. The central purpose of this study is to learn about the economic conditions of families in which the head of the household is an industrial worker, construction worker, or personal service worker. We want to find out what resources and mechanisms these families use to confront their economic problems in times of crisis.

If you agree to participate in the study, the information you provide will be strictly confidential, used only for research purposes. Neither your name nor your address will appear in the study; thus, you and your family cannot be identified from the information you give me.

I would like to interview you and your husband/wife because the study asks for the opinions of both of the couple. The questions I'm going to ask you are the same that I'll ask your husband/wife, but since both of your opinions might be different, the interviews should be separate so that one's answers don't influence the other's and to guaranty strict confidentiality.

The interview consists of two parts. The first is a questionnaire with specific questions about the members of your family and the characteristics of your house. The second part is a series of open questions about your family and work history. If it's all right with you, I would like to tape the second part of the interview. Our hope is that this study helps identify the mechanisms lower income families use to confront their economic difficulties and, ultimately, to improve public policy.

Thank you.

Date _____ Time _____
Mr./Mrs. : _____
Name of wife/husband _____
Address _____

A.2.2 Housing Characteristics

To begin with, I'm going to ask you about some characteristics of your house.

1. What material are most of your house's walls made of?
1. Cardboard 2. Bamboo or palm leaves 3. Wood 4. Asbestos or metal siding
5. Adobe

2. What material is most of your house's roof made of?
1. Cardboard 2. Palm or wood 3. Asbestos or metal sheet 4. Tiles
5. Concrete slab or brick 6. Other materials

3. What material is most of your house's floor made of?
1. Dirt 2. Cement 3. Wood, tile or other covering

4a. How many rooms are used for sleeping?
4b. How many rooms does your house have altogether, not counting halls or bathrooms?

5a. Does your house have a room for cooking?
5b. Do people sleep in the room where you cook?

6a. Does your house have a toilet?
6b. Does the toilet have running water?

7a. Does your house have running water?
7b. Does your house have drainage?

8. Do you:
1. Own the house? 2. Rent the house? 3. Other

9. How many people normally live in this house, counting young children and the elderly?

A.2.3 Household Structure

Now I'm going to ask some questions about ALL the people living in this house, starting .
with the head of the family, his/her spouse, his/her children (from oldest to youngest) and other relatives.

Name	Sex	Age	Marital Status	Relationship to the head of family	How many years of school did you complete? Grade	Level	Where were you born? Mun./State	Occupation
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
13.								

Sex	**Marital Status**	**Relationship**	**Education**
1. Male	(> 15 years)	1. Head	0. None
2. Female	1. Single	2. Spouse	1. Elementary
	2. Married or Common Law	3. Son/Daughter	2. Jr. High School
	3. Divorced or Separated	4. Parents/Parents-in-Law	3. High School
	4. Widowed	5. Brother/Sister	4. Technical Degree
		6. Other Relative	5. Bachelor's Degree
		7. No Relationship	6. Graduate

A.2.4 Interview Guide

We're here with Mr./Mrs. _____. The date is _____ and the time is _____.
The name of his wife/husband is _____.

a) Family History

Mr. _____, where were you born? What is your birthday?

I would like for you to tell me your family's history year by year—about your family before you got married, how many brothers and sisters you had, where your parents were from, what they did, and so on.

Have you only married one time?

If more than once:
When was the first time you got married?
Did you have children? How many? When were they born?
Why did you separate?

Regarding your present spouse:
When or at what age did you marry Mrs. _____?
What's your family life been like after you got married?
How many children do you have?
How old are your children?
What problems have you had raising your children?

b) Educational History

Did you attend school?
What was the highest grade you completed?
Could you tell me how many years you studied at each school level and what your experience was like in school? Did you like it? Would you like to have continued studying? Did your family support you?
Has having studied until (*level of education*) affected you when you've looked for work?
Do you think the kind of work you've had has been appropriate for your level of education and training?

c) Work History

Could you tell me at what age you began working, please?

Could you tell me how many times you've changed jobs since then, and what type of jobs you've had (types of trades or job titles where you've worked)?
How many employees were there at the businesses where you worked?
In each of the businesses, you were:
a) boss b) contract worker c) fixed wage worker, salaried or daily wage d) coop/communal land worker e) paid by piece, percentage or commission f) unpaid worker.

What type of benefits have you had at your jobs?
a) Christmas bonus b) paid vacations c) profit sharing d) Social Security (IMSS) e) public health care (ISSSTE) f) retirement savings (SAR) g) housing credit h) private medical care/health insurance i) other
Has your income been sufficient to meet your family's needs?
Do you remember receiving job training to perform your tasks?
Have you ever been unionized?
Do you remember how you got your jobs (did an acquaintance or family member help you?)
Do you feel that the experience you acquired at a job helped you in another job (did you use your previous experience in a subsequent job) or was it beneficial in getting a new job?

Check dates, repeat them to interview subject to confirm.

Dates	Occupation	Job Position	Company Department	Size of the Business
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				

What do you do now?

Dates	Occupation	Job Position	Company Department	Size of the Business

How long have you worked at your present job?
How much do you earn per month?
Is your income sufficient to meet your family's needs?

If salaried employee:
What type of contract do you have at work? (Written or oral?) (Permanent or temporary? (*If temporary*, for how long?)
What type of benefits do you have (Christmas bonus, paid vacation, social security, retirement pension, other)?
How many hours a week do you work?
Have you received job training in your present employment?
Are you a union member?
Would you prefer to be self-employed?

If self-employed:
How many hours a week do you work?
Would you prefer to be a salaried employee?

Does your wife work?

If yes:
Do you feel that the money your wife earns is important for your household?
Or is it a complement to help you support the family?

If no:
Does your wife not work because she can't find a job or because she doesn't need to?

d) Migratory History
You were saying that you were born in (*municipality and state*) and you now live in (*municipality and state*).

If the same place:
Have you lived all your life in (*municipality and state*)
Have you ever thought about moving somewhere else to find a better job or for better living conditions in general? Where?

If he has migrated:
Could you tell me how many times you've moved (somewhere else) since you were born?
Where did you move to?

Why?
How long did you live in each place?
Why?
What did you do for work in the places you've lived?
Do you feel that having migrated has been beneficial in improving living conditions for your family?
Do you plan on staying here in (*municipality and state*)?

e) The Household (Material resources, employment, and poverty):
Housing:
Do you own the house where you're living?

If yes:
When did you buy it?
If you had to pay rent, how would that affect your family economy?

If no:
Do you pay rent or live with a family member?
Are you thinking about buying a house?
When do you think you might be able to buy one?
If you didn't pay rent, or don't live with family members, how might that benefit your family economy?

All:
Do you own a piece or plot of land?
Do you have other property? (house, business, animals, etc.)
Do you having savings in the bank?
Does any family member live in the United States and send you money?
What is the source of your family income?
What's the main source (job, rent, pension)?

Workforce:
How many family members work?
Who? (Check age and sex of each in the list of household members)
Since when have they worked?
What do they do?
How much does each one contribute to the family income?

Health:
What are the main health problems of your family members?
Where do they go for medical care?

How do these health problems affect your household economy?

Times of Crisis (economic and/or family):
Using the narrative, refer to difficult years for the family.
Economically, when has your family gone through difficult times?
How did your family life change? How was it before? How was it after?
What did you and/or your wife do to confront these difficulties?
Did your household organization change in some way—for example, household chores—due to these economic difficulties?
Did a family member or friend help you?
Did a family member began to work during the years of crisis to "help the family out"?
If so, did one of your children or your wife begin to work first?
Did one of your household members stop studying in those times of crisis?
Was it the same child who began to work?

If married more than once:
Do your economic responsibilities to your other family affect your present household economy in some way?

If wife married more than once:
Does the fact that your wife had formed another household previously affect your present household economy in some way (especially if she has other children)?

Bibliography

Aguayo, Francisco and Carlos Salas 2002. "Reestructuración regional y dinámica del empleo en México, 1980-1998" *Region y Sociedad. Revista de El Colegio de Sonora*, No. 25, Forthcoming

Aguilar, Adrian Guillermo and Boris Graizbord 1995. "La restructuración regional en México: cambios de la actividad económica urbana, 1980-1988" *Comercio Exterior*, Vol. 45 (2): 140-151

Aguilar, Adrian Guillermo, Boris Graizbord, and Alvaro Sanchez 1996. *Las ciudades intermedias y el desarrollo regional en México*, México: CNCA-UNAM-El Colegio de México

Alarcón, Diana 1994. *Changes in the Distribution of Income in Mexico and Trade Liberalization*, México: El Colegio de la Frontera Norte.

Alarcón, Diana and Terry McKinley 1998. "Mercados de trabajo y desigualdad del ingreso en México. Dos décadas de restructuración económica", *Papeles de Población*, Año 4, (18): 49-79.

Alba, Francisco 1999. "La cuestión regional y la integración internacional de México: una introducción", *Estudios Sociológicos*, Vol. XVII, Núm. 51, Septiembre-Diciembre, pp. 611-631

Alba, Francisco 2001. "Oportunidades y retos demográficos, económicos y políticos a principios del siglo XXI" *Papeles de Población*, Vol. 7 (29): 9-20

Albelda, Randy and Chris Tilly 1997. *Glass Ceilings and Bottomless Pits. Women's Work. Women's Poverty*. Boston: South End Press.

Alegría, et al., 1997. "Reestructuración productiva y cambio territorial: un segundo eje de industrialización en el norte de Mexico" *Revista de la CEPAL*, No. 61, Abril, pp. 187-204

Arguello, Omar 1981. "Estrategias de supervivencia: un concepto en busca de su contenido" *Demografía y Economia*, Vol. XV (2): 190-203

Bane, Mary J. and David T. Ellwood 1986. "Slipping into and out of poverty: the dynamics of spells" *The Journal of Human Resources*, Vol. XXI, (1): 1-23

Bassols Ricardez, Mario 1997. *Politica urbana en Aguascalientes. Actores sociales y territorio (1968-1995)*, México: Universidad Autonoma Metropolitana-Instituto Cultural de Aguascalientes

Becker, Gary S. 1963. *Human capital: a theoretical and empirical análisis, with a special reference to education.* New York: Columbia University Press.

Benería, Lourdes 1979. "Reproduction, production and the sexual division of labour" *Cambridge Journal of Economics*, Vol. 3:203-225

Benería, Lourdes 1992. "The Mexican Debt Crisis: Restructuring the Economy and the Household" in Lourdes Benería y Shelley Feldman (eds.), *Unequal Burden: Economic Crises, Persistent Poverty, and Women's Work*, Oxford: West View Press: 83-104.

Benería, Lourdes and Martha Roldán 1987. *The Crossroads of Class and Gender: Industrial Homework, Subcontracting and Household Dynamics in Mexico City*, Chicago: University of Chicago Press.

Bensusán, Graciela 1999. *El modelo de regulación laboral mexicano*, Mexico City: Plaza y Valdés-Fundación Friedrich Ebert.

Blaikie, Piers et al. 1994. *At risk: natural hazards, people's vulnerability, and disasters.* London: Routledge.

Boltvinik, Julio 1992. "El método de medición integrada de la pobreza. Una propuesta para su desarrollo" *Comercio Exterior*, Vol. 42 (4): 354-365.

Boltvinik, Julio 1994. "La satisfacción de las necesidades esenciales en México en los setenta y ochenta" en Moncayo, Pablo P. y José Woldenberg (eds.), *Desarrollo, desigualdad y medio ambiente*, México: Cal y Arena, pp. 99-177.

Boltvinik, Julio 1996. "Familia y pobreza" en Fuentes, Mario Luis, et al., *La familia: Investigación y política pública*, México: Unicef – DIF - El Colegio de México, pp.77-81.

Boltvinik, Julio 1999. "Introducción", Chapters 2, 5, and 6 in Boltvinik, Julio and Enrique Hernández Laos, *Pobreza y distribución del ingreso en México*, Mexico: Siglo XXI Editores.

Boltvinik, Julio y Enrique Hernández Laos 1999. *Pobreza y distribución del ingreso en México*, Mexico: Siglo XXI Editores.

Bortz, Jeffrey 1990. "Política salarial en México: evolución de los salarios mínimos desde la posguerra hasta la crisis económica actual" en Wilkie, James W. y Jesús Reyes Heroles G.G., *Industria y trabajo en México*, México: Universidad Autónoma Metropolitana, pp. 315-332.

Bracho, Teresa 2000. "Poverty and education in México, 1984-1996". In Reimers, Fernando, ed. *Unequal schools, unequal chances: the challenges to equal opportunities in the Americas,* Cambridge: Harvard University Press.

Canudas, Rocío C. 2001. "La re-emergencia del capital humano en el marco de los paradigmas" *Investigación Económica*. Vol.61(235):13-44.

Cárdenas, Fe Esperanza and Vincent Redonnet 1990. "El Impacto de la crisis sobre la población de Monclova, Coahuila" *Estudios Demograficos y Urbanos*, Vol. 5 (2): 321-340

Casique, Irene 2001. *Power, autonomy and division of labor in Mexican dual-earner families.* Lanham: University Press of America.

CEPAL 2001. *Notas de la CEPAL*, Marzo.

Cerrutti, Marcela Sandra 1997. *Coping with Opposing Pressures: A Comparative Analysis of Women's Intermittent Participation in the Labor Force in Buenos Aires and Mexico City*, Ph.D. Dissertation, The University of Texas at Austin, 1997.

Chávez Quezada, Servando 1994. "Notas sobre la historia de AHMSA, 1941-1992" in Rueda Peiro, Isabel (ed.), *Tras las huellas de la privatización. El caso de Altos Hornos de México*, México: Siglo XXI editores, pp. 60-102.

Clark, Robert L. and Joseph J. Spengler 1980. "Dependency ratios: their use in economic analysis". *Research in Population Economics*. Vol.2:63-76.

Conger, Rand D. et al. 1992. "A family process model of economic hardship and adjustment of early adolescent boys" *Child Development.* Vol. 63:5626-541.

Corbett, Jane 1988. "Famine and Household Coping Strategies" *World Development*, Vol. 16 (9): 1099-1112

Cortés, Fernando 1990. “De marginal a informal: El desarrollo de la discusión en América Latina” in Cortés, Fernando y Oscar Cuéllar (eds.), *Crisis y reproducción social*. *Los comerciantes del sector informal*, Mexico: FLACSO-Miguel Angel Porrúa, pp. 125-164.

Cortés, Fernando 2000. *Procesos sociales y desigualdad económica en México*, México: Sglo XXI Editores.

Cortés, Fernando and Rosa María Rubalcava 1991. *Autoexplotación forzada y equidad por empobrecimiento. La distribución del ingreso familiar en México*, Mexico: El Colegio de México.

Dávila Flores, Mario 1994. *La economía de Coahuila en el año 2000*, México: Universidad Autónoma de Coahuila

De la Garza, Enrique 1998. *Modelos de industrialización en México*, México: Universidad Autónoma Metropolitana.

Duch Gary, Nestor 1998. *Competitividad y mercados laborales en Aguascalientes. Cuatro ensayos sobre los dilemas de la modernización económica*, Aguascalientes: Centro de Investigaciones y Estudios Multidisciplinarios de Aguascalientes.

Dussel Peters, Enrique 1995. “El cambio estructural del sector manufacturero mexicano, 1988-1994”, Comercio Exterior, Vol. 45 (6): 460-469.

Elder, Glen H. Jr. 1974. *Children of the Great Depression: Social Change in Life Experience.* Chicago: University of Chicago Press.

Elder, Glen H. Jr. 1994. “Time, human agency, and social change: perspectives on the life course”. *Social Psychology Quarterly*. Vol. 57(1):4-15

Elder, Glen H. Jr., et al. 1992. “Families under Economic Pressure” *Journal of Family Issues*, Vol. 13, (1): 5-37

Erikson, Robert and John H. Goldthorpe 1993. *The Constant Flux. A Study of Class Mobility in Industrial Societies*, New York: Oxford University Press

Escobar, Agustín 1996. “Mexico: Poverty as Politics and Academic Disciplines” en Øyen, Else y S. M. Miller (eds.), *Poverty: A Global Review. Handbook on International Poverty Research*, Oslo: Scandinavian University Press, pp. 539-586.

Filgueira, Carlos H. 1998. "Welfare and Citzenship. Old and New Vulnerabilities" en Tokman, Víctor E. y Guillermo O'Donell (eds.), *Poverty and Inequality in Latin America*, Indiana: University of Notre Dame Press, pp. 119-139

García, Brígida, Humberto Muñoz, and Orlandina de Oliveira 1982. *Hogares y trabajadores en la Ciudad de México*, México: El Colegio de México

García, Brígida y Orlandina de Oliveira 1994. *Trabajo y vida familiar en México*, México: El Colegio de México

García, Brígida y Orlandina de Oliveira 2000. "El mercado de trabajo, 1930-1998" en Garza, Gustavo (coord.), *La Ciudad de México en el fin del segundo milenio*, México: Gobierno del Distrito Federal - El Colegio de México, pp. 279-286.

Garza, Gustavo, 1990. "El carácter metropolitano de la urbanización en México, 1900-1988" *Estudios Demográficos y Urbanos*, Vol. 5 (1): 37-59.

Garza, Gustavo, 1991. "Dinámica industrial de la Ciudad de México, 1940-1980" *Estudios Demográficos y Urbanos*, Vol. 6 (1): 209-214

Garza, Gustavo 1992. *Desconcentración, tecnología y localización industrial en México. Los parques y ciudades industriales, 1953-1988*, México: El Colegio de México.

Garza, Gustavo (ed.) 2000, *La Ciudad de México en el fin del segundo milenio*, México: Gobierno del Distrito Federal - El Colegio de México

Giddens, Anthony 1984. *The Constitution of Society. Outline of the Theory of Structuration*, California: University of California Press.

González de la Rocha, Mercedes 1986. "Lo público y lo privado: el grupo doméstico frente al mercado de trabajo urbano". In Peña, Guillermo de la and Agustín Escobar, comps. *Cambio Regional, Mercado de trabajo y Vida Obrera en Jalisco*. Guadalajara: El Colegio de Jalisco.

González de la Rocha, Mercedes 1994. *The Resources of Poverty. Women and Survival in a Mexican City*, Great Britain: Blackwell

González de la Rocha, Mercedes 2000. *Private Adjustments: Household Responses to the Erosion of Work*, New York: UNDP

Graizbord, Boris and Crescencio Ruiz 1999. "Restructuracion regional-sectorial en Mexico, 1980-1993: una evaluacion" *Comercio Exterior*, Vol. 49 (4): 321-330

Griffin, Keith and Azizur Rahman Khan 1978. "Poverty in the Third World: Ugly Facts and Fancy Models" *World Development*, Vol. 6 (3): 295-304

Gutiérrez Espeleta, Edgar E. 1995. *Métodos estadísticos para las ciencias biológicas.* Heredia: Editorial de la Universidad Nacional.

Haraven, Tamara K. 1990. "A complex relationship: family strategies and the processes of economic and social change", in Friedland, Roger and A. F. Robertson, eds. *Beyond the marketplace: rethinking economy and society,* New York: Aldine de Gruyter.

Haraven, Tamara K. [1982] (1993). *Family Time and Industrial Time. The Relationship between the Family and Work in a New England Industrial Community*, Maryland: University Press of America

Hernández Laos, Enrique 1992. *Crecimiento económico y pobreza en México. Una agenda para la investigación*, México: UNAM.

Hernández Laos, Enrique 1999. Capítulos 3 y 4, en Boltvinik, Julio y Enrique Hernández Laos, *Pobreza y distribución del ingreso en México*, Mexico: Siglo XXI Editores.

Hernández Laos, Enrique 2000. "Distribución del ingreso y la pobreza en México" in Bensusán, Graciela y Teresa Rendón (eds.), *Trabajo y trabajadores en el México contemporáneo*, México: Porrúa, pp. 93-126.

Hernández Romo, Marcela and Daniel Gutierrez Castorena 1999. "Relaciones laborales y contratos colectivos en Aguascalientes" in De la Garza, Enrique and Jose Alfonso Bouzas (eds.), *Cambios en las relaciones laborales. Enfoque sectorial y regional*, Volume 1, Mexico: UNAM – UAM – FAT – AFL-CIO, pp. 259-285

Herrera Nuño, Eugenio [1989] 1996. *Aguascalientes: Sociedad, economía, política y cultura*, México: UNAM

Hiernaux Nicolás, Daniel. 1998. "Reestructuración económica y cambios territoriales en México. Un balance 1982-1995" en De Mattos, Carlos A., Daniel Hiernaux N. y Dario Restrepo B. (coord.), *Globalización y*

territorio. Impactos y perspectivas, Chile: Pontificia Universidad Catolica de Chile – Fondo de Cultura Económica, pp. 92-119

INDEC 2001. "Incidencia de la pobreza y la indigencia en el aglomerado Gran Buenos Aires. Octubre de 2000". *Información de Prensa*. 02/02/01.

INEGI 1998. *Encuesta Nacional de Empleo Urbano. Documento Metodológico*, Aguascalientes, Mexico: INEGI.

INEGI-CEPAL 1993. *Magnitud y evolución de la pobreza en México 1984-1992*, Aguascalientes, Mexico: INEGI.

Jiménez Huerta, Edith 1995. "Mercado informal del suelo para vivienda en Aguascalientes" *Cuadernos de Trabajo. Desarrollo Social.* Num. 36, Aguascalientes: Gobierno del Estado.

Jordan, Bill, et al. 1992. *Trapped in poverty? Labour-market decisions in low-income households.* London: Routledge.

Kaztman, Rubén 1989. "La heterogeneidad de la pobreza. El caso de Montevideo" *Revista de la CEPAL*, No. 37, pp. 141-152

Kaztman, Rubén 1999 (ed.). *Activos y estructuras de oportunidades*, Montevideo: CEPAL-PNUD

Kelly, Thomas 1999. *The Effects of Economic Adjustment on Poverty in Mexico*, Inglaterra: Ashgate Publishing Ltd.

Lindón Villoria, Alicia 1999. *De la trama de la cotidianidad a los modos de vida urbanos. El Valle de Chalco,* México: El Colegio de México - EL Colegio Mexiquense

Lloyd, Cynthia 1995. "Household Structure and Poverty: What are the Connections?", in IUSSP, *Demography and Poverty,* Conference Papers, Florence, Italy, March 1-4.

Longhurst, Richard 1994. "Conceptual Frameworks for Linking Relief and Development" *IDS Bulletin*. Vol. 25(4):17-23

Lustig, Nora 1992. *Mexico: The Remaking of an Economy*, Washington D.C.: The Brookings Institution

Margulis, Mario 1989. "Reproducción de la unidad doméstica, fuerza de trabajo y relaciones de producción," in Orlandina de Oliveira, et al. (eds.), *Grupos domésticos y reproducción cotidiana,* colección "Las ciencias sociales", México: Coordinación de Humanidades, UNAM – Porrúa – El Colegio de México.

Marquette, Catherine M. 1984. *Household Demographic Characteristics, Consumption Pressure, Labor Utilization, and Land Use Among Settler Households on the Northeastern Ecuadorian Amazon Frontier*, Ph.D. Dissertation, Fordham University, New York.

Marshall, T.H. 1950. *Citizenship and Social Class*, Cambridge University Press

Martínez Morales, Gerardo, 1999. "Liberación comercial, especialización industrial y ajuste regional en México" in Zepeda M. Eduardo y David Castro Lugo (eds.), *Reestructuración económica y empleo en México*, Saltillo: Universidad Autónoma de Coahuila.

Martínez Omaña, Ma. Concepción 1994. *Aguascalientes: un ensayo de descentralizacion (1982-1988)*, Mexico: Instituto Mora – Instituto Cultural de Aguascalientes.

McLoyd, Vonnie 1989. "Socialization and development in a changing economy: the effects of paternal job and income loss on children". *American Psychologist*. Vol. 44(2): 293-302.

Merrick, Thomas 2001. "Population and Poverty in Households: A Review of Reviews" in Birdsall, Nancy, Allen C. Kelley, and Steven W. Sinding (eds.), *Population Matters. Demographic Change, Economic Growth, and Poverty in the Developing World*, New York: Oxford University Press, pp. 201-212

Moen, Phyllis, Edward L. Kain, and Glen H. Elder Jr. 1983. "Economic Conditions and Family Life: Contemporary and Historical Perspectives" in Nelson, Richard R. and Felicity Skidmore (eds.), *American Families and the Economy. The High Costs of Living*, Washington D.C.: National Academy Press, pp. 213-259

Morris, Lydia 1988. "Employment, the Household and Social Networks" in Gallie, Duncan, *Employment in Britain*, UK: Basil Blackwell, pp. 376-405

Moser, Caroline O. N. 1996. *Confronting Crisis. Comparative Study of Household Responses to Poverty and Vulnerability in Four Poor Urban Communities*, Washington, D.C.: The World Bank

Moser, Caroline O. N. 1998. "The Asset Vulnerability Framework: Reassessing Urban Poverty Reduction Strategies" *World Development*, Vol. 26 (1): 1-19

Narayan, Deepa, et al. 2000. *Voices of the Poor. Crying out for change*. New York: Oxfords University Press – The World Bank.

Oliveira, Orlandina de 1999. "Familia, ingreso y desarrollo. Políticas económicas, arreglos familiares y perceptores de ingresos" *Demos. Carta demográfica sobre México*, pp. 32-33

Oliveira, Orlandina de and Vania Salles 1989. "Introducción: acerca del estudio de los grupos domésticos: un enfoque sociodemográfico", in Orlandina de Oliveira, et al. (eds.), *Grupos domésticos y reproducción cotidiana,* colección "Las ciencias sociales", México: Coordinación de Humanidades, UNAM – Porrúa – El Colegio de México.

Oliveira, Orlandina de and Bryan Roberts 1994. "Urban Growth and Urban Social Structures" in L. Bethell (ed.), *The Cambridge History of Latin America*, vol. VI, pt. 1, pp. 253-324

Pastor, Manuel Jr. 1998. "Pesos, Policies, and Predictions. Why the Crisis, Why the Surprise, and Why the Recovery?" en Wise, Carol (ed.), *The Post-NAFTA Political Economy. Mexico and the Western Hemisphere*, Pennsylvania: The Pennsylvania State University Press, pp. 119-147.

Pedrero, Mercedes 1990. "Evolución de la participación económica femenina en los ochenta" *Revista Mexicana de Sociología*, 52(1): 133-149

Pedrero, Mercedes, Teresa Rendón and Antonieta Barrón. 1997. *Segregación ocupacional por género en México*, Mexico: CRIM-UNAM

Portes, Alejandro 1998. "Social Capital: Its Origins and Applications in Modern Sociology" *Annual Review of Sociology*, No. 24, pp. 1-24

Puig Escudero, Antonio 2000. "La población en el año 2000. Cerca de los 100 millones de habitantes" en *Demos. Carta demográfica sobre México*, pp. 4-5.

Reimers, Fernando, ed. 2000. *Unequal schools, unequal chances: the challenges to equal opportunities in the Americas,* Cambridge: Harvard University Press.

Rendón, Teresa. 1990. "Trabajo femenino remunerado en el siglo XX. Cambios, tendencias y perspectivas" in Ramírez Bautista, Elia and Hilda R. Dávila Ibáñez, *Trabajo femenino y crisis en México. Tendencias y transformaciones actuales*, México: UAM-X, pp. 29-51

Rendón, Teresa and Carlos Salas 1992. "El mercado de trabajo no agrícola en México. Tendencias y cambios recientes", in *Ajuste estructural, mercados laborales y TLC*, Mexico: El Colegio de México-Fundación Friedrich Ebert-El Colegio de la Frontera Norte, pp. 13-31.

Roberts, Bryan 1978. *Cities of peasants. The political economy of urbanization in the Third World.* London: Edward Arnold.

Roberts, Bryan 1989. "The other working class: uncommitted labor in Britain, Spain and México". In Kohn, Melvin L., ed. *Cross-National Research in Sociology.* Newbury Park (CA): Sage Publications

Roberts, Bryan, 1991a. "Household Coping Strategies and Urban Poverty in a Comparative Perspective" in Gottdiener, M. and Chris G. Pickvance, *Urban Life in Transition*, United States: Sage Publications, pp. 135-168

Roberts, Bryan, 1991b. "The Changing Nature of Informal Employment: The Case of Mexico" en Standing, Guy and Victor Tokman (eds.), *Towards Social Adjustment*, International Labour Office, Geneva, pp. 115-140

Roberts, Bryan, 1992. "The Place of Regions in Mexico" in Young, Eric V. (ed.), *Mexico's Regions. Comparative History and Development*, San Diego: Center for U.S.-Mexican Studies-UCSD, pp. 227-245

Roberts, Bryan, 1995. *The Making of Citizens. Cities of Peasants Revisited*, UK: J. W. Arrowsmith.

Roberts, Bryan 1996. "The Social Context of Citizenship in Latin America" *International Journal of Regional Research*, Vol. 20 (1): 38-65.

Roberts, Bryan and Gonzalo Saraví, 1999. "Economic Restructuring, Urban Diversity and the Prospects of the Small Scale Sector in Mexico", Paper delivered at the 94th Annual Meeting of the American Sociological Association, Chicago, August, 6 – 10

Rodgers, Gerry B. 1978. "Demographic Determinants of the Distribution of Income" *World Development*, Vol. 6 (3): 305-318

Rodgers, Gerry B. 1995. "What is Special about a Social Exclusion Approach?" in Gerry Rodgers, Charles Gore and José E. Figueiredo (eds.), *Social Exclusion: Rhetoric, Reality, Responses,* Geneva: ILO, pp. 43-55

Rodríguez del Valle, Rosario and Isabel Rueda Peiro 1994. "las relaciones laborales en Altos Hornos" in Rueda Peiro, Isabel (ed.), *Tras las huellas de la privatización. El caso de Altos Hornos de México*, México: Siglo XXI editores, pp. 103-140

Rojas García, Georgina 2002. "Precariedad laboral en el México urbano a fines del siglo XX: comparación de 38 mercados locales de trabajo" en Lozano Ascencio, Fernando (ed.), *La población de México al inicio del siglo XXI*, México: Sociedad Mexicana de Demografía - Centro Regional de Investigaciones Multidisciplinarias - UNAM (forthcoming)

Rojas Nieto, José Antonio 1990. "El desarrollo industrial reciente: el caso de Aguascalientes" *El Cotidiano*, No. 33, pp. 3-14

Rojas Nieto, José Antonio 1993. "El desarrollo reciente en Aguascalientes: un perfil" in Vargas, Claudio H. (ed.), *Aguascalientes en los noventas: estrategias para el cambio*, Mexico: Instituto Cultural de Aguascalientes, pp. 21-61

Romo Vázquez, Arnoldo 1998. "Desempeño económico e industrialización en Aguascalientes, 1970-1993" *Caleidoscopio. Revista semestral de Ciencias Sociales y Humanidades*, Año 2, Num. 4, pp. 53-88

Romo Vázquez, Arnoldo 2000. *La industrialización de la economia de Aguascalientes 1980-1993. (Modernización e inequidad).* Research Report PIEc-96-1N, Unpublished

Rueda Peiro, Isabel (1994). "El contexto" and "Percepción de la comunidad a punto de privatizarse AHMSA" in Rueda Peiro, Isabel (ed.), *Tras las huellas de la privatización. El caso de Altos Hornos de México*, México: Siglo XXI editores, pp. 21-59 and 179-191

Ruiz, Crescencio and Ana María Tepichini 1987. "Ciudad de México: ubicación en el sistema nacional de ciudades, expansion física y dinámica sociodemográfica (1900-1980) in Garza, Gustavo and Programa de Intercambio Científico y Capacitación Técnica (eds.), *Atlas de la Ciudad*

de México, Mexico: Departamento del Distrito Federal – El Colegio de México, pp. 116-120

Runciman, W. Gary 1966. *Relative deprivation and social justice. A study of attitudes to social inequality in twentieth-century England.* Berkeley: University of California Press

Ryan, Gery and H. Russell Bernard. 2000. "Data management and analysis methods". In Denzin, N. K and Y. S. Lincoln, ed. *Handbook of Qualitative Research.* 2ª ed., California: Sage Publications, pp. 769-802.

Salmerón Castro, Fernando 1996. *Intermediarios del progreso. Política y crecimiento económico en Aguascalientes*, Mexico: CIESAS

Sassen, Saskia 1994. *Cities in a World Economy*, California: Pine Forge Press

Schmink, Marianne 1984. "Household Economic Strategies: Review and Research Agenda" *Latin American Research Review*, Vol. 19 (3): 87-101

Schteingart, Martha 1997. *Pobreza, condiciones de vida y salud en la Ciudad de México.* México: El Colegio de México.

Schteingart, Martha 2000. "Evolución reciente de la situación habitacional" *Demos. Carta Demográfica sobre México*. Vol. 13:26-27.

Schultz, Theodore W. 1960. "Capital Formation by Education" *The Journal of Political Economy*. Vol.68:571-583.

Selby, Henry A., Arthur D. Murphy, and Stephen A. Lorenzen 1990. *The Mexican Urban Household. Organizing for Self-Defense*, Austin: The University of Texas Press

Sen, Amartya 1981. Poverty and Famines. An Essay on Entitlement and Deprivation, Oxford: Clarendon Press

Sen, Amartya 1983. "Poor, Relatively Speaking". *Oxford Economic Papers.* Vol. 35:154-169.

Sen, Amartya 1985. *Commodities and Capabilities*, Netherlands: The Oxford University Press

Sen, Amartya 1992. *Inequality Reexamined.* New York: Russell Sage Foundation.

Sen, Amartya 1997. "Human Capital and Human Capability" *World Development*. 25(12):1959-1961.

SIEMPRO 2001. *Encuesta de desarrollo social. No. 4a: Las familias*. Buenos Aires.

Sifuentes, Marco Alejandro 1994., *Aguascalientes: Urbanismo y sociedad. Nueve ensayos de interpretación de la realidad urbana,* Aguascalientes: Gobierno del Estado - Instituto Cultural de Aguascalientes

Singer, Judith 1998. "Using SAS PROC MIXED To Fit Multilevel Models, Hierarchical Models, and Individual Growth Models" *Journal of Education and Behavioral Statistics*, Vol. 24, No.4, pp. 323-355

Thorner, Daniel [1966] 1986. "Chayanov's Concept of Peasant Economy", in Daniel Thorner, et al. (eds.), *A.V. Chayanov on the Theory of Peasant Economy*, Madison: University of Wisconsin Press.

Toledo Beltrán, Daniel and Francisco Zapata 1994. *Acero y Estado. Una historia de la industria siderúrgica integrada de México*, Tomo I and Tomo II, Mexico: UAM-Iztapalapa

Torrado, Susana 1981. "Sobre los conceptos de 'Estrategias familiares de vida' y 'Proceso de reproducción de la fuerza de trabajo': Notas teórico-metodológicas," *Demografía y Economía*, Vol. XV (2): 204-233

Townsend, Peter 1974. "Poverty as relative deprivation: resources and style of living" in Wedderburn, Dorothy (ed.), *Poverty, inequality and class structure*, New York: Cambridge University Press, pp. 15-41

Unger, Kurt y Luz Consuelo Saldaña. 1999. "Industrialización y progreso tecnológico: una comparación entre las regiones de México", *Estudios Sociológicos*, Vol. XVII, Núm. 51, Septiembre-Diciembre, pp. 633-682.

Waal, Alexander de. 1989. *Famine that Kills. Darfur, Sudan, 1984-1985*, Oxford: Clarendon Press.

Ward, Peter M. 1990. *Mexico City. The production and reproduction of an environment,* London: Belhaven Press

Warren, Mark R., J. Phillip Thompson, and Susan Saegert 2001. "The Role of Social Capital in Combating Poverty" in Saegert, Susan, J. Phillip

Thompson, and Mark R. Warren (eds.) *Social Capital and Poor Communities*, New York: Rusell Sage Foundation, pp. 1-28

Welti, Carlos and Beatriz Rodríguez 1997. "La investigación en México sobre participación de la mujer en la actividad económica en áreas urbanas y los efectos en su condición social". In Alatorre, Javier et al. *Las mujeres en la pobreza.* México: El Colegio de México. Grupo Interdisciplinario sobre Mujer, Trabajo y Pobreza.

Willet, John 1997. "Measuring change: what individuals growth modeling buys us" in Amsel, Eric and K. Ann Renninger, eds. *Change and development: issues of theory, method and application*, London: Lawrence Earlbaum Associates.

Willet, John, Judith Singer and Nina Martin 1998. "The design and analysis of longitudinal studies of development and psychopathology in context: statistical model and methodological recommendations" *Development and Psychopathology*, 10, pp. 395-426

Wise, Carol 1998. "Introduction. NAFTA, Mexico, and the Western Hemisphere" en Carol Wise (ed.), *The Post-NAFTA Political Economy. Mexico and the Western Hemisphere*, Pennsylvania: The Pennsylvania State University Press, pp. 1-37.

Yáñez-Chávez, Aníbal, 1994. *Development and Crisis: Geographical Industrialization in Coahuila and Mexico-U.S. Economic Integration*, Ph.D. Dissertation, The University of California, Berkeley

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