

**GLOBALIZATION AND URBAN STRUCTURE IN LATIN AMERICA;
THE CASE OF EXPORT PROCESSING ZONES IN EL SALVADOR**

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(ABSTRACT)

This research explores the relationship between economic transformations, as part of the process of globalization of the economy in Latin America and the restructuring of urban space. The study reviews two main bodies of the literature. The first one, concerned with the economic evolution of the region in the last two decades especially the trend toward export promotion. The second is related to the changes in the urbanization process arising from globalization. Drawing from these sources, a new model for the Globalized Latin American City is introduced.

The empirical part of the research focuses on the Metropolitan Area of San Salvador (MASS), El Salvador, particularly in the relationship between the establishment of new Export Processing Zones (EPZs) and the emergence of new post suburban residential developments occurring nearby, thirty kilometers away from the city. A random sample household survey was conducted in two sites in order to get information about the processes of spatial movement of these populations and their hypothetical direct connection with the EPZs.

The results contrast with the theoretical assumptions of the model. There is no evidence of strong direct connections between the neighborhoods and the EPZs. However, there is significant evidence that these linkages occur at a regional level, since the corridors where export-oriented industries have tended to locate appear to be increasingly connected to the metropolitan dynamic, as suppliers of work force and potential areas for new development. Therefore, economic globalization appears to act as a catalyst of a new pattern of urbanization, with profound social, administrative, and environmental consequences.

Key words: El Salvador, export-processing zones, globalization, Latin America, urbanization, urban morphology.

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LIST OF ACRONYMS

ARENA: Nationalist Republican Alliance; *Alianza Republicana Nacionalista*
 BCR: Central Reserve Bank of El Salvador; *Banco Central de Reserva de El Salvador*
 CBD: Central Business District
 DIGESTYC: National Bureau of Statistics and Census; *Dirección General de Estadísticas y Censos*
 ECLAC: Economic Commission for Latin America and the Caribbean
 EOI: Export Oriented Industrialization
 EPZ: Export Processing Zone
 FDI: Foreign Direct Investment
 IADB: Inter American Development Bank
 IGN: National Geographic Institute; *Instituto Geográfico Nacional*
 ISI: Import Substitution Industrialization
 LAC: Latin America and the Caribbean
 FMLN: Farabundo Marti Front for National Liberation; *Frente Farabundo Marti para la Liberación Nacional*
 MASS: Metropolitan Area of San Salvador
 MCCA: Central American Common Market; *Mercado Común Centroamericano*
 MERCOSUR: Mercado Común del Sur (Argentina, Brazil, Paraguay, and Uruguay)
 NAFTA: North America Free Trade Agreement
 OPAMSS: Planning Office of the Metropolitan Area of San Salvador; *Oficina de Planificación del Área Metropolitana de San Salvador*
 TNC: Trans National Corporations
 VMVDU: Vice Ministry of Housing and Urban Development; *Vice Ministerio de Vivienda y Desarrollo Urbano*
 WTO: World Trade Organization

1. INTRODUCTION

Urbanization is one of the most pressing realities of the developing countries; nearly two billion people live in the cities of the Third World. This is particularly relevant in the case of Latin America where urban areas concentrate three quarters of the total population. Nonetheless, this process is not uniform in either time or space. Multiple political, social and economic variables affect it. This is most evident as a consequence of the “sea-change” called “globalization” (Dicken, 1998) that has occurred in the world economic system during the last two decades. This thesis will examine the transformations of the Latin American urban space in the last two decades focusing on the linkages between global economic restructuring and urbanization. On one hand, Latin America has experienced economic transformations resulting from “Globalization.” On the other hand it is necessary to know how these changes have affected the urbanization process and the physical structure of the city. The empirical part of the research concentrates on the study of the recent post suburban residential developments that have been built nearby the export processing zones (EPZs) in the periphery of Metropolitan Area of San Salvador (MASS), the capital city of El Salvador, as a hypothetical example of interaction between economic globalization and urban morphological change. This thesis will address these issues in the following chapters.

Chapter 2 explores the literature on the process of economic transformation in Latin America during the last two decades and explores its interaction with globalization, based on the analysis by authors such as Harvey (1990) and Dicken (1998). Chapter 3 concentrates on the literature on urbanization process of Latin America since 1980 especially in the processes of transformation of the urban structure and introduces a new model of the Globalized Latin American City, building upon Ward (1990), Portes (1997), and Gilbert (1997, 1998). Chapter 4 presents the research methodology for the empirical study of the new post suburban developments in the MASS. Chapter 5 describes economic restructuring in El Salvador. Chapter 6 analyzes the qualitative and quantitative results of the empirical research. Chapter 7 discusses those results in the framework of the conceptual assumptions of the literature on globalization and urbanization in Latin America. Findings appear to support the initial assumptions of the model, however indicating that the relationship between economic globalization and urbanization is not straightforward. Finally Chapter 8 concludes the study presenting conclusions and implications for further research and planning in El Salvador.

2. GLOBALIZATION PROCESSES AND LATIN AMERICA

In its 1999 World Development Report, the World Bank states “Globalization and localization [...] are two of the most important forces shaping development as we enter into the 21st. Century.” This is only one of the statements that emphasize the relevance of the global processes in today’s world. Nonetheless, views about globalization are not uniform; there is ample discussion about the nature and consequences of these processes around the World. The first part of this chapter will summarize the economic transformations that characterize what Dicken calls the *Global Shift* (1998). The second part will explore the theoretical frameworks that explain such developments and finally, the last part will review the nature of the global processes in Latin America. All this will serve as a base for the subsequent discussion on the relationship between globalization and the transformation of the urban structure of Latin American cities, particularly when related with social segregation.

2.1. GLOBALIZATION PROCESSES

In his book *The Global Shift* (1998), Peter Dicken explains that the last twenty years of world history have been characterized by a series of economic, social, technological, and political transformations. Dicken asserts that “Globalization is emerging as the norm in a growing range of economic activities” (1998: 1).

In Dicken’s view the magnitude of these processes can be portrayed by analyzing the global transformations in the spheres of production, trade and investment. These analytical dimensions can be assimilated to Radice’s idea (cited in Armstrong & McGee, 1985: 23) that in order to understand the world economic system one has to study the interactions between the production processes, the circulation of commodities (trade), and the circulation of money (capital flows). This chapter will study the transformations in these three spheres of the economic system in order to establish connections with the restructuring of the urban space in Latin America

2.1.1. TRANSFORMATIONS IN PRODUCTION

Authors like Harvey (1990: 177) and Dicken (1998: 20) observe that the structure of production has dramatically changed in the last two decades. This shift concerns the location of production, the types of commodities and the dynamics of the actors involved in production. The emergence of industrial production, and exports, in the Third World, particularly in South East Asia is one of the major geographical transformations. Table 2.1 shows that in economic terms East Asia has been the most dynamic region in the World in the last two decades. Nonetheless, the share of the global GDP by Developing countries has diminished.

Table 2.1 **Global Gross Domestic Product** (billions \$)

	1980	% total	1997	% total	av. growth 80/97
World	10,925	100.00	28,976	100.00	9.72
Developed Countries	7,990	73.14	22,848	78.85	10.94
Transition Economies	826	7.56	1,139	3.93	2.23
East Asia	444	4.06	1,528	5.27	14.36
LAC	782	7.16	2,088	7.21	9.82
Middle East, N. Africa	391	3.58	498	1.72	1.61
South Asia	223	2.04	512	1.77	7.62
Sub Saharan Africa	269	2.46	326	1.13	1.25
Developing Countries	2,109	19.30	4,952	17.09	7.93

Source: World Bank (1998)

Simultaneously the “core industrial countries” in North America and Western Europe have seen the rise and domination of the service sector in their economies (Dicken, 1998). Finally, the functions of the actors involved in the production process are also changing. The role of transnational corporations has dramatically increased in the world scene, while the role of the state has been redefined into a more regulatory position. This process, called “re-regulation” by Dicken (1998) does not necessarily means that economic regulations are suppressed but that they are now delineated to promote the activities of the private sector.

2.1.2. TRANSFORMATIONS IN TRADE

The last fifteen years, as part of the process of “economic liberalization” (Dicken, 1998) particularly after the onset of the debt crisis of the early 1980’s, have been characterized by an increased tendency for opening markets and eliminating trade barriers which has resulted in the expansion of the volume of world trade.

As in the case of production, East Asia and the Developed World have been the most dynamic regions in this process, but the exclusion of numerous developing countries has increased (see Table 2.2). The establishment in 1995 of the World Trade Organization (WTO) is perceived as a major step in the liberalization of commodities circulation (Evans, 1995). In fact the World Bank uses WTO membership as an indicator of the openness of markets in developing countries. Moreover, economic policies in the 1990's have been oriented to favor export-oriented economies, particularly in the Third World, replacing prior schemes of Import Substitution Industrialization (ISI) with Export Oriented Industrialization (EOI) (Altimir, 1996). This new pattern of outward looking development results in the restructuring of the global economic geography since the location of production is facilitated by these liberalized flows of trade, moreover as it shall be presented in the following sections, urban geography has also undergone important changes because of this shift.

Table 2.2 **Global Trade** (billions \$)

	1980	% total	1997	% total	av. growth 80/97
World	4,406	100.00	13,361	100.00	11.96
Developed Countries	3,358	76.21	10,301	77.10	12.16
Transition Economies	232	5.27	552	4.13	8.11
East Asia	304	6.90	982	7.35	13.12
LAC	241	5.47	706	5.28	11.35
Middle East, N. Africa	381	8.65	371	2.78	(0.15)
South Asia	47	1.07	135	1.01	11.01
Sub Saharan Africa	113	2.56	177	1.32	3.33
Developing Countries	1,086	24.65	2,371	17.75	6.96

Source: World Bank (1998)

2.1.3. TRANSFORMATIONS IN THE FLOWS OF CAPITAL

According to Dicken (1998), the growth of foreign direct investment (FDI) that started after World War II has undergone major changes in the last fifteen years. Dicken describes those changes in terms of the increased participation of transnational corporations and higher levels of concentration of investment going to Developing Countries.

Table 2.3 shows how the share of global FDI going to these nations has multiplied by three in the last decade, which represents an important difference with the patterns of trade and production observed before (Tables 2.1 & 2.2). In this case Latin America and East Asia are the most dynamic regions in the World. However, the flows of FDI are highly uneven since they

concentrate in few developing countries with Brazil, Mexico and China counting for \$ 100 billion in 1997 (World Bank, 1998). Additionally, regulations on the international movement of capital are diminishing, resulting in speculation and instability (Harvey 1990, Dicken, 1998) which is reflected in the variability of portfolio investment, which according to the World Bank accounted in 1997 for more than nearly forty billion dollars only in the Developing World.

Table 2.3 **Global Foreign Direct Investment** (millions \$)

	1990	% total	1997	% total	av. growth 80/97
World	192,662	100.00	394,476	100.00	14.96
Developed Countries	168,975	87.71	233,897	59.29	5.49
Transition Economies	1,097	0.57	22,314	5.66	276.30
East Asia	10,347	5.37	61,440	15.58	70.54
LAC	8,188	4.25	61,573	15.61	93.14
Middle East, N. Africa	2,757	1.43	5,368	1.36	13.53
South Asia	464	0.24	4,662	1.18	129.25
Sub Saharan Africa	834	0.43	5,222	1.32	75.16
Developing Countries	22,590	11.73	138,265	35.05	73.15

Source: World Bank (1998)

2.2 THEORY FOR GLOBALIZATION PROCESSES

However, more important than describing the general trends in the world economy is to try to formulate a theoretical framework to explain this wide array of changes. The following section applies what Dicken called “an era of turbulence and volatility” (1998:1) and sets it as a base for the upcoming study of the evolving patterns of urbanization in Latin America.

2.2.1 THE NEO CLASSICAL APPROACH

Introducing what he calls the “Neoclassical Counterrevolution,” Michael Todaro (1997: 86), explains that the rise to power of conservative governments in the US, UK, and Germany emphasized important shifts regarding economic policy in the early 1980s. This approach is based on three paradigms: first, “free market analysis,” which asserts that if markets are free they will be efficient and therefore will allocate resources in an appropriate manner, following the classical principles of Adam Smith; second, “public choice theory,” which condemns government intervention because of its distorting role in the economy and therefore proposes its reduction; third, “market friendly theory” which defines a new role for government in areas that will facilitate economic growth, particularly the development of education, health, and infrastructure. Following these premises, the construction of a global market, where production, the circulation of commodities, and the circulation of capital are free, will result in increased

opportunities for economic growth. Other economists like Edwards and Wijnbergen (1986), underlined the “dynamic effects of economic liberalization” by attempting to demonstrate a linkage between capital formation and trade liberalization and the general welfare of a society.

Following this argument, other economists highlight the importance of transnational corporations and theories, explaining their behavior. This approach focuses on four processes, the strategies of the corporations, the strategies of the states, the interactions between firms and states, and technological development. From this framework emerge the concepts of the state as a container of business practices and regulator of the national economy. It conceptualizes the transnational corporations in a micro level approach where globalized activities respond to series of “technological, owner and location advantages,” emphasizing the importance of the “agents of change” (Dunning cited in Dicken, 1998). Dicken also explains that globalization would result from the capitalist nature of corporations, particularly of transnationals, that started to pursue profits at the global scale after the end of World War II. Vernon (in Dicken, 1998) explains the “sequential” development of corporations and their natural tendency to internationalize, especially when they are originated in the core industrial countries of the world. Nevertheless Dicken criticizes the simplistic notion of “global firms,” since his study of corporations demonstrates that transnationals are more “national corporations with international operations” (1998: 196). Dicken also underlines the fact that corporations will always prefer the homogenization of markets and only decentralize certain kind of activities related with production and will relocate only in a very limited way decision making or high level research.

In fact the other main component of the global processes will result from the “dialectic” relation between corporations and states. This would consist in dynamic process of “bargaining” between host countries and investors negotiating for special advantages like labor prices, tax exemptions, and technology transfers.

2.2.2 THE NEO-MARXIST APPROACH

Building from a different perspective, various authors like Harvey (1990), Armstrong & McGee (1985), Jones (1994), Marcuse (1998), do not limit the analysis of globalization to the economic dimension. They study the structural explanations and implications of the global processes in the philosophical, cultural and political realms. Dicken cites Harvey to illustrate the “structural approach to globalization” and the necessity to investigate “the universal laws of process.”

In his book *The Condition of Postmodernity*, Harvey discusses the fact that a “sea change in cultural, as well as in political-economic practices” (1990: 10) has occurred since the early 1970s. These transformations are associated with the crisis of the previous model of “Fordist” capitalist accumulation and the establishment of what Harvey calls the “regime of flexible accumulation” (1990: 147). Following Swyngedouw (1990:179), Harvey examines the transformations associated with the production process, labor, space, state, and ideology within the Marxist framework of the “invariant elements and relations.” Harvey underlines the contradictory nature of the capitalist system in three dimensions. The first dimension is the growth-oriented character of the capitalist system that is permanently seeking for profit. The second one is the necessity to pursue labor exploitation by increasing “the gap between what labor creates and what it gets” (1990: 180). The third one is the “technologically and organizationally dynamic” nature of capitalism driven by competition and by the necessity to regulate class conflict. Marx explained that these contradictions make of capitalism a “crisis prone system.”

Harvey conceptualizes the current global economic model as a new attempt by the system to manage capitalist crisis. In Harvey’s analysis, capitalism utilizes several mechanisms to manage the “overaccumulation” crisis (whether of commodities, employment or capital). The first mechanism is temporal displacement (in the form of credit and investment); the second is spatial displacement (by shifting the location of production or the kind of productive activities) and the combination of both (through international capital flows or lending money to developing countries). This analysis corresponds to other authors ideas such as Palloix (cited in Dicken, 1998) concerning the internationalization of circuits of capital (in investment, production and trade) and the image of capitalism “fighting or running away from the class struggle” from one place to the other (Peet cited in Dicken: 200) and the necessity of capitalism to extend the techniques of mass marketing and consumption beyond industrial societies (McGee, 1985: 4; Banck, 1994).

Under this framework, the forces of global capital are currently expanding their activities and interests at the global scale, setting different kinds of interventions in developed and developing countries. This is particularly relevant to this study since the process of transformation and relocation of economic activity will presumably leave a certain footprint in the physical structure of the city.

2.3 LATIN AMERICA AND THE GLOBALIZATION PROCESSES

One the most important characteristics of the globalization processes is its complexity and variability (Dicken, 1998; Harvey, 1990), Dicken describes this system as a “mosaic of unevenness in a continuous state of flux.” This unevenness is particularly dramatic in the Third World, where only specific regions within certain countries have become “fully integrated” into the world system (McGee, 1985; Banck 1994). While the effects of the globalization can be examined world-wide, this section will focus on the nature of economic shift in Latin America.

Taking a neo-classical perspective, Edwards (1995: 48) explains how the magnitude of the crisis and the failure of “heterodox adjustment plans” (in Brazil, Argentina, and Peru) led to the definition of a new economic model for Latin America. This model is based on the “Washington consensus” defined with the participation of the International Monetary Fund (IMF), the World Bank (WB), the US Treasury, and several neo-conservative Latin American governments (Williamson, 1994). The new policy stressed the necessity to implement five major economic reforms: tax reform, trade liberalization, financial deregulation, labor market reform and privatization. Table 2.4 shows the importance of these policies in the IMF and WB programs for Latin America in 1980s.

% of programs implemented by IMF and WB		
Table 2.4 including specific policy conditions		
Condition	IMF	WB
Trade liberalization	35	79
Exchange rate	79	45
Tax reform	59	67
Financial Reform	44	51
Privatization	59	65

Source: Edwards (1995)

Edwards (1995) explains that multiple factors such as the success of the economic reforms in Chile, the sustained growth of East Asian economies, the “advice” of the multilateral organizations, and the failure of heterodox plans to control the crisis generated the necessary momentum that permitted the implementation of the reform in Latin America. Enrique Iglesias (1994), president of the Inter American Development Bank (IADB) also stresses out the importance of a “change of values” in the political process in Latin America, which in his opinion oriented the regional government towards free-market policies. One after another all the countries in the region, with the exception of the Dominican Republic, Ecuador, and Haiti adopted liberalization plans (Edwards, 1995). Table 2.5 shows how reform was carried out in

successive waves. The sample of countries for the following analysis intends to capture regional variations and common trends; Argentina, Brazil, and Mexico represent the largest economies in the region; Chile is considered the model of economic reform (Edwards, 1995); Peru is an example of a country that initially implemented “heterodox adjustment” (Edwards, 1995); Bolivia is the smallest economy in South America; Colombia has implemented reform apparently with lower social costs (Gilbert, 1998); and Costa Rica is taken as representative of the small countries in Central America.

Table 2.5 **Economic Reform in Latin America**

Plan Components					
<i>Early Reformers</i>	Fiscal Reform	Trade Reform	Financial Market	Labor Reform	Privatization
Chile (1975)	Major	Major	Major	Major	Major
Bolivia (1985)	Major	Major	Some	Some	Major
Mexico (1985)	Major	Major	Major	Some	Major
<i>Second Wave Reformers</i>					
Costa Rica (1988)	Major	Some	Some	None	Some
<i>Third Wave Reformers</i>					
Argentina (1990)	Major	Major	Major	Major	Major
Colombia (1990)	Major	Major	Some	Some	Major
Brazil (1991)	None	Some	Major	None	Major
Peru (1991)	None	Major	Major	Major	Major

Source: Edwards (1995)

Therefore, during the late 1980s and early 1990s most of Latin America started the implementation of economic reform inspired by a free market approach. The following section will illustrate how in general these new policies have further the region’s integration to the global economy by facilitating the expansion and transforming the capital circuits of production, investment and trade just as described by Dicken (1998).

2.3.1 PATTERNS OF PRODUCTION

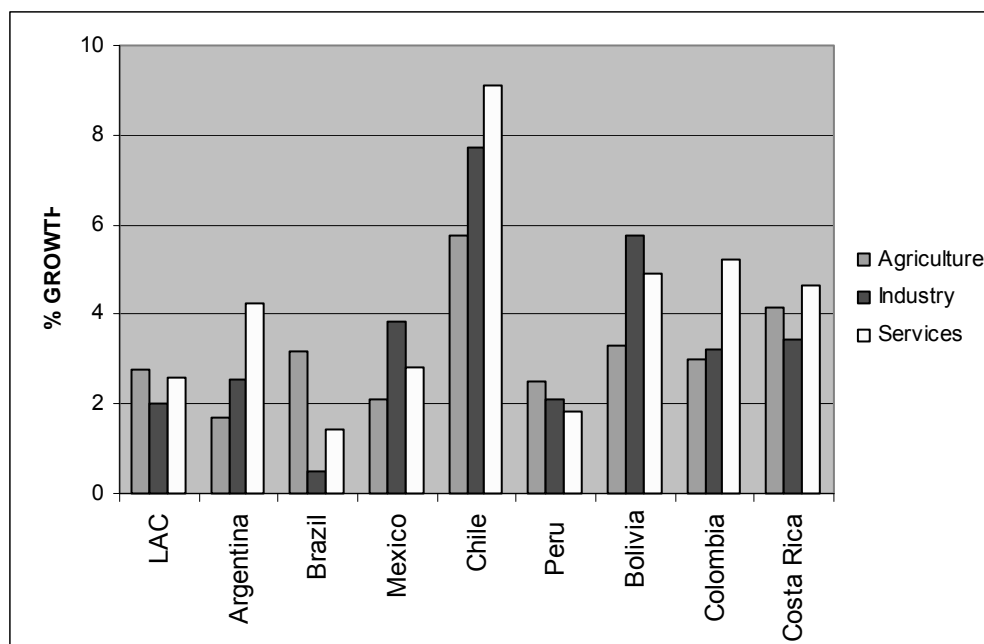
The debt crisis of 1982 and the subsequent structural adjustment programs implemented along the lines of the “Washington Consensus” transformed the economic system in Latin America emphasizing the reduction of state interventionism in the economy and the necessity to stimulate the development of the private sector (Altimir, 1996 & Huddle 1997). In order to reduce the size of the state and increase the participation of the private sector (local or international), privatization became one of the most important policies of the reform (Edwards cited in Huddle, 1997). Table 2.6 analyzes economic growth tendencies in the region during the last two decades. 1988 appears to be a watershed year for reversing the generally stagnant growth figures observed during the 1980s.

Table 2.6

GDP (millions 1990 \$)

	1980	1985	1988	1992	1996	1997	av.growth 80/88	av.growth 88/97
Argentina	151,642	141,139	152,207	170,227	190,252	231,055	0.05%	3.97%
Brazil	353,255	369,024	410,045	397,839	471,248	531,440	2.01%	3.73%
Mexico	221,052	242,322	239,611	283,967	297,543	323,861	1.05%	1.56%
Chile	22,633	22,380	26,855	35,975	46,000	58,012	2.33%	6.81%
Peru	40,125	39,128	43,366	36,389	48,398	50,758	1.01%	4.39%
Bolivia	5,149	4,675	4,815	5,595	6,585	7,360	-0.81%	3.51%
Colombia	27,910	31,809	37,523	42,546	51,668	64,746	4.31%	5.80%
Costa Rica	4,573	4,618	5,241	6,258	7,039	7,476	1.83%	2.16%
LAC	942,168	960,880	1,035,695	1,109,521	1,259,634	1,371,201	1.24%	2.62%

Source: Inter American Development Bank (1999), ECLAC (1998)

**Figure 2.1 Rate of GDP growth per economic sector 1988-1997**

Source: IADB (1998), ECLAC (1999)

These increased growth figures lasted until the mid 90's but have turned to be lower and irregular in the late 1990's, particularly after the Mexican crisis of 1995 (Altimir, 1996; Huddle, 1997). In general the results of the policy vary according to the country and the economic sector. Figure 2.1 illustrates the variability. In general industrial activities have been benefited least by economic reform whereas services and agriculture have grown at more substantial rates. In fact the dismantlement of industrial protection policies associated with the previous model of import substitution has affected industrial growth. The case of Mexico shows a different pattern, probably related with the application of NAFTA and the emergence of manufacturing exports to the United States.

2.3.2 PATTERNS OF TRADE

One the most radical transformations of the 1980's reforms was to open the economies of the region to free trade. The protectionist policies that accompanied import substitution from the 1950s to the 1970s were dismantled in most of the countries, especially in the largest economies, lowering tariffs and import restrictions (Huddle, 1997). Simultaneously policies encouraging exports were set in place by the state and international financial organizations (Vilas, 1996). These policies vary from country to country and include export promotion zones, maquiladoras and investment by transnational corporations (Altimir, 1996). Moreover, the integration of trade blocs such as NAFTA and MERCOSUR (Common Market of the South, including Argentina, Brazil, Paraguay, and Uruguay) have also stimulated the opening of the markets, this is particularly relevant in the case of Mexico where exports to the US represent almost ninety billion dollars, around one third of the total regional exports (ECLAC, 1998). As a consequence of these policies exports nearly doubled from 140 billion dollars to 290 billion from 1992 to 1997 (ECLAC, 1998). However, imports reached more than 370 billion dollars (World Bank, 1999), tables 2.7 and 2.8 demonstrate this trend, showing again important regional differences like the case of Mexico's exports that grew at a yearly average of nearly 30% while Brazil only did it at a rate of 6%, which demonstrates the impact of NAFTA on the economy. Moreover it is also important to note that for the whole region, imports grew almost at double the rate of exports.

Table 2.7 **Exports of selected Latin American countries (millions 1990 \$)**

	1980	1985	1988	1992	1996	1997	av.growth 80/88	av.growth 88/97
Argentina	6,489	8,960	9,134	12,399	24,043	26,217	5%	21%
Brazil	16,734	27,802	33,773	35,793	47,747	52,990	13%	6%
Mexico	18,324	32,083	30,692	46,196	96,000	110,431	8%	29%
Chile	4,372	5,112	7,054	10,007	15,404	16,923	8%	16%
Peru	4,020	4,217	2,731	3,661	5,900	6,813	-4%	17%
Bolivia	685	548	543	608	1,132	1,166	-3%	13%
Colombia	3,796	3,941	5,343	7,263	10,651	11,681	5%	13%
Costa Rica	886	899	1,180	2,386	3,774	4,350	4%	30%
LAC	80,628	107,230	123,811	151,443	222,571	290,324	7%	15%

Source: Inter American Development Bank (1999), ECLAC (1998)

Table 2.8 **Imports of selected Latin American countries (millions 1990 \$)**

	1980	1985	1988	1992	1996	1997	av.growth 80/88	av.growth 88/97
Argentina	11,698	4,628	4,892	13,795	22,282	28,489	-7%	54%
Brazil	22,978	14,470	14,605	20,554	53,301	61,354	-5%	36%
Mexico	32,193	20,651	28,081	62,130	89,469	109,808	-2%	32%
Chile	6,300	3,570	4,844	9,285	16,499	18,218	-3%	31%
Peru	4,395	2,411	2,865	4,002	7,885	8,552	-4%	22%
Bolivia	558	585	590	1,040	1,368	1,642	1%	20%
Colombia	4,743	4,023	4,516	6,029	12,794	14,409	-1%	24%
Costa Rica	1,267	1,030	1,278	2,724	4,023	4,584	0.1%	29%
LAC	112,566	72,672	91,429	154,907	232,151	306,411	-2%	26%

Source: Inter American Development Bank (1999), ECLAC (1998)

The comparison between GDP growth rates (see Table 2.6) and foreign exchange expansion indicates that there has been a process of economic opening and that the interconnectedness of the region with the rest of the world has increased in the last fifteen years. Figure 2.2 shows that tendency by presenting the ratio of foreign trade against GDP. It is interesting to compare the cases of the three biggest economies of the region, Argentina, Brazil and Mexico, since while Argentina and Brazil are the least “interconnected” countries of the sample; Mexico is the most connected after Costa Rica. This suggests again the importance of the transformations originated by NAFTA.

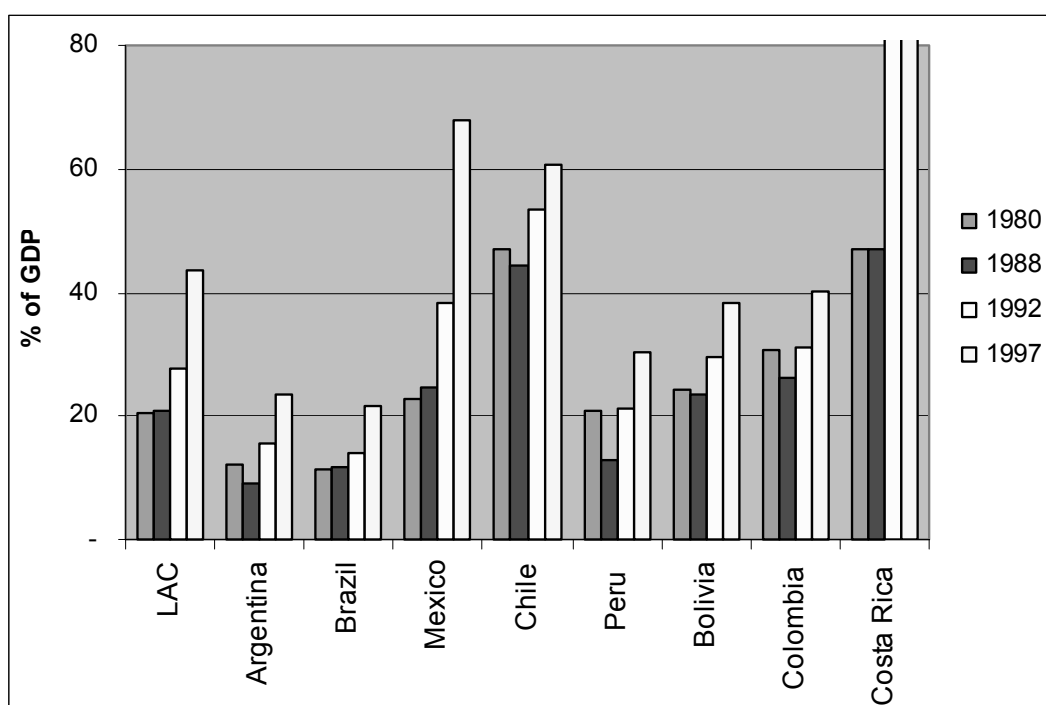


Figure 2.2 Ratio of Foreign Trade to GDP
Source: IADB (1998), ECLAC (1999)

2.3.3. PATTERNS OF CAPITAL FLOWS

According to Villarreal (cited in Dicken, 1998) one of the major components of the new economic policy of the region was to liberalize the flow of direct investment. Previous restrictions concerning areas of investment and share of foreign ownership have been eliminated or considerably reduced. The total volume of FDI in the region is concentrated in the three largest economies, Brazil, Mexico and Argentina. Nonetheless, Table 2.9 demonstrates that the expansion of flow of global capital (without counting portfolio investment) has reached all the countries in the sample. Moreover the regional yearly ratio of growth of FDI in the last ten years is of nearly 75%, compared with 26% for imports, 15% for exports and only 2.6% for the GDP.

Table 2.9 **Foreign direct investment in selected Latin American countries (millions 1990 \$)**

	1980	1985	1988	1992	1996	1997	av.growth 80/88	av.growth 88/97
Argentina	788	919	1,147	4,020	4,885	6,617	6%	53%
Brazil	1,544	1,360	2,629	1,924	11,667	18,610	9%	68%
Mexico	2,090	1,984	2,879	4,393	9,186	12,831	5%	38%
Chile	213	142	952	537	3,561	3,467	43%	29%
Peru	27	1	26	136	3,242	2,030	0%	856%
Bolivia	46	10	30	91	472	728	-4%	259%
Colombia	51	1,016	159	679	3,208	5,192	26%	352%
Costa Rica	48	65	121	221	421	475	19%	33%
LAC	5,732	5,819	7,439	12,933	40,074	56,663	4%	74%

source Inter American Development Bank (1999), ECLAC (1998)

However, this pattern must be balanced by the still increasing importance of the foreign debt of the region. Latin America's debt has grown from 420 billion to 700 billion dollars from 1988 to 1998 and the annual debt service represents more than 130 billion dollars per year (World Bank, 1999; Vilas, 1996). Therefore, Latin America was exporting capital and favoring the penetration of global capital in its economy.

2.3.3.1. The growing importance of FDI

As indicated in the previous section FDI in the region has dramatically expanded in the last decade, from less than eight billion dollars in 1989 to more than fifty six billion dollars in 1997 (IADB, 1999). This represents an increase of more than 600 %. Moreover the rate of growth of FDI in the last decade has been much faster than the growth of the GDP, which is a clear evidence of increasing degree on internationalization of the regional economies. Figure 2.3 depicts this evolution for selected countries.

At the regional scale the ratio FDI / GDP has multiplied by five in the last ten years. Nonetheless, there are important differences between the countries, going from Brazil where the

proportion has grown more than twenty five times to Chile were the increase has not even attained 50%. In fact Bolivia (the smallest economy in the sample) presents higher figures of FDI penetration, probably associated with a massive privatization program, whereas in the countries with the largest GDPs the penetration of FDI is relatively lower. In that sense the stage of the economic reform program of the country can represent major variances in the specific penetration of FDI. Moreover, it is also relevant to study the nature of these capital flows, both according to the mode of penetration and according to the economic sector in which they intervene.

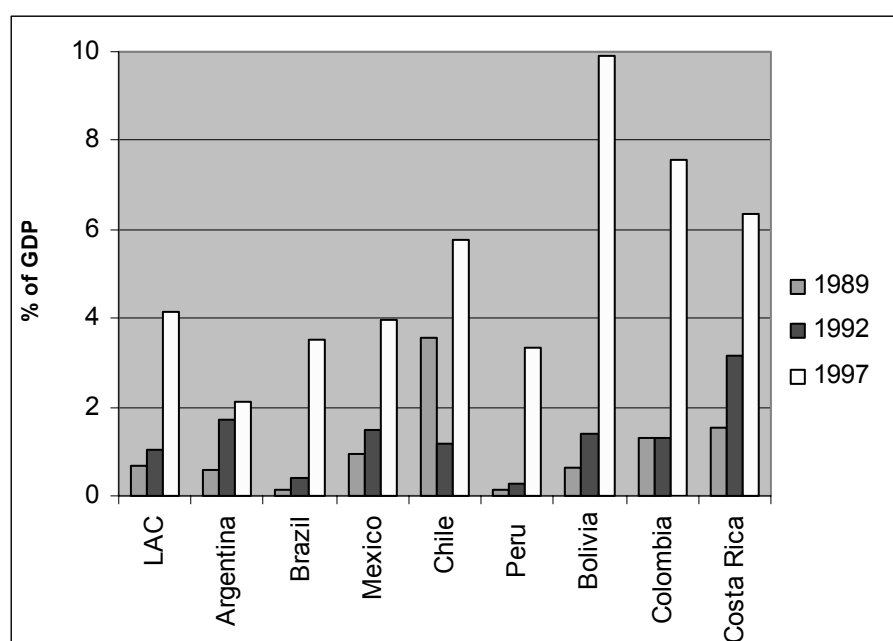


Figure 2.3 **Ratio FDI/GNP in selected countries**

Source: ECLAC (1998)

2.3.3.2. The modes of penetration of FDI

ECLAC (1999a) defines three different modes used by FDI to penetrate Latin American economies. The first mode is the expansion or diversification of previously existing operations by foreign firms, which represents an approximate value of fourteen billion dollars. The second is constituted by the acquisition (partial or total) of local private companies by foreign firms, which counts for twenty five billion dollars. Finally the third mode corresponds to the acquisition (partial or total) of state owned corporations by foreign investors through privatization processes, which mean over seventeen billion dollars. ECLAC (1999b) underlines the fact that the second

and third modes, which count for over 70% of the total regional FDI are associated with the transfer of property and not necessarily with the expansion of the production capacity. Once again it is interesting to consider the differences within the region for 1997 as they are shown in figure 2.4

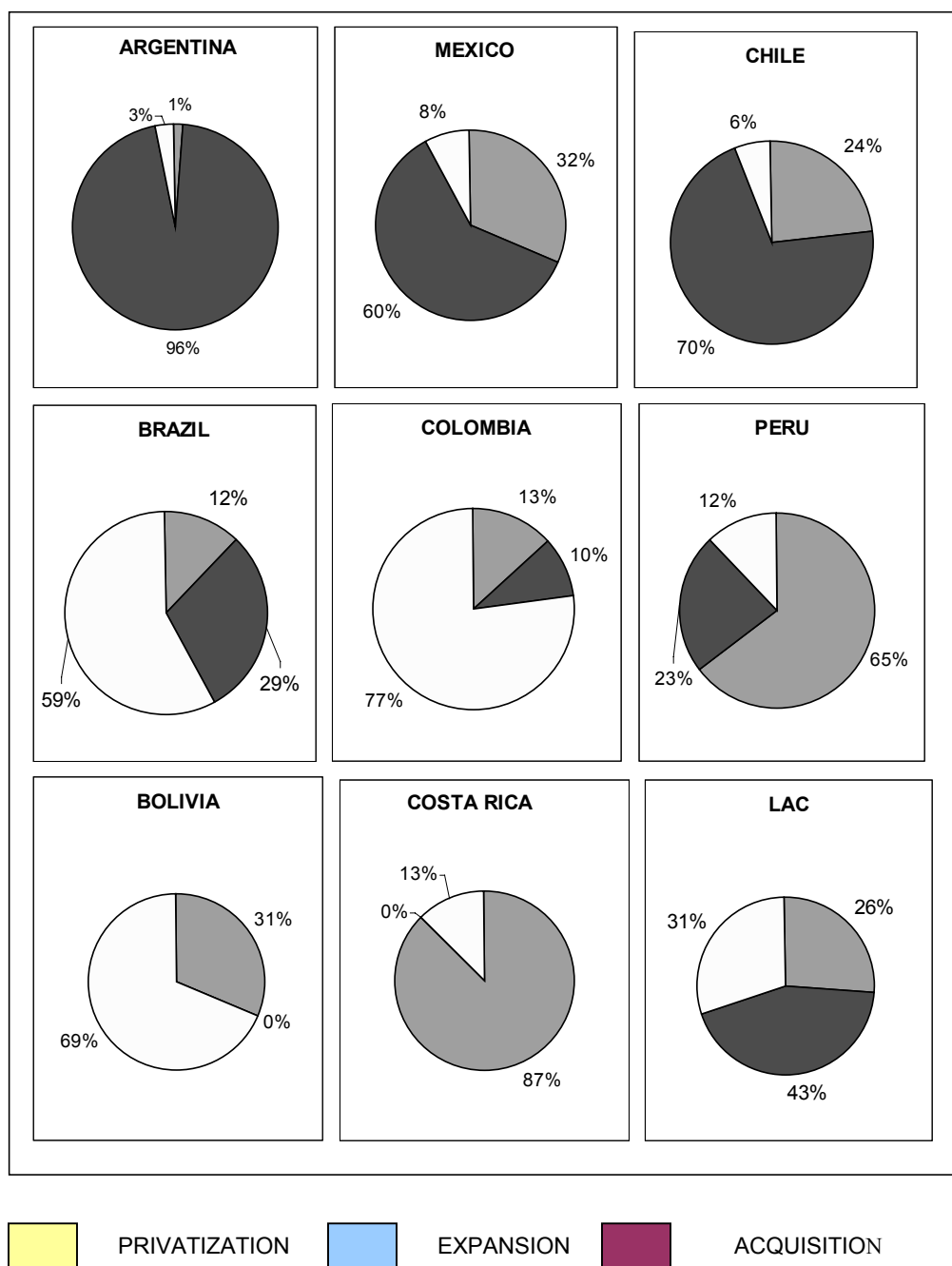


Figure 2.4 **Modes of penetration of FDI in selected countries, 1997.**
Source ECLAC (1998)

According to ECLAC (1999a) these differences can be attributed to the stage of the economic program of each country. Argentina, Mexico, and Chile having started their privatization programs in the early 1980s (Chile), late 1980s (Mexico) and early 1990s (Argentina) have already completed the transfer of most of the public enterprises to private investors, which would be expanding their local operations to private acquisition mechanisms. Other countries such as Brazil, Colombia, and Bolivia are still in the middle of their privatization programs therefore this mode of penetration is dominant.

ECLAC (1999b) sees in this pattern a tendency in which foreign private capital would begin by acquiring strategic public companies and would in a second phase purchase or build agreements with local private firms associated with the activity that was originally privatized. This pattern of FDI would confirm the theoretical assumptions of authors like Roberts (in Portes & Kincaid, 1994) who envisaged the possibility of strengthened alliances between local and foreign capital in the framework of neo-liberal policies in Latin America.

2.3.3.3. FDI by economic sector

International financial institutions (ECLAC, World Bank, IABD) emphasize the shift that has occurred in Latin America in the last decade concerning the economic sectors in which foreign capital is being invested. Most Latin American countries show the increasing importance of FDI in the tertiary sector, particularly banking, public services (energy, water, communications and transportation) and retail (ECLAC, 1998). On the other hand the relative importance of FDI in industry is declining, while their importance in primary activities such as agriculture and mining remains basically constant. Figure 2.5 shows this pattern for selected countries. Mexico represents a particular case in the sample since it is the only country to present a balance between the different economic sectors. This is a consequence of the implementation of NAFTA (1994) and the influence of the US economy over the country. Mexico is the recipient of major American capital interested both in manufactures and agriculture to supply the US market. Nonetheless the magnitude of tertiary activities is still important. In the case of Brazil the relative importance of the tertiary sector is related with the recent privatization process of telecommunications, banking and energy companies. In Argentina the increase of FDI participation in the tertiary sector is related with the acquisition of local banks and retail stores by foreign investors.

The transformation of the financial sector in Latin America demonstrates the effects of globalization in the regional economy. Major banks in Argentina, Mexico, Brazil, Venezuela, Chile, and Peru are now owned or are under the control of foreign financial institutions. This activity represented in 1997 more than six billion dollars in investment, which constitutes more than ten percent of the total FDI. The intervention in the communication sector is also critical, since in the same year it represented a total FDI of more than six and a half billion dollars (ECLAC, 1998). Communications and banking alone counted for almost one quarter of the total flow of capital to the region. Figure 3.4 shows how FDI are increasingly concentrated on specific economic activities within the tertiary sector in different countries. This trend has important implications for employment, provision of services, general corporate strategies, state intervention in the economy and probably urbanization.

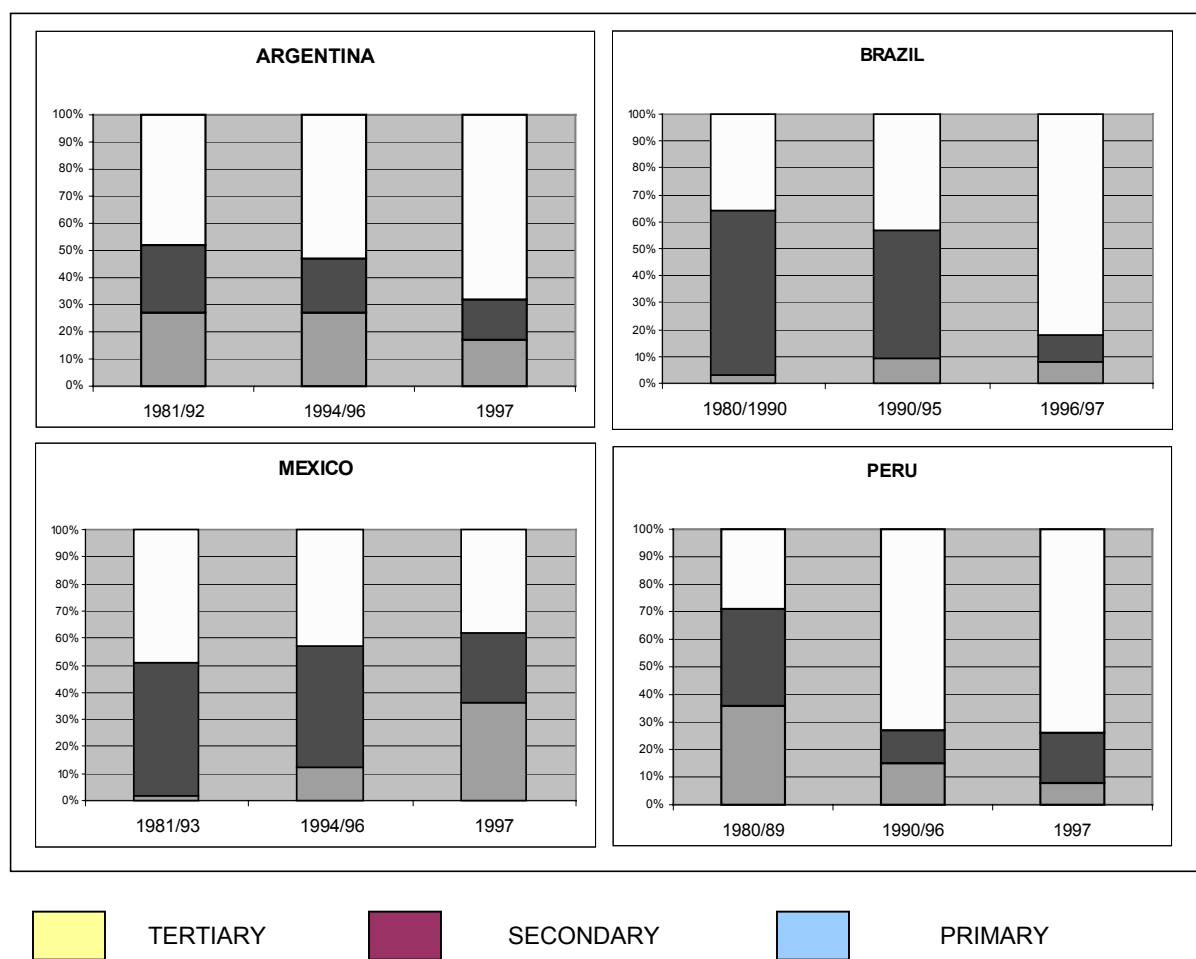


Figure 2.5 FDI by economic sector.

Source: ECLAC (1998)

2.3.3.4. Transnational corporations and FDI

ECLAC (1999b) points out the fact transnational corporations (TNC) play a major role in the expansion of FDI in Latin America. According to the 1998 *Regional Investment Report* the 500 biggest corporations of the region had more 660 billion dollars in sales in 1997, from which transnationals represented 260 billion, which means 40% of the total. This figure demonstrates the key role played by such enterprises in the economic performance of the region.

Nonetheless the presence of transnational capital differs from one economic sector to another. The historic trend of their presence is more related with industry, particularly automobile manufacturing, oil, chemistry, and machinery or in the primary sector, especially mining and agricultural exports. However in the last five years this pattern has changed with the increasing participation of TNC in service activities like telecommunications, finance and retail. In the case of Brazil, almost one fifth of the total financial system was under TNC control in 1997 (ECLAC, 1999b), finally ECLAC estimates that almost one quarter of the energy system that was recently privatized in Brazil is dominated by transnational capital. In Mexico more than half of the national 1997 exports were conducted by TNCs, this confirms the shift from local market oriented production to a more global market orientation (Roberts, 1994; Dicken, 1998).

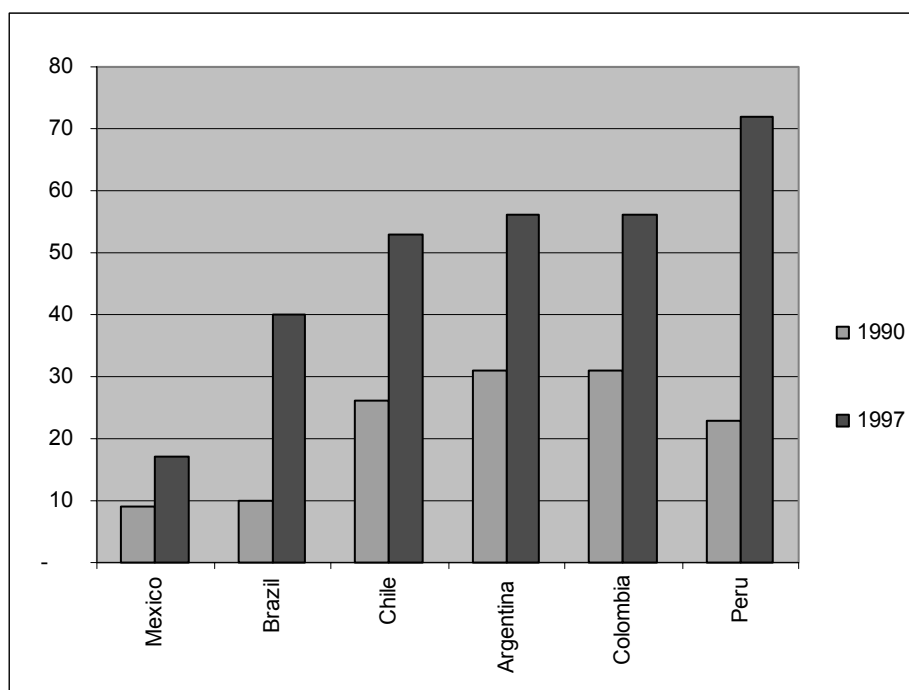


Figure 2.6 **Concentration of FDI in retail, banking and public services.**

Source: ECLAC (1998).

This general overview described the magnitude of the “global shift” that has occurred in the economic structure of Latin America after the 1982 crisis. As the data tends to indicate, reforms were successful in increasing the integration of the region into the global economy. Although the integration presents diverse patterns, it is possible to distinguish three major trends in the region. First, it has resulted in increased, although irregular, economic growth. Second, it has promoted the development of foreign trade, especially imports. Finally and most important it has exacerbated the penetration of global capital into the national economies. In that sense it is clear that the changes in the behavior of FDI in Latin America have had profound effects in the regional economy. Key areas of the economy, especially in those activities that are intimately linked with the world economy like finance, telecommunications, and retail have been penetrated by foreign capital, which has stimulated their growth. Simultaneously the role of the state as regulator of the market has been reduced favoring the participation of transnational corporations. All these changes have important implications for employment patterns, business practices, forms of production and therefore for the shaping of the urban environment. Chapter 3 will examine the reshaping of the urbanization process in the region and will introduce a new model of the urban structure of Latin American cities, which will be tested later in the specific study of economic and urban transformation in El Salvador.

3. URBANIZATION AND CITY STRUCTURE IN LATIN AMERICA; TOWARDS NEW MODELS

Chapter 2 described the magnitude of the economic transformations that have occurred in Latin America after 1980. This section will introduce the study of the urbanization process in the region and its linkages with economic reform in the framework of the region's increasing integration to the global economy and an economic policy that favors liberalization.

Chapter 3 will examine the implications that such changes have had in the social and physical fabric of the city in four sections. The first part will be an overview of the urbanization process prior to the crisis, emphasizing different models proposed in the literature. The second part will discuss the social transformations resulting from the new modes of production. The third section will focus on the effects of the economic shift in restructuring urban landscape. The final section will study the new models proposed in understanding the Latin America city and will summarize the discussion by introducing a new model that captures the new social and physical dynamics resulting from globalization.

3.1. BACKGROUND: MODELS OF THE LATIN AMERICAN CITY BEFORE 1980

The discipline of geography developed in this century several morphological models that illustrate the structure and major components of the city. Although these models were originally created to study North American cities, they are also relevant to understand and conceptualize the dynamics of the Latin American city.

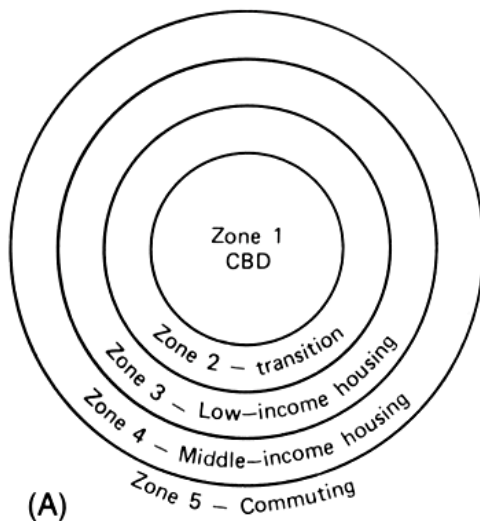


Figure 3.1 **The Concentric Model**
Burgess in Hartshorn (1992)

3.1.1. THE CONCENTRIC MODEL

This model was advanced by Burgess in the early 1900's and responded to the study of Chicago. The model emphasizes the importance of the central business district and shows several concentric rings representing different incomes of housing, the high status residents being located at the outskirts of the city, reflecting the typical North American suburbanization pattern (Hartshorn, 1992; Griffin,

1980). The typical setting of the Latin American colonial city share the importance of the core district, however the succession of rings appears to have a totally opposite connotation, since the deprived sectors are located in the periphery (Portes, 1976; Scargill, 1979). Nonetheless, in the case of this study it is important to retain the notion of income status classification.

3.1.2. THE SECTOR MODEL

Hoyt advanced the sector model in 1939. It refines the simplicity of the concentric model by showing how certain sectors of economic activity originate at the city core but advance into the periphery following major transportation facilities. The model portrays more complex relationships between the different elements of the urban environment, such as high-income residential, low-income housing, commercial and industrial facilities (Hartshorn, 1992).

The idea of activities and sectors moving to the periphery following transportation has also been applied to Latin America, particularly concerning the displacement of the high-income groups. Sargent (in Blouet, 1997) emphasizes the importance of the tramway system to explain the suburbanization of Buenos Aires in the late XIX century. Griffin and Ford (1980) stress that the proximity to major circulation arteries is linked to the necessity of “centrality” of the Latin American elite.

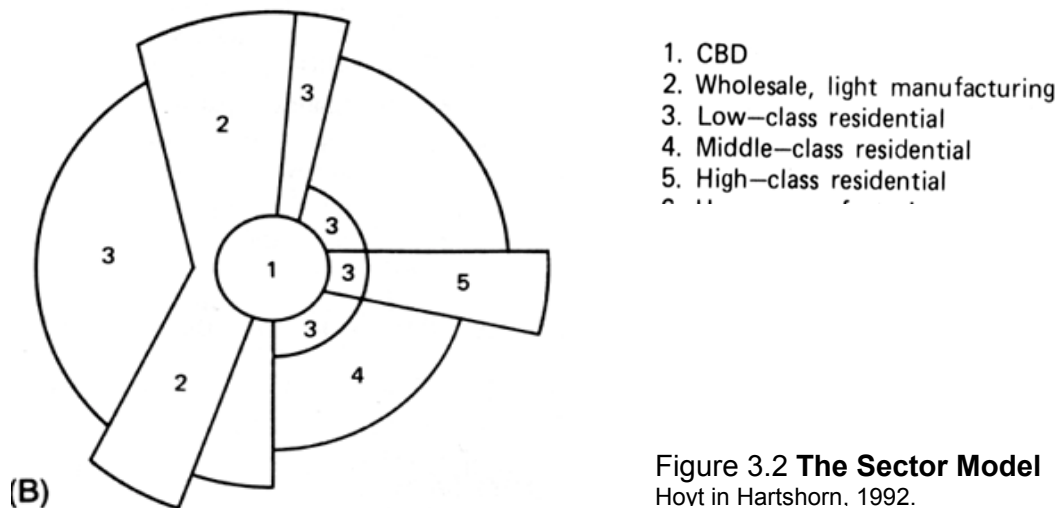


Figure 3.2 **The Sector Model**
Hoyt in Hartshorn, 1992.

3.1.3. THE MULTIPLE NUCLEI MODEL

Harris and Ullman (in Hartshorn, 1992) conceptualized the city as a series of semi autonomous districts gravitating around specific nuclei. The model acknowledged the increasing degree of

complexity of North American city that according to the authors had been intensified by urban sprawl.

In the case of Latin America, Griffin and Ford (1980) argued that the rules of Anglo American urbanization have penetrated the modern urban sector. Policies such as zoning and site planning are implemented and enforced, encouraging the development of suburbs. Portes (1976; 1994) noted that these areas adopt a “self sufficient” character, since they dispose of residential, commercial, recreational and cultural facilities that are independent from the rest of the city.

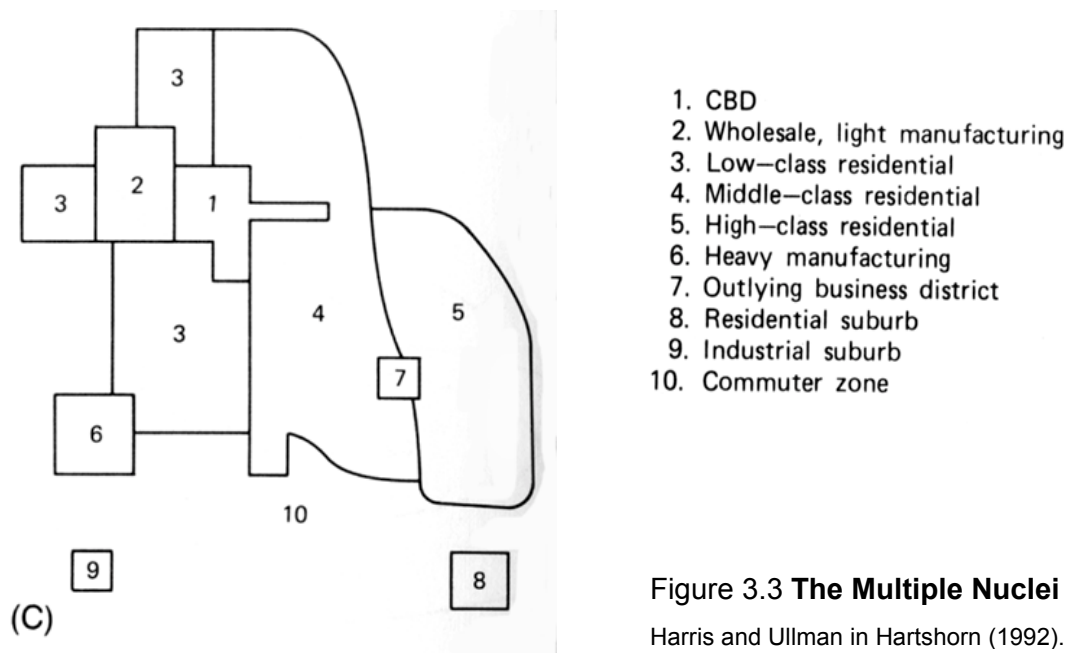


Figure 3.3 **The Multiple Nuclei Model**

Harris and Ullman in Hartshorn (1992).

Other models have been advanced based on these three basic approaches. The emphasis varies whether the differences should be established according to human perception related with travel frequencies as in the *Urban Realms Model* (Vance cited in Hartshorn, 1992) or more related to class differences as in the *Exploitive City Model* (Bunge in Hartshorn, 1992)

3.1.4. THE FIRST MODEL OF THE LATIN AMERICAN CITY

In 1980, Griffin and Ford advanced a morphological model for the Latin American city. This model was based upon the interaction between four main components.

First the core district, which according to the authors is comparable to the North American CBD, in the sense that it concentrated jobs and services. This core also represents the place where Spanish or Portuguese founded the city in the XVI century and includes the historic buildings from the colonial and republican periods. However in the 1940's this district was

unable to supply the space and services required by industrialization and became increasingly congested.

Second, the high-class residential sectors that were pursuing since the late XIX century a movement towards the suburbs in order to escape the congestion of the CBD. The growth of this radial sector guided one part of urban development. The third component of the model is the Spine, which consists in a main avenue or boulevard originated in the CBD that follows the direction of the elite's movement. Both administration and retail space expanded from the CBD following the Spine converting it into the main structural elemental around which higher and middle-income groups established.

Finally the fourth element is made out of a series of rings of housing developed around the CBD. These rings represented the low and middle income housing that according to Ford and Griffin followed an inverted concentric pattern. Higher income households lived in the ring closer to the CBD while the periphery was occupied by the new migrants and was mainly composed by squatters and spontaneous settlements. The age of the settlements determined their degree of consolidation, from consolidated areas in the center to peripheral squatters in the edge.

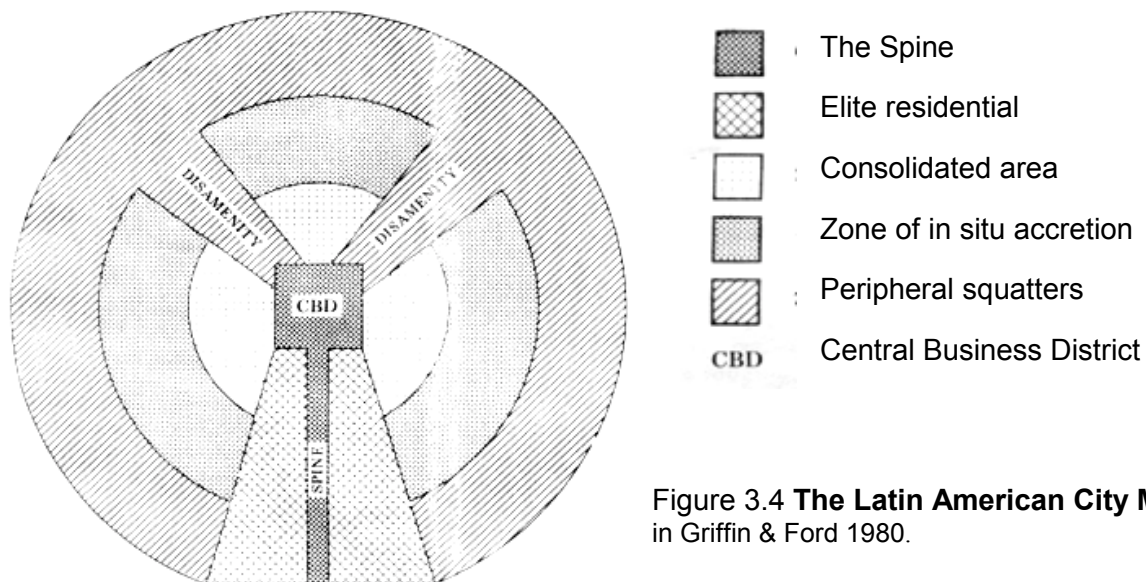


Figure 3.4 **The Latin American City Model** in Griffin & Ford 1980.

Although the model is still exclusively based on the residential land uses and neglects other uses, especially the industrial, it demonstrates a clear pattern of social and spatial differentiation. The Spine and its surroundings represent the privileged area of the city, while the concentric rings, particularly the peripheral one, represent the space of the deprived. The CBD acts as a transition area between both sectors, which confirms Portes (1976) vision of a “triad

city” of clear social segmentation. Portes assures (1989) that most Latin American cities converged into this pattern at the beginning of the 1980s, since it was the result of similar economic and social regimes.

This section reviewed the different morphological models introduced to portray the Latin American city before the 1980s debt crisis. The following section will explore the social and spatial transformations of this pattern after the crisis and discuss the relationship between economic reform and urban structure in order to understand the processes that shape the new structure of Latin American cities.

3.2. SOCIAL AND URBAN TRANSFORMATION SINCE 1980

3.2.1. SOCIAL EFFECTS OF THE NEW PATTERNS OF PRODUCTION

As it was explained in Chapter II, in the late 1980s and early 1990s Latin America moved toward an economic model based on the liberalization of trade, private investment, and privatization, established in the “Washington Consensus” (Edwards, 1995). Klak and Lawson (1990) insist that the new economic model has reconfigured the “reproduction of the economic system” in Latin America through the redefinition of the relationship between the household and the state. This reproduction dimension includes the provision of services such as education, health care, energy, telecommunications and transportation. The scenario of adjustment and liberalization has resulted in the reduction of the participation of the Latin American state in the provision of services to the population. Klak and Lawson (1990) argue that the pressure for austerity and fiscal discipline coming from international institutions, and the obligations issued from external debt have undermined the financial capacity of Latin American governments to respond to the needs of the population.

3.2.1.1. New patterns of employment

The changes in the production system and the redefinition of the relationship between household and state have generated important modifications in the patterns of employment in Latin America. First, the regulations concerning employment in the formal sector of the economy have been modified in order to permit more “flexible” contracting (Klak & Lawson, 1990; Gilbert, 1997). Second, there is a shift concerning the relative importance of the different economic

sectors in the national economies. As it was explained in Chapter 1, the service sector has increased its importance in the economy of most of the countries. Nonetheless, Roberts (in Portes, 1994) underlines the fact that this dominance does not necessarily imply a major transformation in the number of persons employed in the sector, since the most dynamic activities (banking, retail, finance, telecommunications) are by definition more capital intensive. However, those workers employed in the higher levels of such activities will certainly benefit from better working conditions and higher salaries. Sassen (1988), Dandekar (1998b), and Marcuse (1997), analyze this phenomenon around the world and describe it as the emergence of a new “global elite.” The recent shift of foreign direct investment to these sectors in Latin America, explained in Chapter 1, will certainly accelerate this process.

In fact, tertiary employment in Latin America has been dominated by the informal sector. Roberts (1994) hypothesizes that cities that have been more affected by economic restructuring, especially because of the lost industrial jobs, would become increasingly informal. For example in the case of Mexico City, one quarter of the total industrial jobs were lost during the 1980s (Gilbert, 1998) and in general Latin American countries have now higher rates of informal employment than at the beginning of the 1980s. However, Portes (1997), Gilbert (1997), demonstrate that the informal sector is unable to absorb the total displaced, and new, work force. Both authors and Scarpaci (1998) conclude that as a result, urban unemployment has increased, particularly among the poorest. The case of Argentina is particularly dramatic in this context since urban unemployment rose from 6% in 1988 to more than 20% in 1996. This scenario has exacerbated the social differences within the region.

3.2.1.2. Social equity

According to Roberts (in Portes, 1994) economic restructuring in Latin America has mainly affected the urban middle class (particularly state employees), since this group previously enjoyed the benefits of the Latin American “welfare state.” Roberts explains that social policy during the previous model had an urban bias that favored the development of coalitions between those in power and certain groups or urban dwellers. Portes (1997) reaches the same conclusion in his analysis of several countries in the Caribbean, emphasizing the impoverishment of the urban middle class. Portes and other authors (Browder et al, 1995; Miraftab, 1997; Gilbert, 1998) insist that this process of impoverishment will result in increasing competition for housing, jobs and services between the urban poor and the new impoverished groups. This trend is not

particular to Latin America; in fact the transformation of Fordism has implied the redefinition of social policy at the global scale (Harvey, 1990; Van Kempen 1997; Scarpaci, 1998).

On the other hand, the production and employment shifts have benefited other sectors of society. At the global level, Marcuse (1997) analyzes the creation of a privileged elite, defined by its involvement in the more dynamic sectors of the economy and access to the new advances of technology. Marcuse insists that this part of society is the real player in the “global village” since their contacts and relationships go beyond national limits. Following the same analysis, Dandekar highlights the existence of such groups in developing countries. These groups, “the globalizers” (1998b:8), are also associated with the dynamic sectors of the economy, often dominated by transnational corporations and their national counterparts. King explains that in India the arrival of multinationals has favored the development of a “transnational global elite” (in Dandekar, 1998a:28).

3.2.2. PHYSICAL EFFECTS OF THE NEW PATTERNS OF PRODUCTION.

The economic shift of the last fifteen years in Latin America has resulted in the development of new production patterns. Klak and Lawson (1990) associate this transformation with a global trend towards “flexible production” and the integration of the global economy. In their view “international economic forces” are increasingly dominating the “production” dimension of capital in the Latin American economies, and figures concerning the relative importance of FDI seem to confirm such evaluation.

3.2.2.1. National scale effects

According to Roberts (in Portes & Kincaid, 1994), the new economic system will have different spatial effects. At the national scale since EOI does not require the concentration of industries close the major urban markets to supply local customers, it is expected that the urban primacy of the main cities will diminish. Portes et al (1997) hypothesize in their study about urbanization in the Caribbean basin that the importance of secondary cities in countries following EOI should increase, since new growth areas related with export activities should attract new population. However, the authors acknowledge that this effect will depend on the existence of national policies encouraging decentralization and relocation. In fact, their study demonstrates that in countries like Jamaica and Dominican Republic this shift has occurred since their national

governments have pursued the industrialization of peripheral regions and therefore reducing the primacy of the capital cities. In the case of Haiti and Costa Rica, the opposite has occurred since new industries, based on export processing zones (EPZs) planned by the national governments have located close to the capital cities. Trejo Jimenez (in Dandekar, 1998a) explains that the new economic model in Mexico has created “winning” and “loosing” cities depending on the export or domestic orientation of their industries. In that sense “winning” cities, or in other terms those that are able to play a role in the global economy, will tend to attract new population.

3.2.3. URBAN RESTRUCTURING

3.2.3.1. Industrial location

In his analysis, Roberts (1994) argues that in the new export oriented industrialization model the proximity to particular transportation and communication facilities (airports, ports, highways) is in fact the major criterion for industrial location within one country. Portes et al (1997) and Dandekar (1998b) suggest that these constraints will induce a new pattern of urbanization that will tend to erase the differences between urban and rural and will result in the development of metropolitan regions, often associated with “mega cities.” Following those lines, Ford (1996) in his revised model of the Latin American city acknowledges the development of “suburban industrial parks” connected to the city through improved infrastructure. Similar patterns have been described in other areas of the World, for example King (in Dandekar, 1998a) notes that in the case of New Delhi both the new industrial and high income residential developments are moving nearby the highways that connect the city to the international airport. Sykora (1994) describes the same phenomenon in Prague, where new export oriented industries and high-income residences are developed in the highways linking the city to the airport and to Germany.

3.2.3.2. Service sector location

However, the transformation of the industrialization process is not the only driving force behind the restructuring of Latin American cities. As discussed in the previous section, the new economic model has also resulted in the increasing dominance of the service sector, both in terms of investment and production. Multiple authors (Crowley, 1995; Ford, 1996; Gilbert, 1998) have noted the emergence of new commercial land uses in Latin American cities, mainly associated with the development of commercial strips and suburban shopping centers, basically

modeled after the ones in the United States. Crowley relates such development to the construction or improvement of urban infrastructure by local or national government. Ford compares it to the “Edge cities” of the United States. These areas would include high-income residences with special commercial and financial services, often associated with the traditional commercial “spine” that Ford & Griffin described in their 1980 model. These trends have also been observed worldwide. In the case of the United States, Marcuse (1997) sees the “edge city” as one of the three new patterns of urban development resulting from globalization. Perera (in Dandekar, 1998a) describes the relationship between the liberalization of the economy in Sri Lanka and the creation of new urban developments directed to multinational corporations and national businesses related with their operations. In fact, authors like Goldsmith (1997) see this global trend of change as a result of the “force of the market model” represented by the United States.

3.2.3.3. Residential restructuring

The impoverishment of the middle class and the diminishing role of the state in urban development have lead to important transformations in the residential sector of Latin American cities. Gilbert (1998) present figures that demonstrate the growing importance of self help housing in Latin American cities, accelerating the speed that the process had before the crisis. Portes (1997: 34) describes the cases of several Caribbean and South American cities where medium income groups converge into the same areas of the city with low-income groups. The rise in the price of the land and the elimination of government subsidies appear to be the main causes of such phenomenon. This process takes different forms. In the case of Kingston, Jamaica, Portes (1997) notes that both low and medium income groups “moved” to the periphery because of the lack of available space within the city limits. In other cases, like Bogotá and Santo Domingo, Portes describes a different pattern, where the middle-income groups move to areas that were previously regarded as “unacceptable” (1997: 34). In the case of Santo Domingo Portes (1997) talks about “crossing the bridge,” referring to the fact that a river separated the traditional poor areas of the city from the more prosperous neighborhoods. The transformation of the housing patterns in the region have also been noted by Miraftab (1997) who explains that in the case of Guadalajara the lowest income groups of the population have now limited access to peripheral settlements since land prices have increased and middle income groups, displaced from their traditional neighborhoods, have started to acquire parcels in those areas. In her

opinion rental arrangements in the inner city are likely to increase because of this change. Similar results come from the research of Browder et al. (1995) in which it appears that peripheral settlements in Santiago have a very diverse income distribution demonstrating the outside “move” of middle income groups.

On the other hand Portes (1997) also notes the reconfiguration of the spatial location of high-income groups and their relationship with other groups of society. According to Portes, these groups have continued their previous movement to the outside of the city as noted by Griffin & Ford in their 1980 model (see previous chapter). However, in some countries the rise of informal activities and informal settlements has reached those privileged areas, generating what the author calls a “perverse” integration of the poor seeking for jobs and opportunities next to the rich.

The case of Kingston typically demonstrates this restructuring process. Portes (1997) indicates that before the crisis of the 1980s the city reflected the typical pattern of polarization of many cities in Latin America with clear distinct locations for different social groups. Low-income groups living in irregular settlements occupied the south sector of the city, medium income residents lived in the median part and high-income groups were concentrated in the northern suburbs. There were clear distinctions of population density, income and even ethnicity between these districts. In the late nineties this structure had suffered multiple changes. First new irregular settlements appeared in the northern periphery, these communities not only included low-income households but also medium income ones, creating new “suburbs of the poor” (1997: 33). Simultaneously new shantytowns, constructed by the poorest, appeared within the wealthiest districts. Both processes resulted in diminishing social polarization and the partial reversal of the pre-1980s pattern.

3.2.3.4. Provision of public services

Gilbert (1998) explains that one the most important promoters of the urbanization process in Latin America until the beginning of the crisis was the state. As it was discussed in the previous chapter, the state intervened in several levels of the process, providing services, building infrastructure, and constraining or facilitating the development of spontaneous settlements. However this “intervention capacity” has declined in the last fifteen years. In the case of Bogotá, Gilbert (1997) examines the situation of public utilities in the framework of financial austerity, and concludes that coverage and service quality are diminishing, which certainly affects the

living conditions of the poorest. For Ford & Griffin (1980), infrastructure provision (roads, transportation, water, electricity) represented one of the major forces behind the consolidation of the Latin American city; therefore, it can be expected that the consolidation process will be transformed by the state's role reconfiguration. Finally, as it was noted in Chapter 1, the economic reform in Latin America has initiated the privatization of public services to local and foreign investors, it is still to be seen how the intervention of global capital affects the provision of those services to the different social groups.

This section explored the relationship between economic reform, social equity, employment and transformation of the urban structure of Latin American cities. It appears that in the last two decades the major components of the city structure have experienced important changes intimately related with new economic policies. The following section will present current models of the city and introduce a new model that encompasses both social and spatial transformations.

3.3. TOWARDS A NEW MODEL OF THE LATIN AMERICAN CITY

Griffin's and Ford's model for Latin American city (see 3.1.4) represented a major step in the creation of a comprehensive model of the urban morphology of the region. Nonetheless after its presentation in 1980 the model has been criticized because of its "simplicity." According to Crowley (1995) the model seems to ignore the complexity of Latin American urban fabric. Moreover, as the previous chapter explained, the basic components of the urban landscape have been transformed during the last two decades and therefore new models are needed in order to capture the changes.

3.3.1. MODEL OF ORDER AND DISORDER

In 1995 William Crowley presented a model that intended to incorporate "the disorder as well as the order of urban Latin America." In order to do so, the author examined the three main land uses of the city, residential, commercial and industrial and collapsed them into one "synthesized" model (see figure). In the case of commercial activities Crowley acknowledged the importance of the CBD and the Spine, as defined by Griffin & Ford (1980) as primate spaces for commerce. However, he also stresses the presence of new commercial spaces, the *Strip* and the *Shopping Center* linked with transportation improvements and higher-class consumers. Finally the presence of informal commercial activity is also accepted by including the *Market*, and the *Informal vendors* as important players in the CBD. Industrial land use has three components, first individual plants dispersed all over the city, second old industrial areas created during the first half of the century nearby the CBD and finally more recent industrial parks located in the periphery. Residential uses are classified in four groups according based on their socio economic status. Crowley notes that elite and middle class housing are not only concentrated around the *Spine*, new high standard residences have appeared in other areas of the city connected with transportation facilities. Working class residences occupy a large area of the city, including government housing, housing tracts and consolidated informal settlements. Finally in Crowley's perspective, squatter settlements occupy peripheral locations and certain undesirable locations close to downtown. The final model presents a complex and discontinuous picture that emphasizes the interaction between the different components of the urban structure. The model to be introduced in this thesis will retain Crowley's classification of major urban land uses.

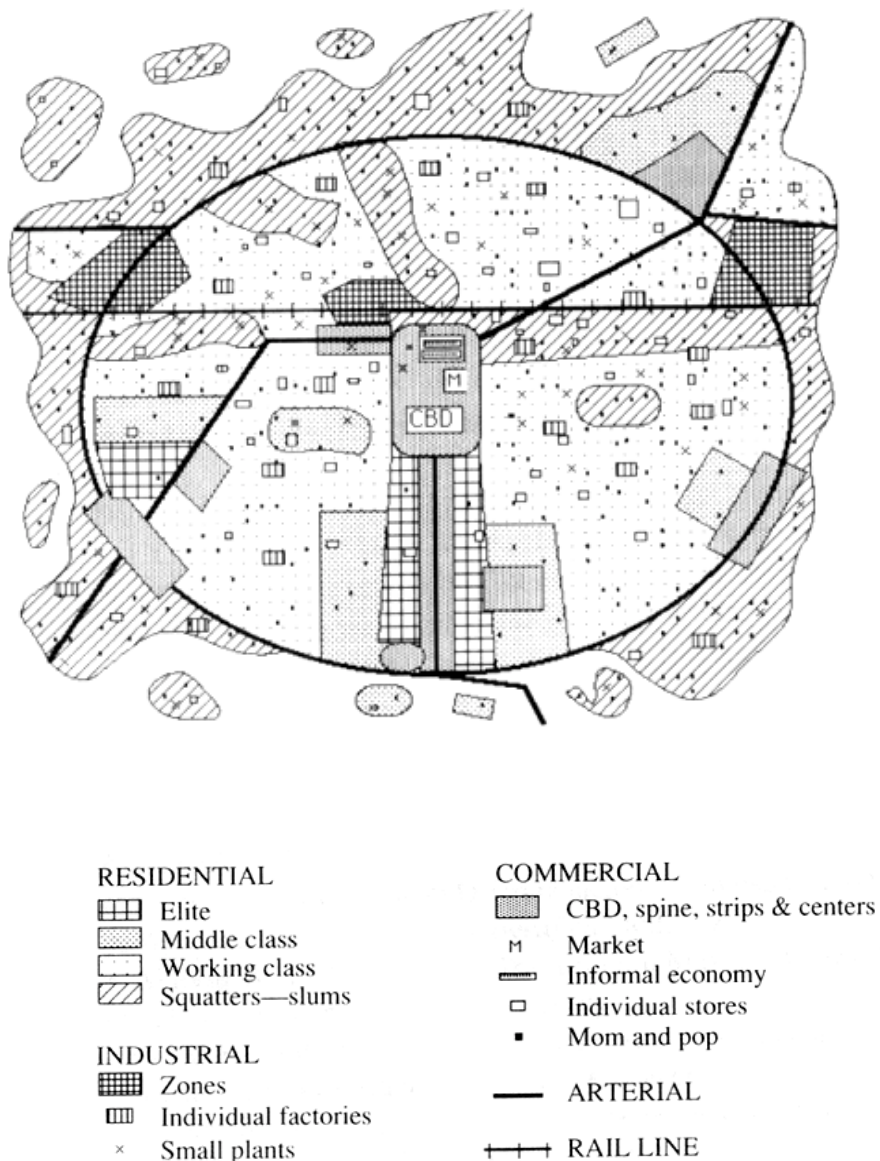


Figure 3.5 **Crowley's model for the Latin American city (1995)**

3.3.2. ECOLOGIC AREAS MODEL FOR MEXICO CITY

To explain the patterns of social segregation in Mexico City, Peter Ward (1990) introduced a model based on concentric residential zones and nuclei. These zones follow a similar configuration that the one explained by Griffin and Ford (1980), low income groups are divided in two categories, old and new proletarian, the first living around the core district and the latter in the outside periphery. The higher income groups occupy the spine shaped districts where upper middle and middle-income group areas serve as buffers between elite housing and proletarian

residences. Moreover, Ward notes the existence of isolated nuclei of higher income groups both within the city and outside its perimeter. The model of the Globalized Latin American City that will be introduced at the end of this chapter will retain Ward's idea of a process of working class groups moving towards metropolitan periphery and the progressive conformation of autonomous nuclei in peripheral locations.

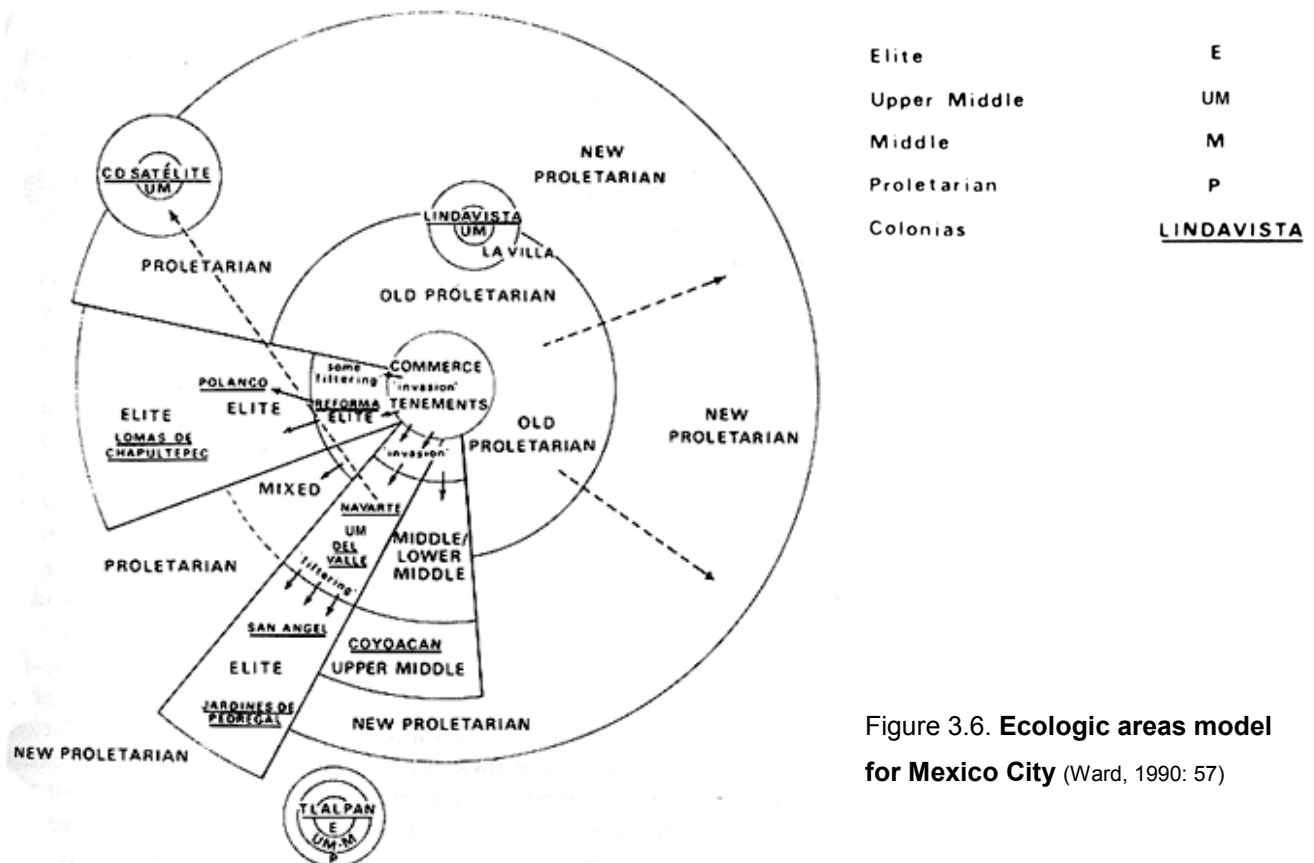


Figure 3.6. Ecologic areas model for Mexico City (Ward, 1990: 57)

3.3.3. THE IMPROVED MODEL OF THE LATIN AMERICAN CITY STRUCTURE

In 1996 Larry Ford reacted to the criticisms about the 1980 model by presenting a new version that intended to integrate the changes resulting from the transformation of the cities in the region. The new version is still based on three major components, CBD, Spine and the concentric rings of residences, however Ford introduces new subcomponents within each one of them. The CBD is divided in three parts, the formal commercial and working section, the market and informal commercial district and a gentrified district resulting from historic preservation. In another hand,

the Spine now incorporates a “Mall” comparable to the American “Edge City.” Finally the housing rings incorporate middle-income housing surrounding the elite districts. This study will incorporate this new classification of commercial uses, CBD, market, spine, strip and Mall to the model of the Globalized Latin American City.

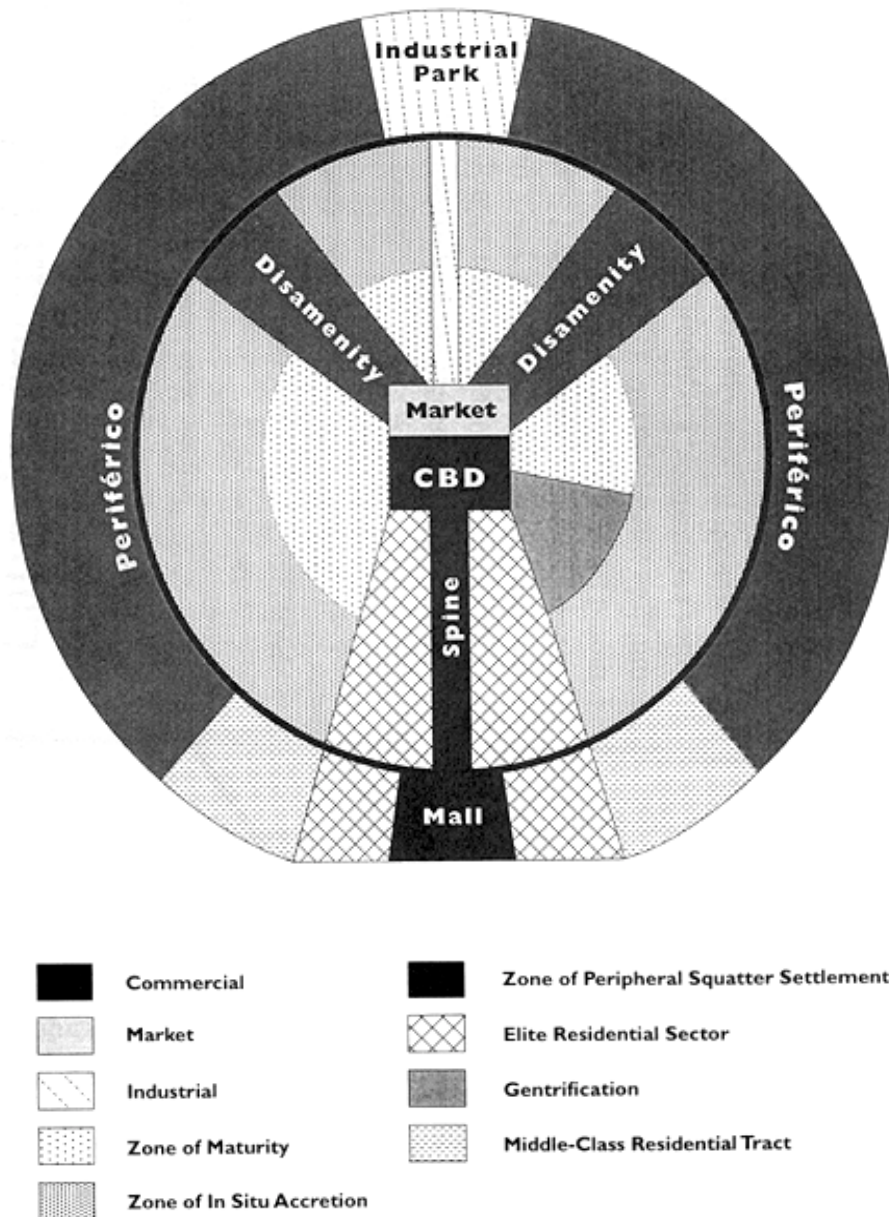


Figure 3.7 The improved model of the Latin American city (Ford, 1996)

3.3.4. PROPOSED MODEL OF THE GLOBALIZED LATIN AMERICAN CITY

Building upon the previous morphological models and on the social and spatial transformations described in section 3.2, it is possible to construct a new hypothetical model of the urban structure of Latin American cities that encompasses the transformations resulting from economic globalization.

The model of the Globalized Latin American City divides the urban space in three major land uses: commercial and services, industrial, and residential. Each one of these uses has various spatial morphological areas as presented in Crowley's model (1995). Commercial and service land uses are divided in five areas: the CBD, the Market, the Spine, the Strip, and the Mall. This classification takes from the model presented by Ford in 1995. The *CBD* represents the core district of the city and concentrates numerous employments in private and public services as well as in retail. The *Market* is the area of the CBD that has been invaded by informal activities, mainly street vendors. The *Spine* includes the main avenue or boulevard originated in the CBD that concentrates multiple commercial and service activities and follows the elite's movement to the periphery. The *Strip* is a suburban avenue that concentrates new kinds of commercial activities such as automobile sales, shopping centers, supermarkets, following an US like pattern. Finally the *Mall* is the space where new and more sophisticated retail activities concentrate, mainly directed to high-income groups, conforming the core of an emerging "Edge City."

Residential uses are divided in four sectors: Elite, Middle Class, Consolidated Working Class, and Working Class. These categories are taken from the models presented by Ward (1990) and Crowley (1995). *Elite* residential areas still present a radial pattern pursuing the movement toward the periphery, as presented by Ward (1990) and Ford (1996). Dominant social groups including landowners, businessmen, and wealthy liberal professionals occupy this sector, which tends to present higher land prices. *Middle Class* residential areas occupy several locations: first, the historic pattern of buffers between elite groups and working class groups; second, peripheral locations in the metropolitan fringe, and finally post suburban locations associated with industrial nodes. Wage-based employees in the private and state sector live in this areas in neighborhoods built within the formal economy.

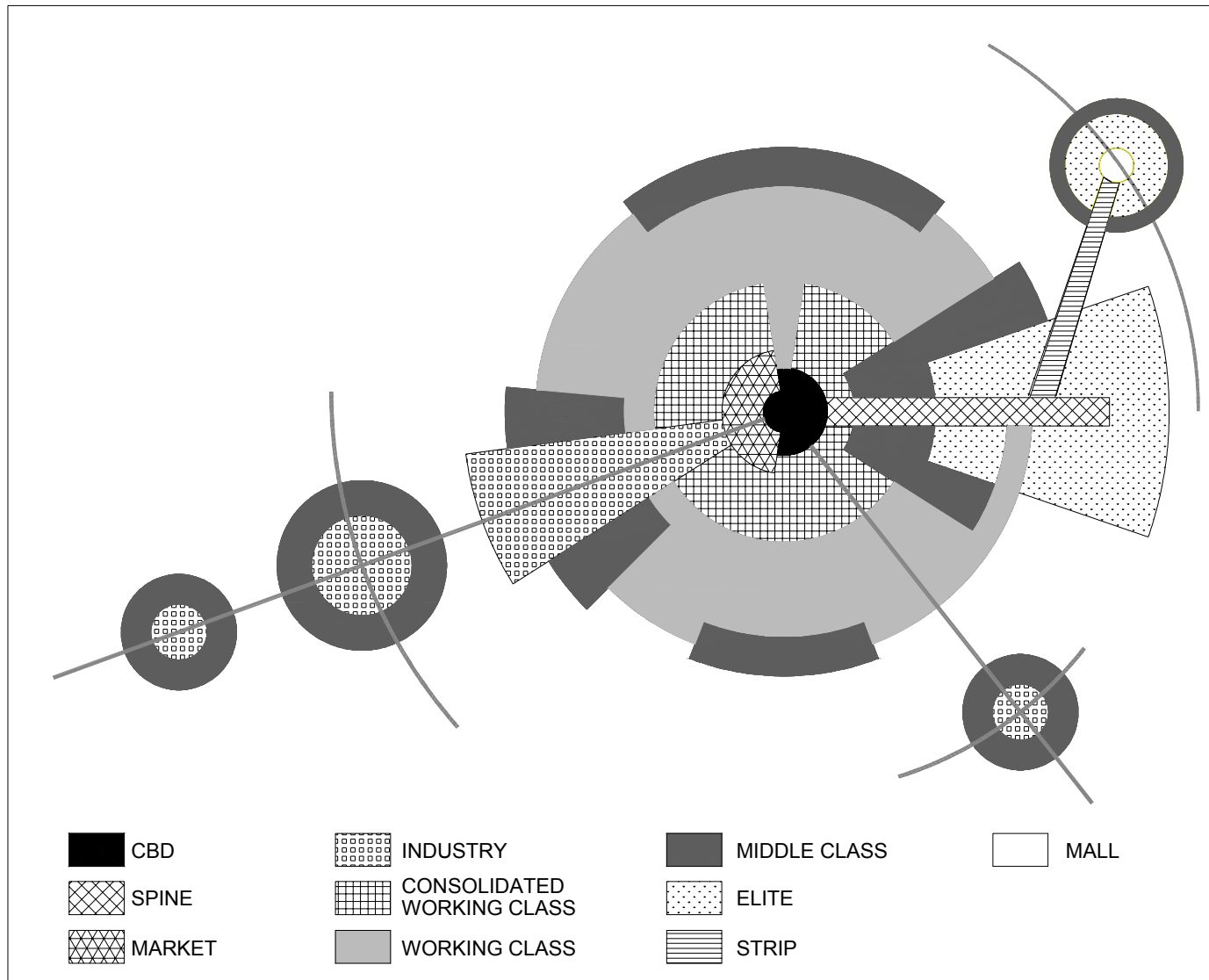


Figure 3.8 **The proposed model of the Globalized Latin American City**
 Source: by the author

Consolidated Working Class groups occupy areas around the CBD as presented by Ward (1990) and Ford (1996). Low-wage workers in the formal economy and households employed in informal activities reside in this sector. These areas might have been originally built by the informal sector but since they are older they already have all services. *Recent Working Class* areas occupy the rest of the metropolitan space. Similar social groups to the ones mentioned before occupy these areas, however since these neighborhoods are more recent they might not count with all urban services. Industrial uses are divided in two areas: first, industry within metropolitan limits, which tends to correspond to those industries of the import substitution phase and second, distant industrial nodes, which correspond to the export-oriented industrialization phase.

The model of the Globalized Latin American City also intends to represent four major restructuring processes, discussed below, that appear to be occurring within the Latin American city and seem to be functionally related to globalization and economic transformation. Moreover, these four metropolitan processes will constitute the four basic research subjects of the empirical study in Metropolitan Area of San Salvador.

3.3.4.1. Trend to Mega-urbanization

Shifts in production patterns have altered the location and morphology of industrial land use. Roberts (in Portes & Kincaid, 1994) and Portes (1997) explained that new industrial development does not occur any longer within the typical city limits. New industrial developments, associated with Export Oriented Industrialization (EOI), are now located along major highways or communication nodes within a much larger region. It is possible to assume that this trend should lead to the development of the metropolitan hinterland, since these new industrial centers will pull new waves of immigrants attracted by job opportunities.

Independent production complexes, such as EPZs can grow as a series of satellites of major urban centers following the pattern that Dandekar (1998b: 8) called “mega-city urbanization,” where mega-urbanization is defined as a process of extended and non contiguous urban growth at the regional scale that favors a polycentric configuration of the metropolis with blurring distinctions between urban and rural.

This process is not necessarily related with the strict size of the city but with an expanded array of economic, spatial, and social linkages. In the case of Sao Paulo, Santos (in Gilbert,

1996), explains that in the nineties industrial growth and employment expansion has occurred in a radius of almost 200 kilometers from the core city. At a smaller scale Portes (1997: 29) considers that the new patterns of urbanization in San Jose, Costa Rica, which is a city of little over one million people already reflect the characteristics of mega-urbanization. New productive activities, related with exports, are no longer concentrated within the urban perimeter but are still located in neighboring satellite cities, that tend to constitute a “metropolitan region.”

3.3.4.2. A Latin American Edge City

Chapter 2 noted that the new wave of foreign direct investment in Latin America has been attracted by specific economic activities, mostly in the tertiary sector, particularly those activities having a strong connection with the global economy like retail, banking, and telecommunications especially in the largest economies of the region (Brazil, Argentina and Mexico). These formal commercial and service activities were traditionally performed in the *Spine*, the *Strip* and the *Mall*; thereafter these spaces could be consolidated and transformed depending on whether they are able to satisfy the requirements of the new activities, for example for banking and insurance headquarters. When the traditional city structure is not able to meet those standards, capital will tend to develop new spaces, as it has done in developed economies in the form of Edge Cities (Marcuse, 1997). The fact that elite groups are also pursuing their progressive migration to the periphery will also contribute to consolidate these privileged spaces (Ward, 1990; Ford, 1996).

3.3.4.3. The Expansion of Informal Activities

Other authors like Portes (1994, 1997) and Gilbert (1997) emphasize the trend towards greater informality in the urban economy. The lost of manufacturing jobs in previous import substitution industries, as well as the reduction of state employment caused by austerity measures results in increasing urban unemployment, especially in those cities that have not been able to integrate themselves into the global economy (see section 3.2). In most of the cases this new unemployed workforce would tend to find new job opportunities in informal activities like street vending. Therefore one could hypothesize that as a result of these economic and social changes, linked with the global transformation of the economy, the *Market* in the CBD will attract more vendors. However, new areas of the city would also tend to be occupied by informal vendors, since in multiple cases like Quito (Ecuador), Lima (Peru), Puebla (Mexico) informal vending has been prohibited in the CBD as a result of preservation and rehabilitation plans.

3.3.4.4. Residential Restructuring

As it was explained in Section 3.2 in the last two decades residential uses in urban Latin America appear to have undergone deep changes, relocating and integrating diverse social groups.

Middle-income groups appear to be the most affected by economic restructuring since they have lost previous benefits granted by the state, such as subsidies, employment, and public services. These wage based groups occupy now extended areas of the periphery, sharing spaces that were previously restricted to the lower income classes, since they are no longer able to afford better located areas. Simultaneously the most deprived groups tend to get closer to the higher income neighborhoods seeking jobs. Portes (1989) indicates that this restructuring process will lead to the densification of the city and foresees new transformations in the consolidated area surrounding downtown.

In that sense the model of the Globalized Latin American City intends to identify four critical trends in the recent development of Latin American cities. First the development of mega-urbanization, second the expansion of the informal economy and its informal spaces, third the emergence of “globalized” areas of retailing, manufacturing, and corporate activity and the reshaping of the residential space particularly at the periphery. However, as many studies indicate (Roberts, 1994; Portes, 1997; Gilbert, 1997), these patterns are not uniform within the region since particular local characteristics, especially state action, affect the outcomes of the globalization forces. In fact, as Portes emphasized in 1989, the apparently similar processes of urbanization of the region before 1980 have been replaced by more divergent and variable dynamics that also require the development of more flexible theories and approaches towards urbanization.

The empirical part of this thesis will focus on the specific case of recent post suburban developments in the Metropolitan Area of San Salvador (MASS), which are apparently connected to Export Processing Zones. This study will explore the existence of two of the core processes included in the model of the globalized Latin American city, the trend to mega-urbanization and the process of residential restructuring.

4. RESEARCH METHODS

The model presented in Chapter 3 (section 3.3) intends to synthesize the recent processes of economic, social and spatial reconfiguration of the Latin American city that appear to be connected to globalization and are acknowledged in the literature. The original research of this study will examine the proposed model of the Globalized Latin American City in the case of the Metropolitan Area of San Salvador (MASS), the capital city of El Salvador.

The interaction between economic globalization and urbanization will be analyzed at two levels. The first will focus on the process of change of the Salvadoran economy at a macro scale level. The second part will empirically investigate at a micro scale level the relationship between one expression of globalization, the development of EPZs, and the residential developments that have occurred next to them in the periphery of San Salvador. This hypothetical relationship should illustrate two of the urban processes described in the model, the trend to mega-urbanization and residential restructuring.

The results of both analyses, the applicability of the new model to a specific city and the possible relationship between EPZs and housing developments, will represent the contribution of this research project to the literature concerning the interaction between globalization and social and physical reshaping of the Latin American city. This chapter describes in two parts the different quantitative and qualitative methods used to pursue the research. The first part describes the methodological approach at the macro scale level, while the second one addresses the empirical methodology for the micro scale study.

4.1. MACRO SCALE LEVEL ANALYSIS

At the macro level the research is interested in confirming whether El Salvador and its capital city follow the economic and urban patterns described in the theoretical part of the study, which described both processes in the Latin American context. This test will be done in two parts, the first will be economic, and the second will be spatial.

4.1.1 GENERAL ECONOMIC TRENDS

This part of the research will describe the economic transformations (production, trade, and investment) during the last two decades in El Salvador, in order to confirm whether these processes follow similar trends that other Latin American countries and try to determine possible

unique characteristics. It uses the same theoretical framework that the one used for the study of Latin American economic restructuring. Research relies on secondary data coming from national sources such as the Central Reserve Bank, Banco *Central de Reserva* (BCR), the National Bureau of Statistics and Census, *Dirección General de Estadística y Censo* (DIGESTYC) and international organizations particularly the World Bank (WB), the Inter American Development Bank (IADB), and the Economic Commission for Latin America and the Caribbean (ECLAC).

4.1.2 MORPHOLOGICAL CHANGES

This part focuses on a longitudinal study of the major spatial transformations of the city of San Salvador in the last two decades, in order to determine whether the overall model presented in Chapter 2 of this paper applies to this particular case. In order to achieve this the research will rely on three methodologies: direct observation, remote sensing, and key informant interviews.

4.1.2.1 Direct observation

The study examines evidence of the urban restructuring processes suggested in the literature about Latin American urbanization. Data supporting this method will come from photographs (by the author), land use maps, and building permit data from the San Salvador Metropolitan Area Planning Office, *Oficina de Planificación del Area Metropolitana de San Salvador* (OPAMSS).

4.1.2.2 Remote sensing

The study of the transformations of the city at the larger scale will be supported by satellite imagery, aerial photographs and city plans provided by OPAMSS, the National Geographic Institute, *Instituto Geográfico Nacional* (IGN) and commercial satellite imagery providers.

4.1.2.3 Interviews with key informants

A series of key informant interviews were developed in order to grasp a comprehensive vision about the recent urbanization process in San Salvador. These interviews included one senior architectural and urban scholar at one of the private universities of the country, a planning official at OPAMSS (see Appendix 1). The names of the informants are omitted to assure anonymity .

However, it is important to note that the macro scale analysis should primarily serve as a background for the micro scale empirical research. Because of the complexity of both processes of economic restructuring and urbanization of the AMSS and time and space constraints this review cannot pretend to be exhaustive. Moreover there are certain data limitations, primarily of

different units analysis. Economic processes tend to be analyzed at the national level and only in some cases at the metropolitan level, while socio demographic information is available at the municipal level. The fact that different branches of the national and local government, or even international agencies collect the information, poses the question about time and category definition consistency. Therefore the macro scale analysis is above all exploratory and illustrates the big trends of economic and urban transformations.

4.2 MICRO SCALE LEVEL ANALYSIS

At the micro scale level the research intends to describe, understand, and analyze the relationship between two major components of recent urban transformation. The study will concentrate on the new residential developments that have been built outside the perimeter of the Metropolitan Area of San Salvador in close proximity to the new export processing zones (EPZs). The research consists in the case study of two new developments occurring next to the EPZs, Ciudad Obrera and Montelimar. Two complementary methodologies were used to achieve this analysis, first a random sample household survey, and second open-ended interviews with key informants.

4.2.1 HOUSEHOLD SURVEY

The survey collected data concerning the resident population in three different dimensions, demographic, socio economic, and urban spatial. Moreover it will also inform about the hypothetical functional relationship that exists between the new developments, the EPZs, and the Metropolitan Area of San Salvador.

4.2.1.1 Research hypotheses

The research hypotheses come from the review of the literature on globalization and urbanization in Latin America presented in Chapters 2 and 3. This research specifically explored two of the four processes hypothesized in the Latin American city model introduced in Chapter 2 (section 2.3.4), first the trend to mega-urbanization, second the process of residential restructuring.

A/ Trend to mega-urbanization

Mega-urbanization is defined as a process of extended and non-contiguous urban growth at the regional scale that favors a polycentric configuration of the metropolis with blurring distinctions between urban and rural (Gilbert, 1996; Portes, 1997; Dandekar, 1998b). The process of Export Oriented Industrialization (EOI) has favored the development of industrial complexes outside of the metropolitan areas and that these new industrial nodes area attracting important amounts of

migrant population since they are main sources of employment. Two specific hypotheses rise from this assumption: (A1) these neighborhoods are a destination of migrants attracted by job opportunities in the export industrial sector, therefore one could expect that a significant part of the active population works at the EPZs; (A2) workers seek to minimize commute time therefore job location is a major factor to decide to move to these neighborhoods.

B/ Residential Restructuring

This assumes that the process of economic restructuring, based on the reduction of the state and economic liberalization has particularly affected wage-based middle class groups, which are now forced to live next lower class groups in a more “integrated” periphery. Two specific hypothesis rise from this assumption: (B1) for a significant part of the population, moving to these neighborhoods is a household response to worsened economic conditions; (B2) housing availability is a major factor to decide to move to these neighborhoods for those impoverished middle class groups.

4.2.1.2 Design and Sample Strategy

A random one stage stratified sample strategy was used for the survey. The site plan of the neighborhoods, provided by the developers, served as sampling frame for the study. The population was the total number of occupied houses in the neighborhood; the sample population was approximately ten percent of the total population, 52 households in the case of Ciudad Obrera and 53 in Montelimar.

The unit of analysis was the households, but educational and occupational data was collected at the individual level and results have been aggregated at the neighborhood level. The sampling process was divided in two steps; first a number was assigned to each house. Second, houses were selected using an initial random start number the subsequent selected houses resulted from adding a skip factor of eleven to the start number until completing the desired sample population of 55 households in each site.

The subject of the survey was the household head or its spouse, if the selected unit was not applicable because the valid subject was not home the first day of the survey (Saturday) the survey was administered the next day (Sunday); if this was not still possible the survey was administered three days later (Wednesday). If the third attempt failed or if the house was definitely not occupied the survey was delivered to the next unit to the right. Only three units in Ciudad Obrera and two in Montelimar required three attempts to be contacted. After final

revision by the author three surveys were rejected as non-valid in Ciudad Obrera, while two were rejected in Montelimar.

Two architecture students from the local Central American University (UCA) and the researcher were in charge of administering the survey in Spanish, person to person, during the second weekend of January 2000 in Ciudad Obrera and the third week of January for Montelimar.

4.2.1.3 Instrument

The instrument consisted in a structured questionnaire comprising nineteen questions (see appendix 2) dealing with demographic, socio economic and urban spatial issues. Demographic data gathered information about the household, its size, age of the members, and familiar relationship. Socio economic data furnished information about the social status of the residents, education level, occupation, secondary occupations, and previous place of residence. Urban spatial data focused on the spatial linkages between the neighborhood and other components of the urban structure, mainly job location and former place of residence. Responses to the survey were coded and processed in an SPSS v8.0 computer program.

4.2.2 INTERVIEWS WITH KEY INFORMANTS

Interviews with key informants provided complementary information about the relationship between neighborhoods and EPZs. These included, managerial staff from the local corporation that developed and administers one of the EPZs, the project manager of one of the neighborhoods' developers and a representative of one of the foreign capital plants operating at the EPZ (see appendix 1). The names of certain informants are omitted to assure anonymity.

The following chapter will address the economic section of the macro scale analysis.

5. ECONOMIC RESTRUCTURING IN EL SALVADOR; A LABOR BASED GLOBALIZATION

In order to know whether economic restructuring, linked with globalization, is related to the transformation of urbanization and regional spatial patterns in El Salvador, it is necessary to understand the process of change in the Salvadoran economy. This chapter will utilize the same framework of analysis used to describe and analyze economic change in Latin America in Chapter 2. The process of economic restructuring in El Salvador will be addressed in five parts. The first part will introduce a general overview of the economic model implemented in El Salvador after 1989. Section two will discuss changes in the production pattern. Section three will review the shift in trade policies. Section four will explore the flows of global capital in the Salvadoran economy. The final part will examine with more detail the export promotion policy implemented in the country after economic reform. This will provide the background for the upcoming discussion about the specific connection between economic transformations related with globalization and spatial restructuring in El Salvador.

5.1. NEW ECONOMIC POLICY

Starting in 1989, with the arrival into power of the conservative government of Alfredo Cristiani, El Salvador started a process of economic restructuring closely following the major axis of the new economic policies implemented in Latin America after the emergence of the Washington Consensus (see Chapter 2). In his review of Latin America's structural adjustment Edwards (1995) classifies El Salvador as a third wave reformer that had by that year already implemented three of the five major reforms. These reforms consisted in trade liberalization, fiscal reform, and financial deregulation.

Trade liberalization started to be implemented after 1990, consisting of the privatization of foreign trade, tariff reduction, export promotion policies, and the pursuit of free-trade agreements with other Central and Latin American countries. Fiscal reform begun in 1992 with the enactment of new taxes, particularly the value added tax, *Impuesto al Valor Agregado* (IVA), the elimination of other taxes such export taxes, tariffs over imports and attempts to reduce and decentralize government (e.g. elimination of the Ministry of Planning, and the Urban Housing Institute, education responsibilities devolved to the communities). In terms of financial

deregulation, laws concerning the operations of the Central Reserve Bank, *Banco Central de Reserva* (BCR), liberalization of the dollar market, measures to stimulate foreign investment, and the privatization of the financial system were implemented between 1991 and 1994 (BCR, 2000).

The second consecutive conservative government of the Nationalist Republican Alliance, *Alianza Republicana Nacionalista* (ARENA) emphasized the fourth axis of reform: privatization. The major previously state-led activities such as sugar processing, energy distribution, oil processing, pension funds, and telecommunications were privatized between 1995 and 1999. Along these same lines, the third successive conservative government, inaugurated in 1999, announced its intention to privatize water provision, and state-provided health services, and initiate major labor market reforms, which is the fifth axis of the Washington Consensus. Nonetheless, political and social consensus around this economic design does not exist as major strikes, and the political consolidation of the political left headed by the former guerrillas of the Farabundo Marti Front for National Liberation, *Frente Farabundo Marti para la Liberación Nacional* (FMLN) demonstrate.

5.2 THE TRANSFORMATION OF PRODUCTION.

Ten years after the implementation of the new economic model, the Salvadoran economy has experienced numerous changes. As Table 5.1 shows, economic evolution in El Salvador can be divided in two major periods. The first phase goes from 1980 to 1991, when the economy was paralyzed, both because of the civil war and generalized economic crisis in Latin America. The second phase begins in 1991 until today, corresponding with the end of the conflict and the implementation of the economic reforms, shows important rates of growth. However, there is a differentiated pattern of economic behavior after 1995, when rates of growth have diminished. As seen in Chapter I, this pattern recalls a general trend in Latin America in which the new model stimulated rapid growth in the short term after its implementation and smaller rates in the mid term.

Table 5.1

GDP

	1980	1985	1988	1991	1993	1995	1998
GDP (millions 1990\$)	4,334.70	3,765.30	3,987.40	4,319.00	4,987.70	5,627.10	6,155.90
GDP/capita (1990\$)	945.20	769.53	795.57	829.46	918.71	992.61	1,020.54
Average GDP growth to previous date		-2.6%	2.0%	2.8%	7.7%	6.4%	3.1%
Average per capita growth to previous date		-3.7%	1.1%	1.4%	5.4%	4.0%	0.9%

source: BCR (1999, 1994), ECLAC (1999)

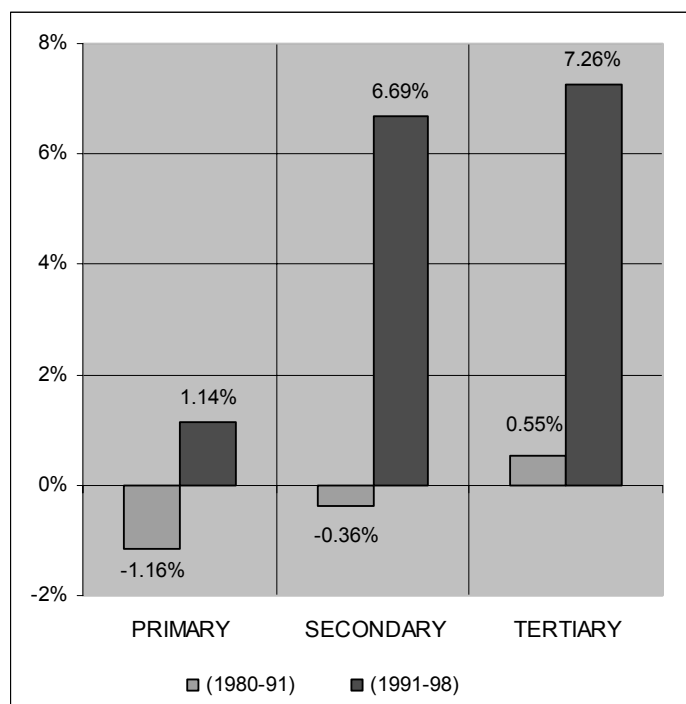


Figure 5.1 Average annual growth by economic sector in El Salvador

Source: BCR (1999a)

Table 5.2 Composition of GDP (%)

	1980	1991	1998
agriculture and mining			
PRIMARY	19.3	16.9	12.8
manufacturing	22.9	22.7	22.9
construction and utilities	4.6	4.2	4.4
SECONDARY	27.5	26.9	27.3
retail and restaurants	17.2	19.4	19.3
transportation	6.8	7.6	8
financial services	11.0	16.2	17.3
personal services	13.2	5.9	5.4
government	5.1	6.4	5.6
other	0.0	0.7	4.2
TERTIARY	53.3	56.2	59.8

source: BCR (1999, 1994), ECLAC (1999)

In order to grasp a more complete picture of restructuring in El Salvador it is interesting to compare the evolution of different sectors of the economy in the last two decades. In terms of economic sectors, Figure 5.1 demonstrates the expansion of the tertiary and secondary sector, while the primary has remained stagnant. In fact in real values agriculture production in El Salvador is still below its 1980 level, and only 10% over its value at the end of the war. In that sense the Salvadoran case differentiates itself from other Latin American countries where agriculture production, particularly

of export oriented crops has been favored by the new model. The fact that industrial production has been able to keep the same rhythm of expansion as the rest of the economy is also a unique feature since in most of Latin America industrialization has been inhibited by the new policies, particularly trade liberalization (see Section 2.3.1). Table 5.2 portrays the evolution in the composition of the GDP

in the last eighteen years. These figures confirm the dramatic loss of importance of agriculture, the constant character of manufacturing and retail and the emergence of financial services. This trend, as explained in Chapter 2, is consistent with the behavior of other economies in the region.

Therefore, the new economic model has generated certain significant changes in the productive structure of the country. Chapter VI will examine the spatial restructuring patterns generated by these transformations.

5.3 TRADE IN THE NEW ECONOMIC MODEL

Opening the economy to the world market is one of the leading principles of the new model. Both exports and imports have been stimulated by a series of measures, dealing with three major areas. First, the foreign exchange market was liberalized, leaving the price of the dollar to be determined by supply and demand. Second, import tariffs were reduced and simplified, from 25 categories ranging from 0 to 290% to five categories up to a maximum of 20% (Paus, 1995). Moreover, these regulations have taken place in the broader context of the Central American Common Market. Finally export promotion legislation has been passed, reinforcing the pre-existing laws coming from the early 70s, this includes the export reactivation law, the industrial free zones law, and formalities concerning carrying and customs (BCR, 1999a).

Table 5.3 **Foreign trade** (millions of 1990\$)

	1980	1985	1988	1991	1993	1995	1998	average growth (1980-1991)	average growth (1991-1998)
Exports	1,075.00	679.00	603.00	719.80	1,031.80	1,661.30	2,445.90	-3.0%	34%
Imports	974.90	695.50	1,006.80	1,512.70	2,156.80	3,352.20	3,959.50	5.0%	23%
Trade balance	100.10	(16.50)	(403.80)	(792.90)	(1,125.00)	(1,690.90)	(1,513.60)	-81.1%	13%

source: BCR (1999, 1994), ECLAC (1999)

Table 5.3 shows the evolution of foreign trade in El Salvador. As in the case of production, two phases clearly appear. The first until 1991 characterized by diminishing exports and imports growing at a moderate rate. The second one to date demonstrates a highly dynamic

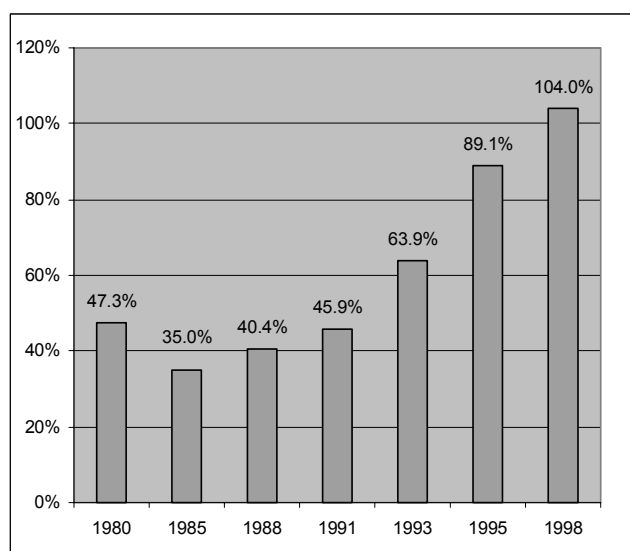


Figure 5.2 **Ratio foreign exchange / GDP**
Source: BCR (1999a)

export sector and up surging imports.

Although this pattern follows the general tendency in Latin America, El Salvador is one of the few countries in the region where exports grew faster than imports after 1991, however it is still presenting a significant trade deficit. Moreover, as in most Latin American countries, the expansion of trade is significantly higher than that of production.

Figure 5.2, demonstrates this fact, showing that the ratio trade/GDP has more than doubled in the last seven years.

Knowing which sectors are pushing the expansion of trade, gives an idea about the transformations in the economic system. The Central Bank classifies exports in three broad categories, traditional, non-traditional and maquiladora. Traditional exports refer to coffee, cotton, sugar and seafood; non-traditional exports refer to manufactures in general; and maquiladora refers to all those products that are only assembled in the country and are exported afterwards, mainly textiles in the case of El Salvador. Before 1991, maquiladora was not considered a separate category and was included in the non-traditional sector. Figure 5.3 demonstrates that the importance of maquiladora exports for the Salvadoran economy is enormous and its rate of growth has been spectacular in the last nine years. In 1991 maquiladora represented 18% of the total exports, in 1998 it accounted for more than 48%, with a yearly average growth of 114%, which represents more than 60% of the total growth of exports in the last seven years. On the other hand the value of traditional exports has diminished from more than 50% of the total in 1980 to less than 18% in 1998, this reaffirms the decadence of the traditional agriculture base of the country.

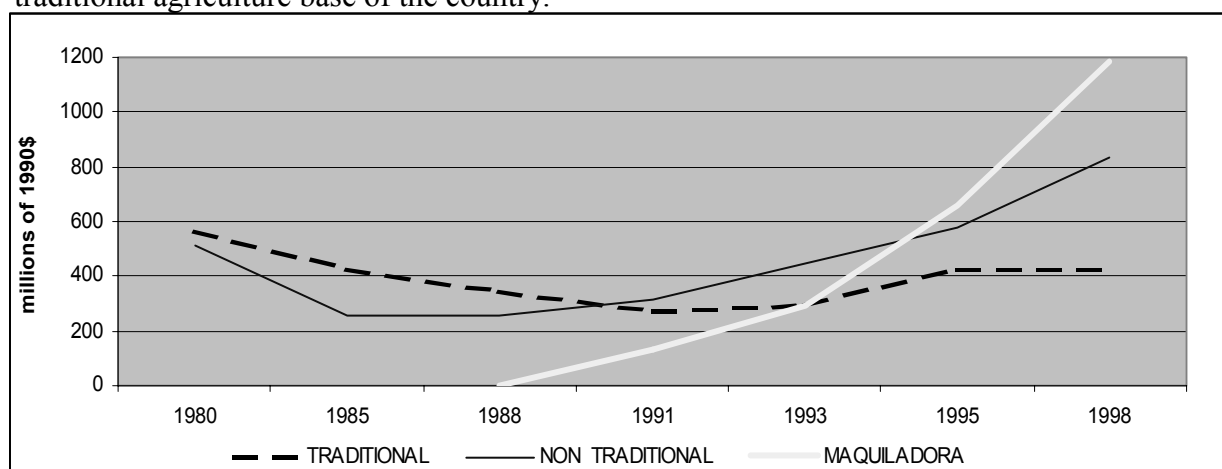


Figure 5.3 Evolution of export composition

Source: BCR (1999a)

Therefore, the evolution of trade figures indicates the dynamism of export activities led by the maquiladora industry in the last eighteen years confirming the increasing export-oriented character of the economy. This evolution is directly linked to the emergence of maquiladora industry. This radical transformation, to a manufacturing export-oriented economic model raises the question about how the spatial configuration of El Salvador, specifically its urban structure, has been affected by economic restructuring.

5.4. CAPITAL FLOWS IN EL SALVADOR

5.4.1. FOREIGN DIRECT INVESTMENT

In the previous discussion about the transformation of the Latin American economy, the surge of foreign direct investment (FDI) appeared to be the most significant change (see Section 2.4). Table 5.4 demonstrates that in El Salvador even if FDI are expanding their level is still very reduced compared to the region, since FDI represented only 1.2% of the GDP in 1997, compared to an average of 4.2% in Latin America. Despite the benefits granted by the law for promotion and guarantee of foreign investment, including free remittance of net profits in the industrial sector, before 1998 El Salvador had never received more than 100 million dollars per year in FDI. However it is interesting to note that from a total cumulative FDI of 191 million dollars until 1997, 35% corresponded to investment in the maquiladora industry in the export processing zones (BCR, 1999a). 1998 represents a radical transformation of this pattern of FDI, since these jumped to more than one billion dollars, or more than 16% of the GDP. This due to the privatization of some the most important state owned companies, telecommunications and energy distribution, which were sold to foreign investors.

Table 5.4 FDI (millions of 1990\$)

	1980	1985	1988	1991	1993	1995	1997	1998
FDI	3.3	7.2	7.8	22	25.4	50.4	75.1	1018
as %GDP	0.08%	0.19%	0.20%	0.51%	0.51%	0.90%	1.22%	16.5%

source: ECLAC (1999)

On another hand it is worth mentioning that external debt is estimated in more than two billion dollars in 1998, which represents around 30% of GDP, similar to the Latin American average of 33%.

5.4.2 INCOME REMITTANCES IN THE SALVADORAN ECONOMY

The flow of capital to El Salvador has another important component apart from FDI; individual remittances by Salvadorans living abroad, particularly in the United States. The US census estimated in 1997 that there were 607,000 legal Salvadoran migrants in the US primarily concentrated in Southern California and Washington DC Metropolitan Area (Landolt et al. 1999). While the Immigration and Naturalization Service of the United States (1997) estimated that in 1996 there were more than 330,000 undocumented Salvadorans in the country. This

represents nearly one million migrants compared to six million living in the country. In 1998, personal remittances represented more than 1.4 billion dollars, exceeding the record FDI of that year and representing almost one quarter of the GDP, compared to 1% average in Latin America (ECLAC, 1998).

5.4.2.1. Impact of income remittances on the economy

Because of their magnitude and their micro scale character, it is hard to evaluate the impact of income remittances on the economy. However, they certainly represent one of the main sources of hard currency for the nation (see figures 5.4 and 5.5), in 1998 they counted for nearly one quarter of the total foreign trade, and as much as 60% of the total exports (BCR, 1999a). Paus (1995) and Wood & Segovia (1995) demonstrate that remittances are also responsible for the abundance of Dollars in the economy and the resulting stabilization and appreciation of the national currency, the *Colon*, against the US Dollar. In fact in the last five years certain government officials have even proposed the adoption of the Dollar as national currency (Wood & Segovia, 1995). On the other hand, an appreciated domestic currency limits export expansion demonstrating a contradiction in the economic model (Paus, 1995).

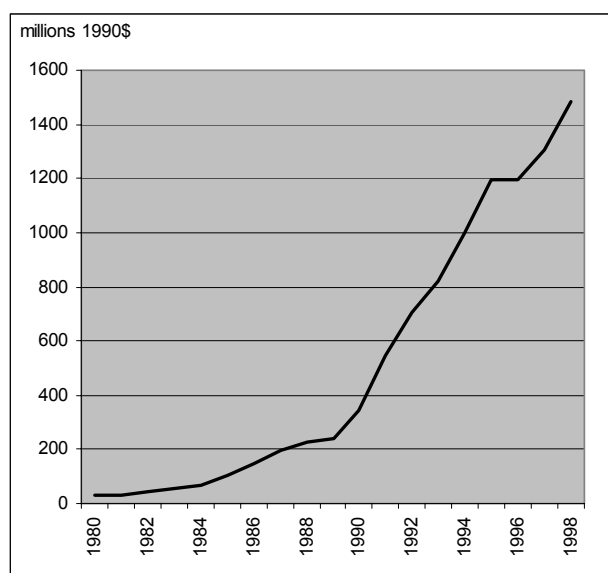


Figure 5.4 Family Income Remittances to El Salvador
Source: BCR (1999a)

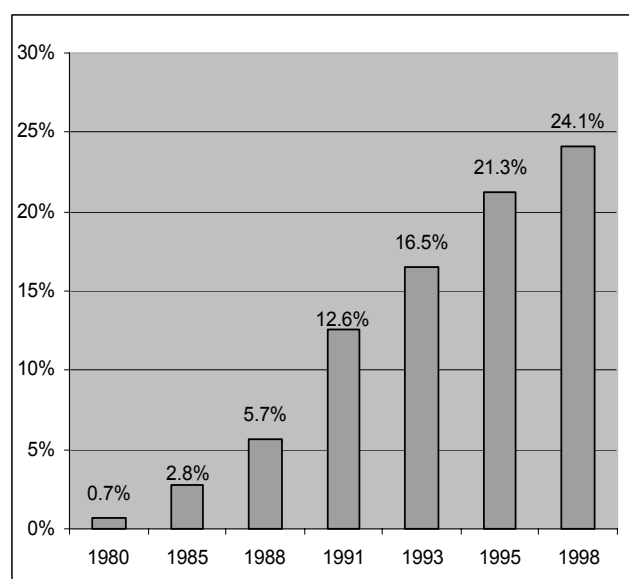


Figure 5.5 Ratio remittances / GDP
Source: BCR (1999a)

5.4.2.2 Income remittances and household welfare

Several studies have examined the study of the role of remittances in the economy of Salvadoran households. DIGESTYC (1998), the National Bureau of Statistics and Census, estimates that one out of seven households receive remittances permanently, counting approximately for one third of the average household income. According to the same source, remittances are mostly geared towards consumption (60% of the total), education (10%), health (8%) and housing (5%). Using that data, remittances represented nearly a 75 million dollar investment in the housing sector in 1998, or 27% of the total 270 million dollar GDP generated by the construction sector that year. Therefore one can assume that remittances play an important role in the construction and reshaping of the urban environment

5.5 EXPORT PROMOTION

5.5.1 HISTORICAL BACKGROUND

Export Oriented Industrialization (EOI) in El Salvador was originally implemented in the mid 70s after the crisis of the Central American Common Market, *Mercado Común Centroamericano*, (MCCA). This policy was aimed to restructure the manufacturing sector by shifting from an import substitution model, based on domestic consumption and exports to the MCCA, to an export oriented model targeting the world market. The first Export Promotion Law was passed in 1974, under the advice of USAID, and contained the provisions concerning the development of *Zonas Francas* (EPZ) (Arriola, 1992). For companies operating inside EPZs, the law granted benefits such as total tax exemption for imports of raw materials and machinery, as well as tax exemptions for corporate income, and patrimony taxes during ten years, finally the law also guaranteed free repatriation of profits for industrial activities. In 1986, the 1974 legislation was modified in order to expand its benefits to individual factories located outside EPZs if they qualified as “export oriented.”

5.5.2 EXPORT PROMOTION AFTER ECONOMIC RESTRUCTURING.

As part of the economic reform initiated by the new government in 1989 both the export promotion legislation, and the EPZ regime were updated (BCR, 2000). The Law for Export Reactivation, *Ley de Reactivacion de Exportaciones*, was passed in 1990. This law modified the

previous legislation by incorporating new benefits to companies located in the EPZs and any other export oriented firm. The new benefits included, reimbursement of 8% of the total value of the FOB exports going outside the MCCA, exemption from the value added tax, expansion of the income tax exemptions to foreign investors living in the country, and the possibility to incorporate companies from the service sector to the EPZs regime. New reforms were introduced in 1997, when the export reimbursement was reduced to 6%, eliminated municipal taxes during ten years, granted income tax exemptions during the whole time of operation of the factories, finally the production areas benefited by the export regime were expanded to include exports of coffee, sugar and cotton if these products had undergone a transformation process that added at least 30% to their original value.

New EPZ legislation was passed in 1998 and consolidated previous regulations concerning their operations. The law introduced important reforms to the 1970s regime. First it shifted the planning and development of EPZs from the state to the local private initiative. Second it classified three groups of EPZ beneficiaries, the companies operating within the EPZ, the local investors who developed and owned the EPZ, and companies administering the EPZ, all of them enjoying similar tax exemptions. The law also established that any kind of economic activity could be developed in EPZs except, hotels, financial services, transportation, natural resource exploitation, and the manipulation of hazardous materials. The law included certain requirements concerning development (minimal equipment, open space) and guaranteed the applicability of labor benefits such as minimum wage, working hours, vacations, right to strike and unionize (BCR, 2000).

The Salvadoran state has granted priority to export promotion and EPZs. It is important to underline the policy shifts in the last twenty five years. In the 1970s legislation was oriented to industrial promotion guided by the state. In the 1990s the legal framework favors a more flexible pattern where the private sector, both national and international has a dominant role and extended benefits. As a result of this, EPZs in El Salvador have expanded and transformed the economic scenario of the country and have presumably reshaped the urban structure of the Metropolitan Area of San Salvador (MASS).

5.5.3. THE DEVELOPMENT OF EPZS AND EXPORT ORIENTED INDUSTRIES

5.5.3.1. EPZs in El Salvador

In 1999 there were seven active EPZs in El Salvador (see Figure 6.1): San Bartolo, El Progreso, San Marcos, El Pedregal, Exportsalva, American Park, and Internacional. San Bartolo is the oldest, and the only one created by the state during the first phase of export promotion in the 70s, however it was privatized in 1994. The rest were privately created during the export promotion phase after economic restructuring in the 90s. Table 5.5 shows the number of employees and amount of capital invested in each one of these EPZs in 1998. San Bartolo was still the biggest both in terms of capital and number of workers, closely followed by San Marcos. Nevertheless in the last two years EPZs outside the *Area Metropolitana de San Salvador*, MASS (Metropolitan Area of San Salvador) have considerably grown. American Park has now 6000 workers (interview: EPZ Director 01/06/2000), El Pedregal has 4,500, and Internacional started operations in 1999 with more than 1,000 workers. In another hand EPZs in the MASS have almost reached their full capacity in terms of space availability (interview: EPZ Director 01/06/2000; BCR, 1999b).

Table 5.5 **EPZs in El Salvador (1998)**

EPZ	year	firms	investment (millions of 1990\$)	% total investment	jobs	% total jobs
SAN BARTOLO	1974	14	21.0	30.9	9,574	31.4
EL PROGRESO	1991	4	3.5	5.2	2,164	7.1
SAN MARCOS	1992	11	14.3	21.0	8,303	27.2
EL PEDREGAL	1994	9	14.9	21.9	3,896	12.8
EXPORTSALVA	1995	8	12.2	18.0	3,980	13.0
AMERICAN	1996	2	2.1	3.0	1,596	5.2
INTERNACIONAL	1999	2*	NA		1,000	3.3
TOTAL		50	68.0	100.00	30,513	100.00

* data from 1999

source: BCR (1999)

Table 5.6 shows the names and economic activities of the four Salvadoran investors involved in the development and administration of the EPZs. From these two groups, ARISTOS and GRAMAR, own and administer two EPZs each. The range of activities in which these Salvadoran corporations are involved is diverse. ARISTOS (American Park and El Progreso) is a holding group with numerous divisions, such as the local branches of American fast food restaurants, video stores, office supply and a plastic factory. PEDREGAL has the same degree of

diversification, particularly retail, real estate, banks, and traditional coffee and sugar exports. GRAMAR apparently is a one activity corporation, mainly real estate and now EPZs development and administration. HILASAL is a forty year old company involved in the textile industry, with fabric plants in El Salvador and Mexico, their EPZ, Exportsalva, is located just next to their major local plant. In that sense local developers and administrators are important actors in the national economy, and the names in their directory boards are familiar to local business elite. Moreover, especially in the case of ARISTOS these are corporations with strong business connections with international capital (BCR, 1999b)

Table 5.6 **Local investors**

EPZ	Investor	Activities
SAN BARTOLO	State	Privatized in 1994 each operating plant owns its building
EL PROGRESO AMERICAN	ARISTOS	Private consortium. Holding group including activities such as the local branches of Pizza Hut, Blockbuster, plastic products
SAN MARCOS INTERNACIONAL	GRAMAR	Private consortium. Real estate development
EL PEDREGAL	PEDREGAL	Private consortium. Holding group including activities such as real estate, supermarkets, financial activities
EXPORTSALVA	HILASAL	Private company. Traditional fabric and textile production

source: BCR (1999), (interview: Edwin Escobar)

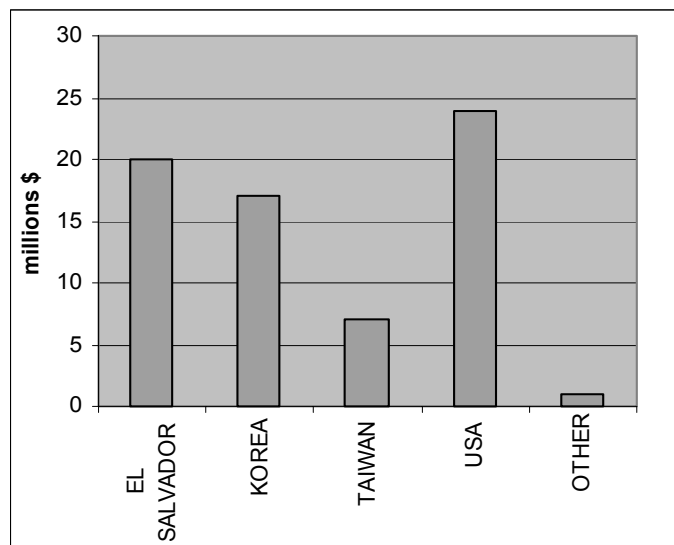


Figure 5.6 **Origin of capital invested in EPZ plants**

Source: BCR (1999b)

Figure 5.6 shows the concentration of the origin of the capital invested in EPZs plants, which is concentrated in four countries, El Salvador, Korea, Taiwan and the US. The range of activities of the 47 companies located in EPZs is very concentrated, 90% work in textiles and apparel in general, while the rest is divided between assembly of electrical products, board boxes and lately, chemical products. The ratios between invested capital, job creation and value of exports provide an interesting indicator of the nature of EPZs in El Salvador. In 1998, an investment of \$2,260

created one job and produced nearly \$37,000 in exports (BCR, 1999b).

5.5.3.2 Export Oriented Firms

In 1998, 218 companies had reached the status of “export oriented,” according to the provisions of the 1990 law (see Section 5.5.2). As a whole they represent an investment of more than \$208 million and employ almost 40,000 workers representing more than 12% of the total employment in the Salvadoran manufacturing sector (BCR, 1999b).

However, these industries are very heterogeneous, both in terms of invested capital, and number of workers. In terms of capital they range from as little as \$10,000 to up to \$23 million, employing from 10 workers to more than 2,000 by factory. Their activities tend to be more concentrated, 75% are occupied in textile production, while the rest are divided in a broad range of activities such as yacht construction, aquaculture, iguana raising, electrical assembly, toy assembly, and international telephone services. There is no available data concerning the origin of the capital, however it is interesting to note that many of these companies are pre-existing Salvadoran firms that have shifted from a domestic/Central American market orientation to a global market approach; simultaneously names such as the Korean “Loh Sang Tsien Industries” suggest that international capital is also active under this form of operation (BCR, 1999b).

Compared to the factories located in EPZs, “export oriented firms” seem to be more capital intensive, since in order to create one job position they require an investment average of \$5,300, more than double of what plants in EPZs require. It is difficult to estimate the value of their exports, since the “non-traditional” export category defined by the BCR also includes exports to Central America. However assuming that all non traditional exports were generated by “export oriented firms,” which will result in an over estimate, one invested dollar results in four exported dollars, compared to sixteen dollars for EPZs (BCR, 1999b).

Table 5.7 summarizes the magnitude of the export industries, whether individual firms or EPZs, in manufacturing employment in the MASS and the whole country in 1998. These results could be even more dramatic if compared to metropolitan and national figures concerning manufacturing in formal companies, but the last national available data comes from 1992. The next section will concentrate on the pattern of spatial development of such outward oriented activities in order to introduce the empirical research concerning, export processing zones and residential development in El Salvador.

Table 5.7 **Share of employment by export oriented industries in total manufacturing employment (1998)**

	INDUSTRY	EPZ	Export Firms	TOTAL
MASS	120990	20041 17%	30263 25%	50304 42%
COUNTRY	211900	10472 5%	8344 4%	18816 9%
EL SALVADOR	332890	30513 9%	38607 12%	69120 21%

source: DIGESTYC (1998), BCR (1999)

The application of the major axis of the Washington Consensus (Edwards, 1995) in El Salvador have generated basic similar characteristics to the economic shift observed in Latin America, such as the expansion of the tertiary sector, particularly financial activity and the increase of foreign trade. However, this overview of the shifts in the Salvadoran economy indicates the importance of two particular phenomena; first the expansion of maquila exports, second the emergence of remittances as main sources of capital. According to the BCR (1999a), both activities counted together for more than three quarters of the total revenues of the national current account. These tendencies appear to be unique in the regional context and suggest El Salvador's profound integration into the World economy is a "Labor based Globalization," since it relies on the exports generated by labor-intensive industries and the remittances sent by migrant labor force. Chapters 6 and 7 will analyze how these unique characteristics affect the process of urbanization expressed in post suburban developments.

6. CIUDAD OBRERA AND MONTELIMAR, TWO NEIGHBORHOODS IN THE SPHERE OF GLOBALIZATION

Chapter 6 presents the results of the empirical research concerning the relationship between one of the main expressions of globalization in El Salvador, the development of EPZs, and changes in the urban structure of the Metropolitan Area of San Salvador (MASS) as portrayed in the model of the Globalized Latin American City introduced in Chapter 3.

This analysis will be done in four sections. The first section will examine the spatial patterns of export-oriented activities in El Salvador, emphasizing those that appear to have a geographic connection with the sites. The second section will present the historic background and describe the neighborhoods. Section three will study the socio demographic characteristics of the households of Ciudad Obrera and Montelimar. The final section will analyze the patterns of spatial migration of the population and introduce the discussion of the results.

6.1. GEOGRAPHY OF EXPORT ORIENTED ACTIVITIES IN EL SALVADOR

6.1.1. CONCENTRATION OF EXPORT ACTIVITIES

Using data from the Central Reserve Bank, *Banco Central de Reserva* (BCR) it is possible to determine the patterns of location for the export oriented firms in El Salvador and the shifts that have occurred after the enactment of the export promotion legislation (see Section 5.5). In 1992 two thirds of the national manufacturing employment was concentrated in the Metropolitan Area of San Salvador (DIGESTYC, 1993). In 1998 two thirds of the manufacturing employment generated by the EPZs and over three quarters of that generated by export industries was still concentrated in the MASS (BCR, 1999b). Therefore, it is possible to conclude that after six years of implementation export promotion policies have not altered the pattern of concentration of manufacturing in the Metropolitan Area of San Salvador.

6.1.2. RELOCATION AT THE NATIONAL LEVEL

However, if one maps the location of export industries and EPZs a different picture appears at the national level (see Figure 6.1). The new export activities are concentrated in the western and central provinces of the country, particularly along three major highways, the Pan American highway to Guatemala and the Caribbean, the highway to the port and the Airport highway.

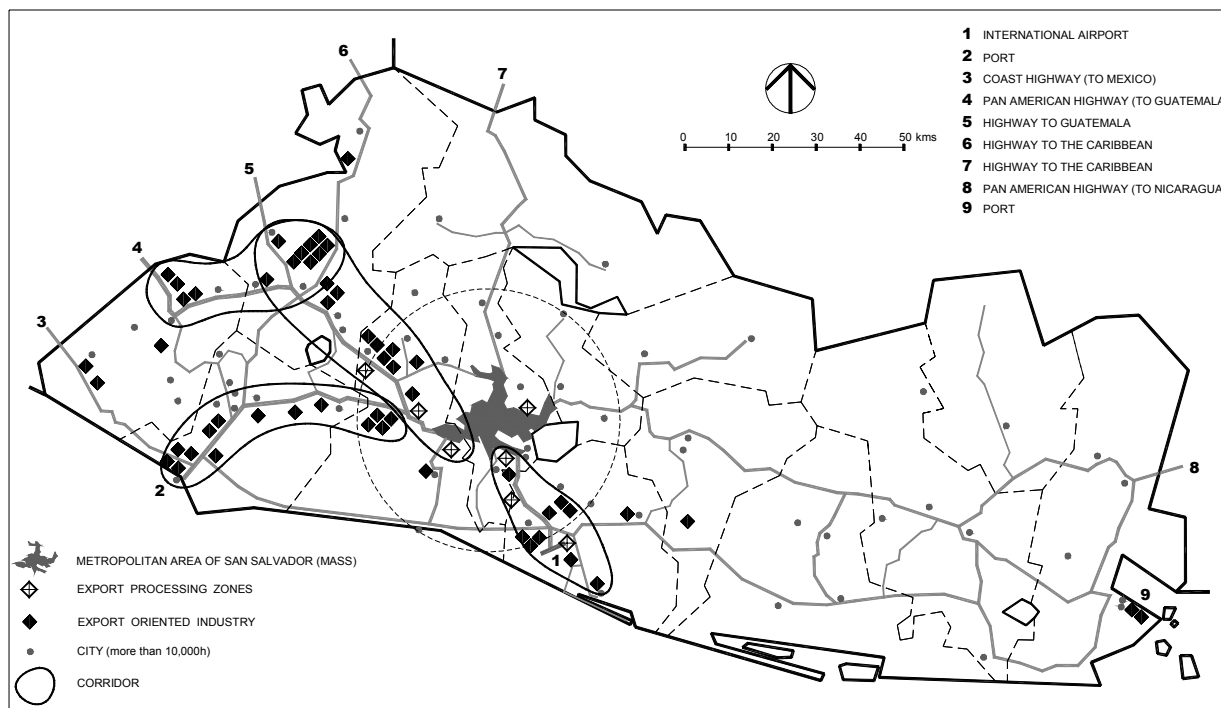


Figure 6.1 Geography of export oriented firms in El Salvador

Source: derived from BCR (1999b)

These three corridors and the MASS account for all the 218 export-oriented firms in El Salvador, except six. EPZs are even more concentrated, being exclusively located in the MASS and in the central provinces, no more than 45 kms. away from the capital. Figure 6.2 shows with higher detail the privileged area for EPZ location around the MASS.

Table 6.1 shows the different patterns of location for manufacturing employment for EPZs and export industries, indicating that the new export oriented industries tend to be geographically more concentrated than the regular Salvadoran industry, especially in two regions, the MASS and the Central and Western provinces. From these results one can infer that after six years of export promotion policies certain regions of the country, particularly the Pan American and Airport highways (see #2, 5, 7 in Figure 6.1), which originate at the metropolitan

**Location patterns of employment
by export oriented industries**

Table 6.1

	INDUSTRY*		EPZ		Export firms	
MASS	51000	67%	20041	66%	30263	78%
CENTRAL-W	15509	20%	10472	34%	8224	21%
REST	10155	13%	0	0%	120	0%
COUNTRY	25664	33%	10472	34%	8344	22%
TOTAL	76664	100%	30513	100%	38607	100%

* data 1992, refers to industries with more than 5 workers

Source: DIGESTYC (1992), BCR (1999)

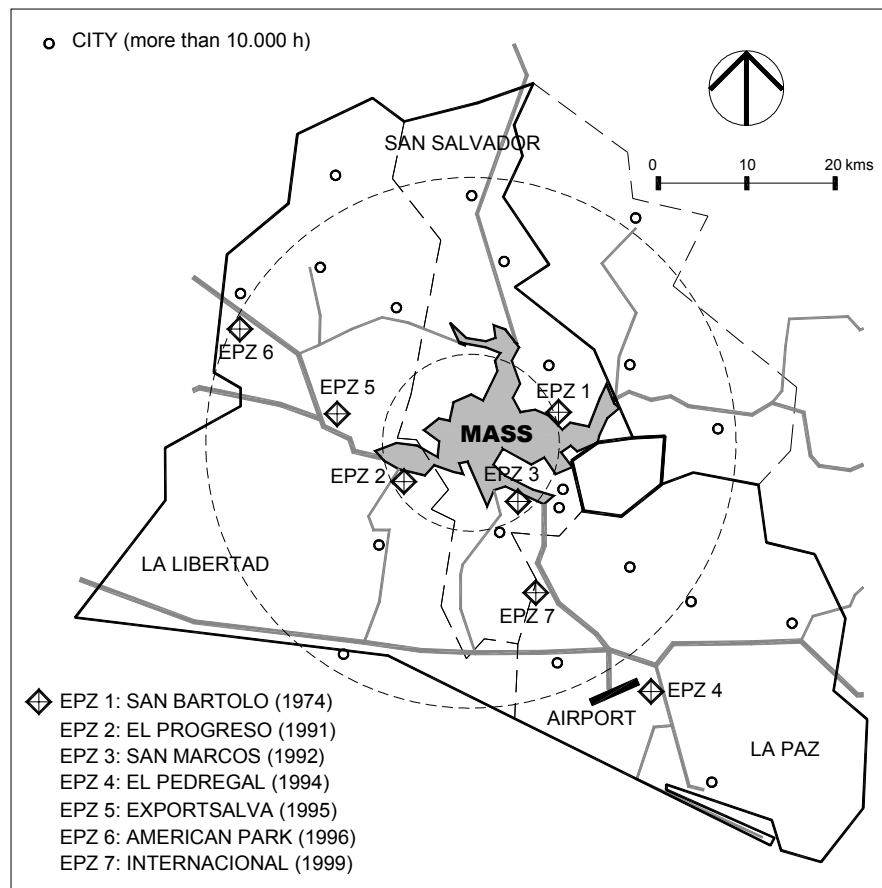


Figure 6.2 Location of EPZs in El Salvador

Source: derived from BCR (1999)

area, have consolidated as export oriented development corridors.

Moreover, the fact that the expansion of EPZs in the MASS is limited because of space constraints encourages the intensification of this phenomenon. In the case of EPZs, in 1992 a USAID export promotion plan indicated that from fourteen possible locations for EPZs in El Salvador, ten were sites in these same corridors (cited in Arriola, 1992). In fact the location of EPZs can be used to define the configuration of two of the corridors mentioned above. The first is located to the west of the MASS along the Pan American Highway and includes El Progreso, Export Salva, and American Park free zones (see Figures 6.4 and 6.5). The second is located to the south of the MASS along the Airport Highway including San Marcos, Internacional and El Pedregal free zones (see Figure 6.6). This national scale trend, even if recent, confirms one of the assumptions of the literature on export oriented industrialization (Roberts in Portes, 1994; Dandekar, 1998), which states that new industries will tend to locate further away from the cities

and privilege those areas which offer major advantages in terms of connections (transports, communications) to foreign markets.

6.2. NEW HOUSING DEVELOPMENTS AROUND EPZS

In the last four years a parallel phenomenon has occurred, consisting of the development of new post suburban residential neighborhoods in the corridors defined by the EPZs, which are located further away from the Metropolitan Area of San Salvador in areas that are considered rural, and out of the jurisdiction of the Planning Office of the Metropolitan Area of San Salvador, *Oficina de Planificación del Área Metropolitana de San Salvador* (OPAMSS) (see Figure 6.3). These developments have the same layout characteristics as typical residential neighborhoods in the MASS. They were all developed by private firms and belong to the lowest level of the formal housing market, with prices ranging around 70,000 *Colones* or US\$ 8,000 (one US\$=8.75 ¢), and qualify for government credit subsidy. As an illustration, this price represents more than 50 monthly minimum salaries, which currently is US\$ 150 per month.

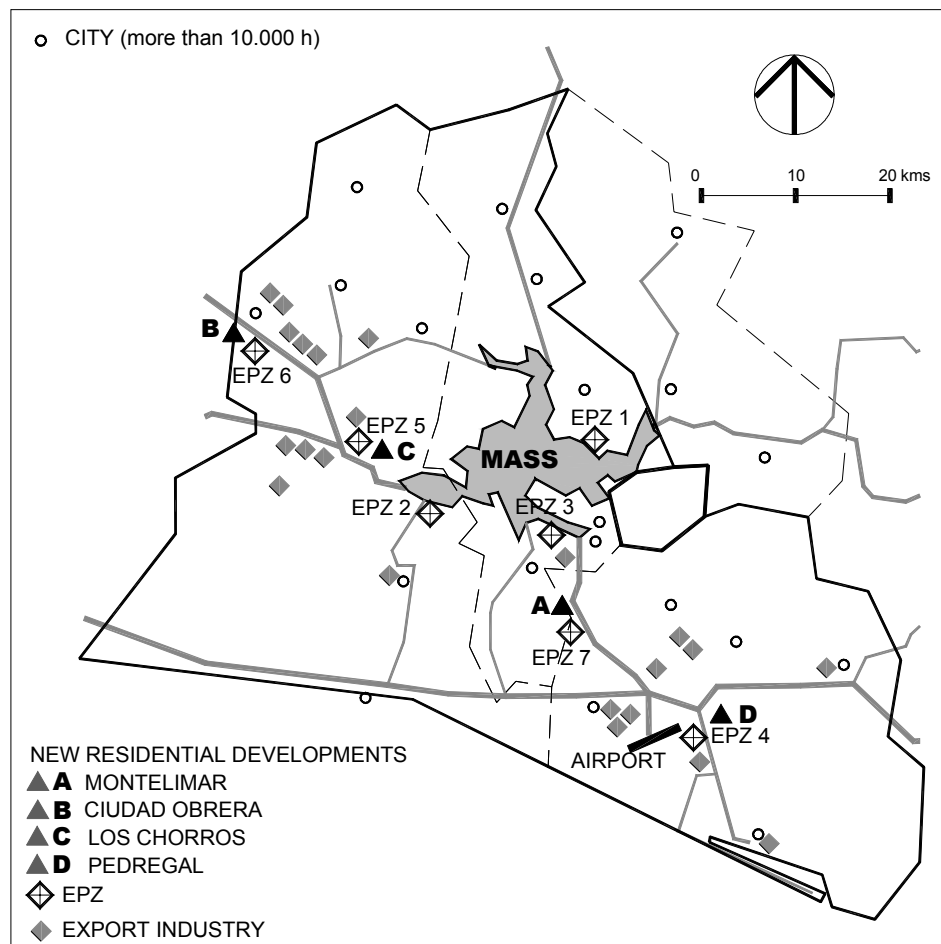


Figure 6.3 Recent post suburban residential developments
Source: derived from BCR (1999)

The first one of these developments was Montelimar, (see “A” in Figure 6.3) its construction initiated in 1996 in the corridor to the Airport, Internacional Free Zone installed next to it three years later. The second was Ciudad Obrera, “Worker City,” (see “B” in Figure 6.3) built next to American Park Free Zone in 1997. Los Chorros was the third, built next to Export Salva Free Zone, finished in 1999. Finally around El Pedregal free zone, two new developments are currently being built, El Pedregal I and II (see Figure 6.7). Table 6.2 summarizes the size and price of housing in these developments.

Table 6.2 **New residential developments next to EPZs**

	Year of Construction	Units	Starting price (\$)	location	immediate EPZ
MONTELIMAR I	1996	800	8,571	Airport Highway	Internacional
MONTELIMAR II	1998	400	NA	Airport Highway	Internacional
CIUDAD OBRERA I	1997	600	9,714	Pan American Highway	American Park
CIUDAD OBRERA II	2000	600	NA	Pan American Highway	American Park
LOS CHORROS	1998	1,400	8,000	Pan American Highway	Export Salva
EL PEDREGAL I	1998	800	6,286	Coastal Highway	El Pedregal
EL PEDREGAL II	2000	800	NA	Coastal Highway	El Pedregal

Source: Developer's advertisement

As a means of comparison of the magnitude of these distant neighborhoods, the largest single residential development built within the MASS in the last ten years has 1100 units and only nine formal developments have more than 600 units. Therefore, residential developments occurring next to EPZs represent a significant contribution to the formal Salvadoran housing sector. This apparent correlation between EPZ development and the construction of massive residential neighborhoods suggests that there is a connection between the transformation of the Salvadoran export sector and new spatial patterns. This study focuses on the case study of two of these neighborhoods, Ciudad Obrera and Montelimar.



Figure 6.4 **Export Salva Free Zone** on the Pan American Highway
Photograph by the author



Figure 6.5 **American Park Free Zone** on the Pan American Highway
Photograph by the author



Figure 6.6 **El Pedregal Free Zone** on the Coastal and Airport Highway
Photograph by the author



Figure 6.7 **Urbanización El Pedregal**, next to El Pedregal Free Zone, EPZ telecommunications tower on the back
Photograph by the author

6.3. CIUDAD OBRERA AND MONTELMAR, GENERAL BACKGROUND

As explained above, Ciudad Obrera and Montelimar are two of the four new residential developments built next to EPZs in El Salvador. These specific sites were selected for the empirical research since they are older and more consolidated than the other two and already have a significant resident population.

6.3.1. CIUDAD OBRERA

Ciudad Obrera I and II are located 31 kilometers west of the Metropolitan Area of San Salvador (MASS) on the Pan American Highway; less than one kilometer away from American Park Free Zone, and 12 kilometers from Export Salva Free Zone. Previous to construction, the site was a “low altitude” coffee plantation (470 meters above the sea level), relatively flat, bounded by the Highway, the Agua Caliente river and two other plantations. The closest urban settlement is Ciudad Arce, the municipal capital, located six kilometers to the north. The national census bureau currently estimates that the municipality’s population is 50,000 people, of which 20,000 are urban (DIGESTYC, 1999). Therefore once the two phases of Ciudad Obrera will be occupied (1200 units) they will represent nearly one quarter of the municipality’s urban population.

Ciudad Obrera I was completed by mid 1998; some houses were occupied immediately. In January 2000 the developer estimated that 550 units had already been purchased (interview Developer manager, 17/01/2000). Ciudad Obrera II, located next to phase I, includes 600 units and its construction is currently in process. Once both phases are completed, the development will include 1200 units, a bus terminal, recreation areas, a small shopping center, and a sewage treatment plant (which is already operating). The average parcel is 70 sq. meters (7 x 10 meters or 21 x 30 feet). Each house comprises a multiuse space (living-dining room), kitchen, two bedrooms, one bathroom and a peripheral yard two meters wide. Since topographical conditions did not require major land displacements, many trees from the plantation were preserved (see Figures 6.8, 6.9, 6.10, 6.11, 6.12).

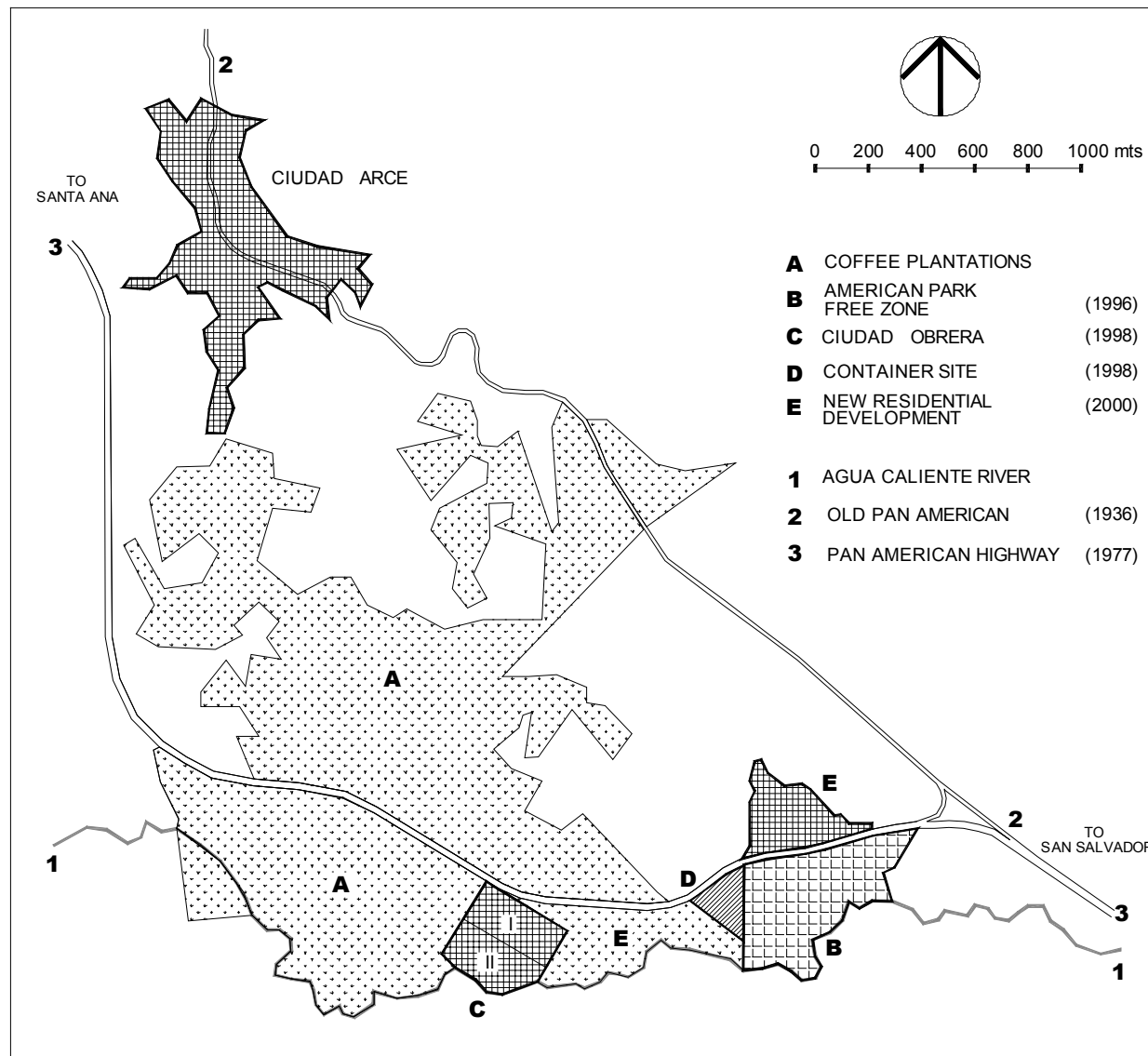


Figure 6.8 Site Plan Ciudad Obrera and American Park

Source: derived from aerial photographs from IGN (1997)



Figure 6.9 **American Park Free Zone** on the Pan American Highway
Photograph by the author



Figure 6.10 **Ciudad Obrera**, advertisement "Here is the development"
Photograph by the author



Figure 6.11 **Ciudad Obrera** typical pedestrian alley
Photograph by the author



Figure 6.12 **Ciudad Obrera** typical layout of the peripheral yards
Photograph by the author

6.3.2. MONTELIMAR

Montelimar is located 23 kilometers south of the MASS on the Airport Highway; one kilometer away from Internacional Free Zone, 20 kilometers from El Pedregal Free Zone, and twelve kilometers from San Marcos Free Zone. Previous to construction the site was a cornfield, which was part of a bigger hacienda, with steep slopes, bounded by the Highway, a ravine, and other agricultural fields. The closest urban settlement is Olocuilta, the municipal capital, located two kilometers to the east (see Figures 6.13, 6.14, 6.15, 6.16, 6.17).

The entire site was developed in 1996 and Montelimar I was completed by mid 1997. In January 2000 approximately 600 units had been purchased (interview: Developer manager 01/17/2000); Montelimar II is currently under construction. The neighborhood also includes a Shell gas station, bus terminal, police station, recreation areas, and a pedestrian bridge over the highway. The average parcel is 60 sq. meters (5 x 12 meters or 15 x 36 feet). Houses are similar to those in Ciudad Obrera, except that they only have a sixteen meters backyard. In this case the topographic conditions required major transformations of the land forms.

6.3.3. THE RELATIONSHIP WITH EPZs

6.3.3.1. Ciudad Obrera and American Park

Ciudad Obrera was built one year after American Park started operating. Although both sites were originally coffee plantations, they belonged to different owners. There is no direct relationship between the corporate groups that developed American Park and Ciudad Obrera; nonetheless the Ciudad Obrera developers (EQUUS *Ingenieros*) acknowledge that the construction of the EPZ encouraged them to pursue the development of the neighborhood since services like electricity and telecommunications became available at a relatively short distance, while others like public transportation were intensified and land prices in the area increased. This process set favorable conditions the development of a successful housing project (interview: Developer manager 01/17/2000). Simultaneously, a container and carrier company directly connected with the operations of the EPZ purchased a neighboring tract of land to serve as terminal for its Salvadoran operations.

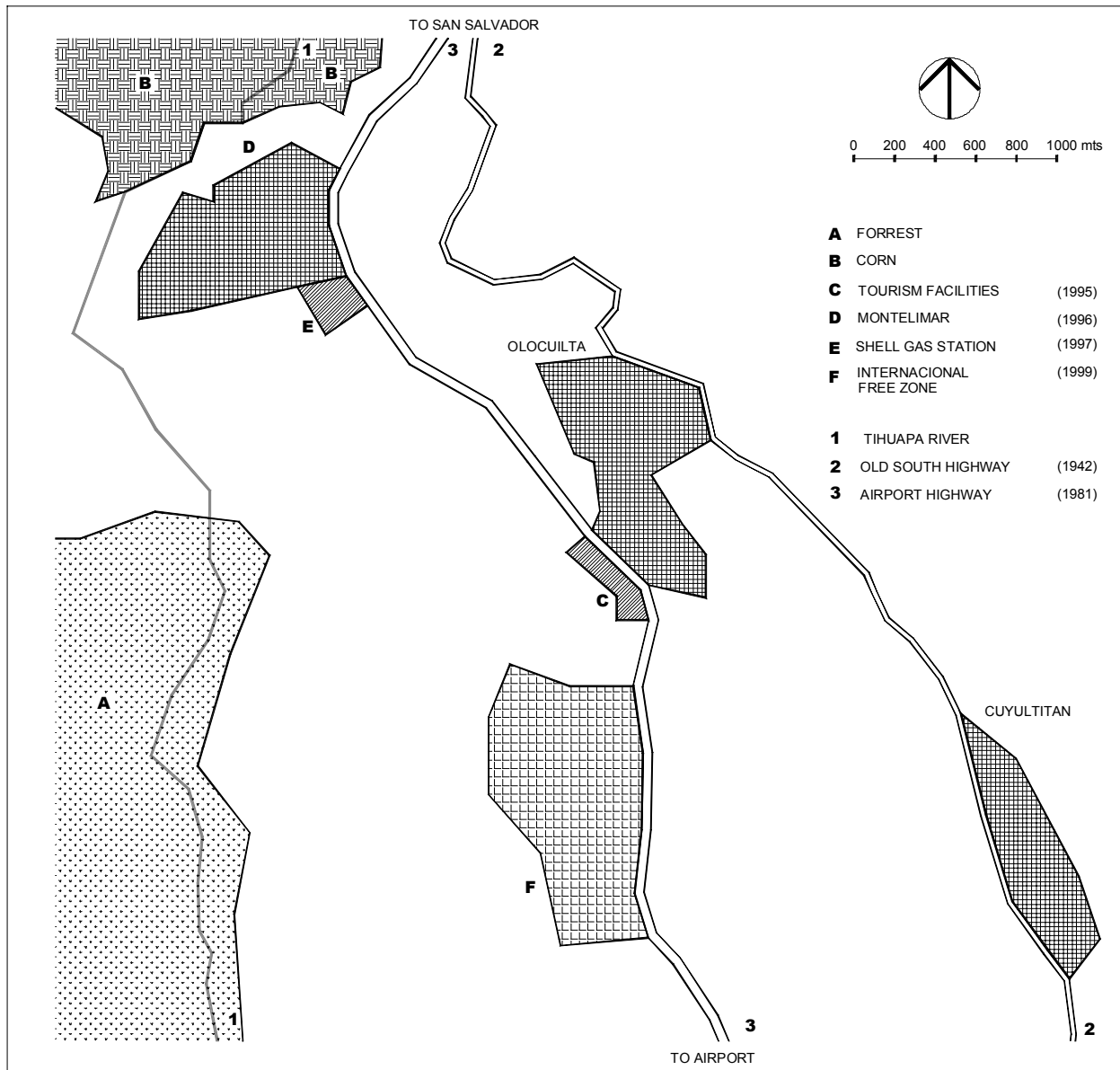


Figure 6.13 Site Plan Montelimar and Internacional Free Zone

Source: derived from aerial photograph IGN (1997)

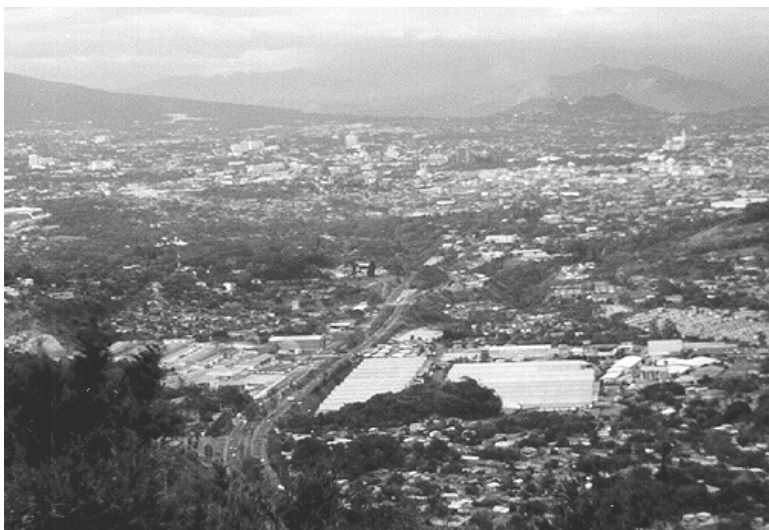


Figure 6.14 **Airport Highway**, San Marcos Free Zone
to the front
Photograph by the author

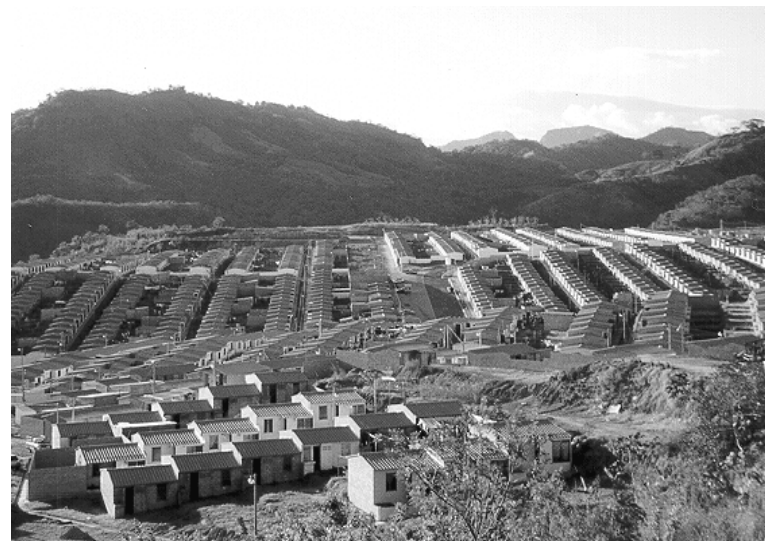


Figure 6.15 **Montelimar**, view from the Airport
Highway
Photograph by the author

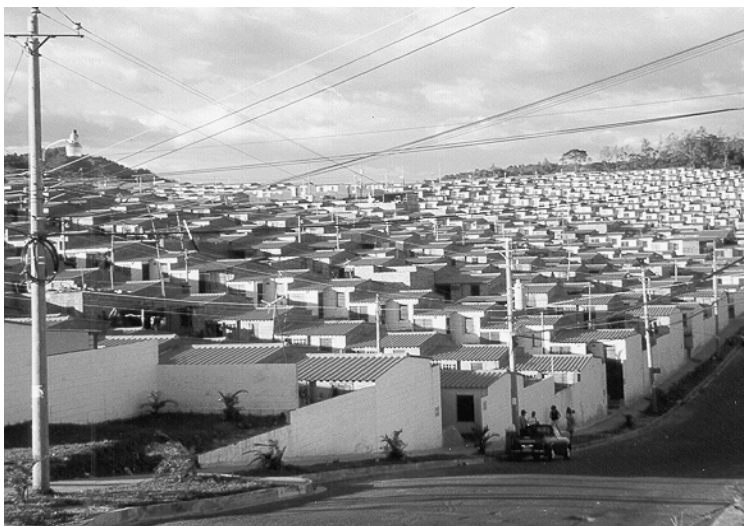


Figure 6.16 **Montelimar**, view from the access road
Photograph by the author



Figure 6.17 **Montelimar**, typical pedestrian alley
Photograph by the author

These dynamics have encouraged ARISTOS, the local developer and administrator of the EPZ, to get involved in the housing business, since they are planning to develop this year 600 units across the highway from American Park (interview: EPZ Director, 01/06/2000). This same strategy of direct intervention of the local developer of the EPZ in mass housing can be observed in the case of El Pedregal. Another recent spatial phenomenon that is becoming evident in the area is the subdivision of agricultural land; there are no official data about its proportions or whether it is legal or illegal, but in any case this indicates that another segment of the housing market is also operating in the region.

6.3.3.2. Montelimar and Internacional.

Montelimar represents a different pattern of development, since Internacional Free Zone, its neighboring EPZ, was developed one year after the neighborhood's completion. As in the case of Ciudad Obrera there is no direct connection between the corporate groups that developed the EPZ and the neighborhood. Nonetheless, GRAMAR (the EPZ developer) and Inversiones S.A. (Montelimar developer) are both firms concentrated in real estate operations. However, according to the interviewed sources (interview: Developer manager, 01/17/2000), it was the development of certain industries and of El Pedregal Free Zone, which stimulated the developers (Inversiones S.A.) to initiate the construction, since they thought that the region was going to become attractive for population. Its previous experience in the development and administration of San Marcos Free Zone and the success of Montelimar stimulated GRAMAR to develop Internacional in the same area. In fact the first two plants operating at Internacional are firms that were previously operating in San Marcos that decided to expand their business and had to move because of space constraints (interview: EPZ Director, 01/06/2000).

Even if in the case of Montelimar the connection between the process of urbanization and EPZs is not as straightforward as in Ciudad Obrera, evidence indicates the existence of such a linkage. In fact, this pattern of "distant" urban development can be understood in the framework of two of the major economic transformations described in Chapter 5 (see Section 5.2), relative to the decline of the traditional agricultural base of the country and the promotion of export oriented industrialization. These economic transformations, directly connected to economic globalization, have permitted a land use that was profitable two decades ago (coffee plantation in

the case of Ciudad Obrera) to be transformed into an industrial and residential use. This is also stimulated by the benefits offered by the national government to Salvadoran EPZ developers concerning tax breaks on land acquisition, revenues, and credit for development (see Section 5.5).

In addition, institutional planning regulations in both regions also facilitate massive residential and industrial development. After the dissolution of the Ministry of Planning in 1991, as part of structural adjustment explained in Section 5.1, regional scale planning in El Salvador was divided in two jurisdictions: the Metropolitan Area of San Salvador (MASS) and the rest of the country. The MASS Planning Office (OPAMSS) is in charge of the Metropolitan Area and depends on appointed officials designated by the Council of Mayors of the MASS. The Vice Ministry of Housing and Urban Development (VMVDU) is in charge of the rest of the country, including the areas where Ciudad Obrera and Montelimar are located. There are two main differences between both institutions; OPAMSS has a local character, while VMVDU is a centralized institution located in the capital; OPAMSS regulations rely on zoning and a master plan, while VMVDU only has building regulations. Developers acknowledge that it is easier to deal with the requirements of VMVDU since they are less comprehensive, particularly for large developments (interview: Developer manager, 01/17/2000).

6.4. SOCIO-DEMOGRAPHICS OF THE TWO SITES

This section will present basic demographic, social, and economic results from the household survey delivered in Ciudad Obrera and Montelimar in January 2000. It will compare differences and similarities between the sites and recent secondary data from the Metropolitan Area of San Salvador (MASS) concerning major demographic social and economic indicators. This analysis will provide information about the social background of the neighborhoods' population, informing about particularities that can help to explain the process of urbanization.

6.4.1. SOCIO ECONOMIC RESULTS

Table 6.3 presents the results of the survey concerning some socio demographic figures that contribute to clarify differences and similarities between the metropolitan population and that of the sites and between the sites themselves.

Table 6.3 **Socio Demographic figures**

		C.O.	MONT.	MASS
1. SAMPLE		52	53	
2. INDIVIDUALS		199	221	
3. SIZE OF HOUSEHOLD	t	3.84	4.17	4.15
5. GENDER RATIO (male/female)	x2	1.01	1.02	0.86
AGE DISTRIBUTION				
5. AVERAGE AGE	t	21.82	21.04	27.85
6. POPULATION LESS 5	x2	18.6%	22.2%	10.3%
7. POPULATION (6-10)		10.1%	10.9%	10.1%
8. POPULATION (11-18)		12.1%	10.9%	20.3%
9. POPULATION (19-30)		36.2%	34.4%	17.9%
10. POPULATION (30-40)		13.1%	14.0%	14.4%
11. POPULATION (40-60)		9.0%	4.1%	17.3%
12. POPULATION OVER 60		1.0%	3.6%	9.6%
EDUCATION (population over 5)				
13. AVERAGE EDUCATION YEARS	t	8.49	7.55	7.83
14. NO EDUCATION	x2	1.3%	4.5%	8.3%
15. SOME EDUCATION (1-4)		17.6%	24.4%	17.4%
16. SOME SECONDARY (5-8)		21.6%	21.6%	19.8%
17. SOME HIGH SCHOOL (9-11)		25.5%	17.0%	16.0%
18. HIGH SCHOOL DEGREE (12)		20.9%	23.3%	22.8%
19. SUPERIOR EDUCATION		13.1%	9.0%	15.7%

C.O. (Ciudad Obrera); MONT. (Montelimar)

Source: household survey; DIGESTYC (1998)

significant difference

at 0.05 level (ttest or x2)

The size of the household in the neighborhoods is significantly similar to the average household size in the Metropolitan Area, which is the smallest average by geographic region in the country (DIGESTYC, 1998). In terms of gender composition, the population of both sites appears to be

equally distributed between men and women, presenting a significant difference with the MASS, which is dominated by female population.

There is also a significant difference in age distribution between the sites and the metro area. Population in Ciudad Obrera and Montelimar appears to be significantly younger than population in the MASS, as indicated by the average age results. This is also confirmed by age composition figures, which show that in both neighborhoods around 54% of the population belongs to two categories, children under five and adults between 19 and 30 years old, compared to only 28% of the metropolitan population. Moreover, the population over 40 years old in the neighborhoods does not represent more than 10% of the total, compared to 27% in the MASS. This indicates that a substantial part of the households in Ciudad Obrera and Montelimar consists of young couples with young children. Therefore it is possible to characterize these recent neighborhoods as recipients of relatively new households in process of consolidation.

In terms of education, average education results indicate that the population of Ciudad Obrera has a higher education than the MASS; figures for Montelimar show similar levels of education between the neighborhood and the metropolitan area. Education categories clarify these results. In the case of Ciudad Obrera the difference is mainly due to people who have some degree of high school education. Nonetheless both sites, particularly Montelimar, have lower levels of superior education (professional or technical degree) than the Metropolitan population.

Table 6.4 examines occupational and economic patterns in Ciudad Obrera, Montelimar and the MASS. In this case, there are important differences between the MASS and the sites.

Table 6.4 Occupation and employment figures

	C.O.	MONT.	MASS
1. ACTIVE POPULATION x2	117	130	
declare to have an occupation	58.6%	58.8%	67.1%
2. HOUSE KEEPING	35	42	
declare house keeping as main occupation	29.9%	32.3%	18.2%
3. JOB	75	82	
declare to have a salary	64.1%	63.1%	75.7%
4. UNEMPLOYED	6	6	
declare to be unemployed or looking for a job	5.0%	4.6%	6.1%

C.O. (Ciudad Obrera); MONT. (Montelimar)

Source: household survey; DIGESTYC (1998)

significant difference
at 0.05 level (x2 test)

First the total working population as a proportion of the total population is higher in the MASS, which is consistent with the larger number of children living in the neighborhoods. In terms of the kind of occupation of the active population, the proportion of house keeping is higher in the

sites, while the employed population is lower; in fact there is an average of 1.5 salaries per household in the neighborhoods, compared to 1.68 in the metro area. On the other hand, open unemployment in the sites appears to be similar to the metropolitan scale.

Table 6.5 Employment and economic activity

	C.O.	MONT.	MASS
5. SECTOR OF EMPLOYMENT			
PRIMARY	0.0%	0.8%	1.2%
SECONDARY	34.0%	25.0%	28.3%
TERTIARY	66.0%	74.2%	78.5%
6. TYPE OF ACTIVITY x2			
6.1 AGRICULTURE	0.0%	1%	1.2%
6.2. MANUFACTURING	22.0%	18.0%	20.3%
6.3. UTILITIES	3.0%	0.0%	1.5%
6.4 CONSTRUCTION	9.0%	7.0%	6.5%
6.5. RETAIL-RESTAURANT	14.0%	15.0%	31.7%
6.6 TRANSPORTATION	9.0%	15.0%	6.2%
6.7 FINANCE AND BANKING	5.0%	12.0%	6.8%
6.8 PUBLIC ADMINISTRATION	19.0%	13.0%	7.5%
6.9. EDUCATION SERVICES	9.0%	2.0%	4.8%
6.10. HEALTH SERVICES	0.0%	5.0%	8.9%
6.11 OTHER	10.0%	11.0%	4.6%
7. TYPE OF EMPLOYMENT x2			
OWNER-SELF	11.0%	13.0%	28.4%
PERMANENT JOB	83.0%	78.0%	50.1%
TEMPORARY JOB	7.0%	9.0%	13.4%
8. RECEIVE HELP FROM ABROAD (HH)	21.2%	7.5%	12.6%
9. SECONDARY JOBS (from active pop.)	14.7%	10.2%	2.6%

C.O. (Ciudad Obrera); MONT. (Montelimar)

Source: household survey; DIGESTYC (1998)

significant difference
at 0.05 level (x2 test)

Table 6.5 analyzes in more detail employment patterns in both sites. In terms of occupation by economic sector even if tertiary sector employment is dominant in the neighborhoods, as in the MASS, Ciudad Obrera presents higher levels of secondary employment. On the other hand the fact that agricultural employment is almost non-existent demonstrates that the neighborhoods do not have any functional connections with the rural environment where they are located, and confirms the urban nature of both settlements. Moreover when one analyzes the type of economic activity, other differences appear. First, the proportion of employment generated by retail activities in the sites is only half of what it generates in the MASS. Second, activities such as transportation, finance (in Montelimar) and public administration (in Ciudad Obrera) are relatively more important sources of employment than at the metropolitan scale. According to DIGESTYC (1998) the lowest average salaries per type of economic activity in the

MASS are in industry and retail, while the highest are in transportation, public administration, and finance. Therefore it is possible to assume that the employed population in both Ciudad Obrera and Montelimar has a higher average income level than the average MASS workers. Even if manufacturing activity is the largest single source of employment in the neighborhoods, comparison with the metropolitan figures do not show a particular industrial character for the sites. In fact it seems that the working population in Ciudad Obrera and Montelimar tends to concentrate in the best remunerated tertiary activities.

Both neighborhoods also have very different patterns of employment type compared to the metro area. The vast majority of the working population in Ciudad Obrera and Montelimar, four fifths of the total, has a permanent job, compared to only half in the MASS. On the other hand the proportion of self-employed workers and owners is less than half than the metropolitan figures. These results suggest that the informal sector is relatively less important in the neighborhoods than in the MASS, at least concerning primary employment. This is consistent with the relatively low proportion of employment generated by retail activities in the neighborhoods since urban informal employment concentrates in retail. Therefore it is possible to characterize the working population of Ciudad Obrera and Montelimar as formal sector wage-workers. It is interesting to note that this pattern does not correspond to the third core process introduced in the model, the expansion of informal activities; however in this kind of neighborhood built by formal developers financed by banks and subject to government subsidies is likely to concentrate population that is directly integrated into the formal economy of El Salvador and therefore is not expected to show a tendency towards informalization.

Figures from both sites, particularly from Ciudad Obrera, indicate that the frequency of a secondary employment is seven times higher than in the MASS, this could compensate the lower number of salaries per household discussed above. Moreover, in the case of Ciudad Obrera the fact that the number of households that receive family remittances from abroad is higher than at the metropolitan scale also demonstrates the existence of another source of income.

This socio economic analysis permits to characterize the population of Ciudad Obrera and Montelimar as young households, with young children, basically with similar education characteristics to the average metropolitan population. Presumably these households have higher incomes than the average metropolitan household, whether by being employed on the best

remunerated activities of the economy, having secondary sources of income, or receiving help from relatives outside the country.

6.5 PATTERNS OF LOCAL MIGRATION

This section discusses the results of the household survey concerning the local migration patterns of the residents of Ciudad Obrera and Montelimar. These patterns are relevant to explore, the validity of two of the core hypotheses of the urban model introduced in Chapter 3, in the case of the Metropolitan Area of San Salvador (MASS).

The first core hypothesis (A), is the *trend to mega-urbanization*, where mega-urbanization is defined as a process of extended and non contiguous urban growth at the regional scale that favors a polycentric configuration of the metropolis with blurring distinctions between urban and rural (Gilbert, 1996; Portes, 1997; Dandekar, 1998b). This hypothesis indicates that the process of Export Oriented Industrialization (EOI) has favored the development of industrial complexes outside of the metropolitan areas and that these new industrial nodes are pulling new waves of migrant population since they are main sources of employment. Two specific hypotheses rise from this assumption: (A1) these neighborhoods are a destination of migrants attracted by job opportunities in the export industrial sector, therefore one could expect that a significant part of the active population works at the EPZs; (A2) workers seek to minimize commute time therefore job location is a major factor to decide to move to these neighborhoods.

This analysis will be divided in three parts. The first section will study the location of jobs for the working population of Ciudad Obrera and Montelimar. The second section will examine the households' process of residential migration. The third section will synthesize both dynamics and present possible explanations.

6.5.1 JOB LOCATION

According to hypothesis (A1), a significant part of the active population should work at the EPZs demonstrating the process of configuration of distant industrial residential clusters. Table 6.6 shows the direct role of EPZs in the employment of the population who have jobs.

Table 6.6 Direct role of EPZ			
	C.O.	MOL	MASS
PERSONS EMPLOYED AT EPZ	7	7	
% OF THE ACTIVE POPULATION	6.0%	5.4%	2.6%
% OF TOTAL JOBS	9.3%	8.5%	3.3%
% OF JOBS IN MANUFACTURING	41.2%	46.6%	16.6%

note: C.O. (Ciudad Obrera), MOL (Montelimar), MASS(Metropolitan Area of San Salvador)

source: household survey

Results appear to confirm hypothesis (A1), since the proportion of people working at the EPZs in both neighborhoods is three times higher than at the metropolitan level. EPZs represent more than 40% of the total manufacturing employment in both sites, compared to 17% in the MASS, and 9% at the national level (DIGESTYC, 1998; BCR, 1999a), yet the percentage is low given the location of the sites. In fact the vast majority of the population, more than 90%, does not work at the EPZs. This finding is consistent with socio economic data (see Table 6.5) that showed that more than two thirds of the working population is in fact employed in tertiary activities. Therefore there is no evidence of a strong direct functional connection between EPZs and the neighborhoods.

Then it becomes necessary to explore the functional ties of the neighborhoods, defined by job location patterns. Table 6.7 shows the geographic location of the primary occupation of the working population.

Table 6.7

Job location

	CIUDAD OBRERA		MONTELIMAR	
1. MASS	54	72.0%	65	79.3%
2. OTHER	21	28.0%	17	20.7%
TOTAL	75	100.0%	82	100.0%

source: household survey

Results in both sites are similar, around three quarters of the active population works at the MASS and only a quarter works outside. This suggests that the Metropolitan Area still represent the major source of jobs for the population, dismissing for the case of Ciudad Obrera and Montelimar, the hypothetical development of new centers of industrial and residential activity suggested in the literature (Gilbert, 1996; Portes, 1997; Dandekar, 1998b) and in hypothesis (A1).

Figures 6.18 and 6.19 show job locations and previous residence for the working population of both sites at the regional level. In the case of Ciudad Obrera, all the non-metropolitan jobs, except one, are located along the Pan American Highway, west of the MASS. Montelimar presents the same pattern of concentration along the Airport Highway, south of the MASS. These locations coincide with the recent export oriented development corridors introduced in section 7.1.

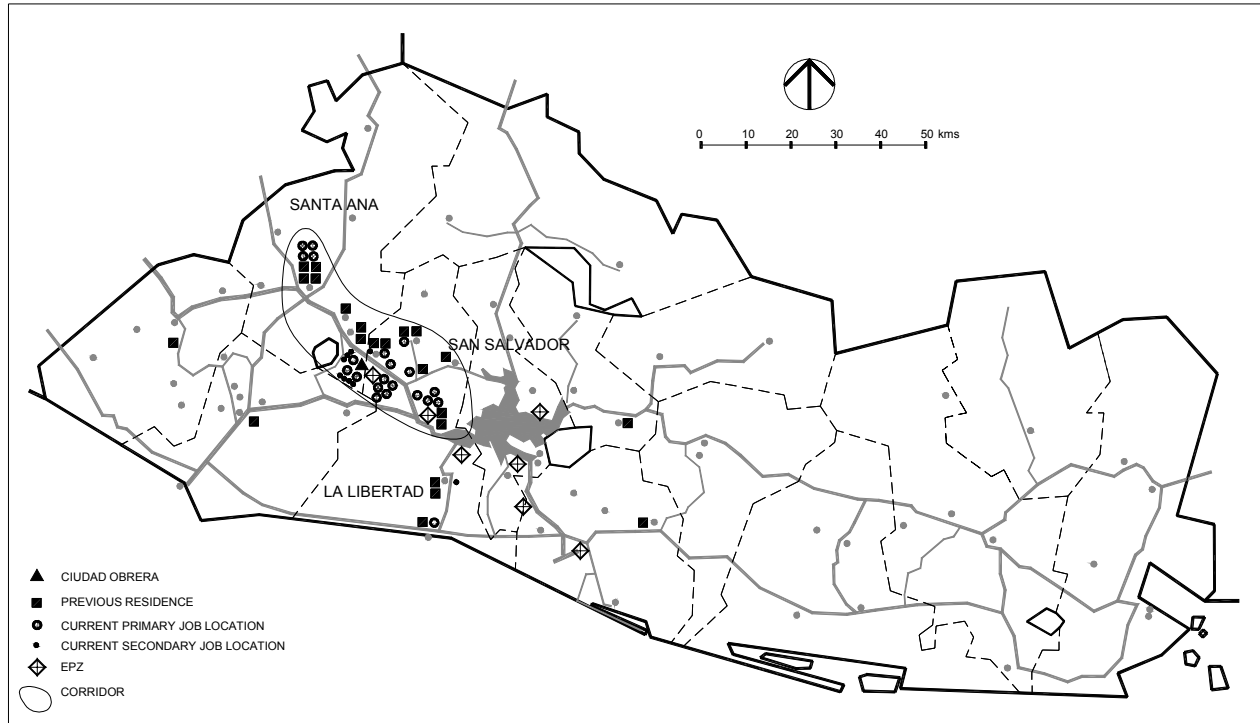


Figure 6.18 Previous Residence and Job Location at the regional level (Ciudad Obrera)
Source: own elaboration based on household survey

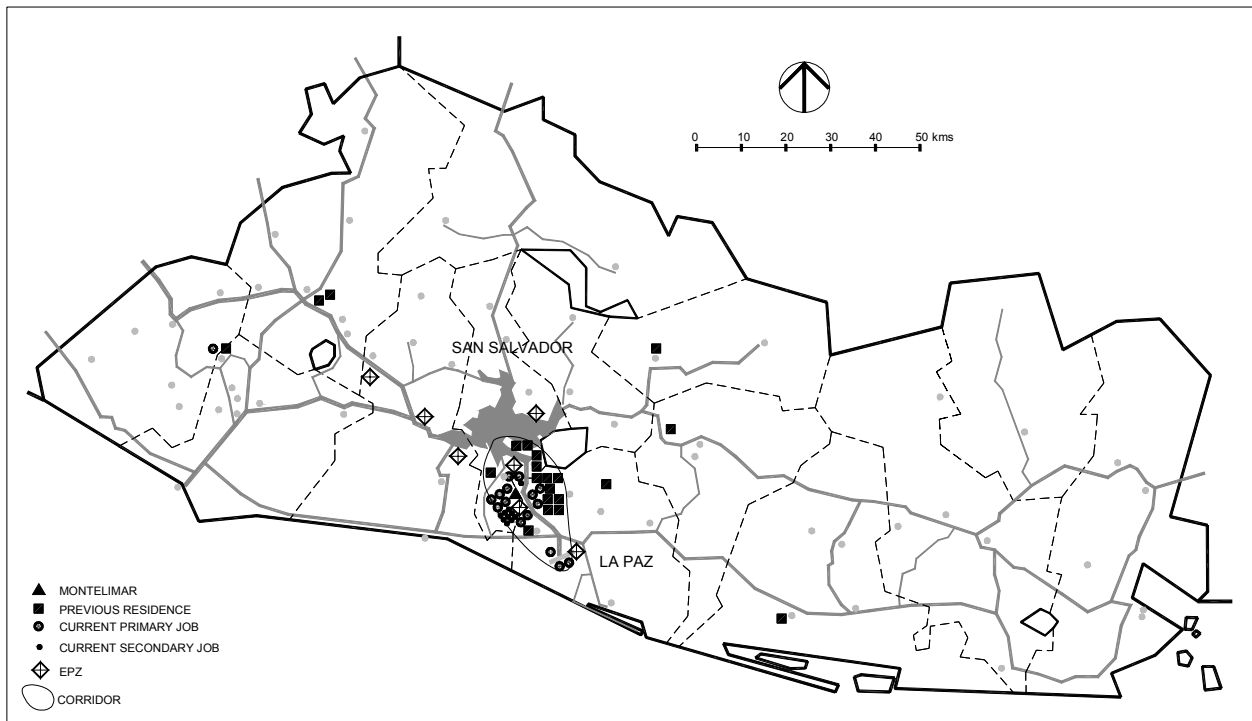


Figure 6.19 Previous Residence and Job Location at the regional level (Montelimar)
Source: own elaboration based on household survey

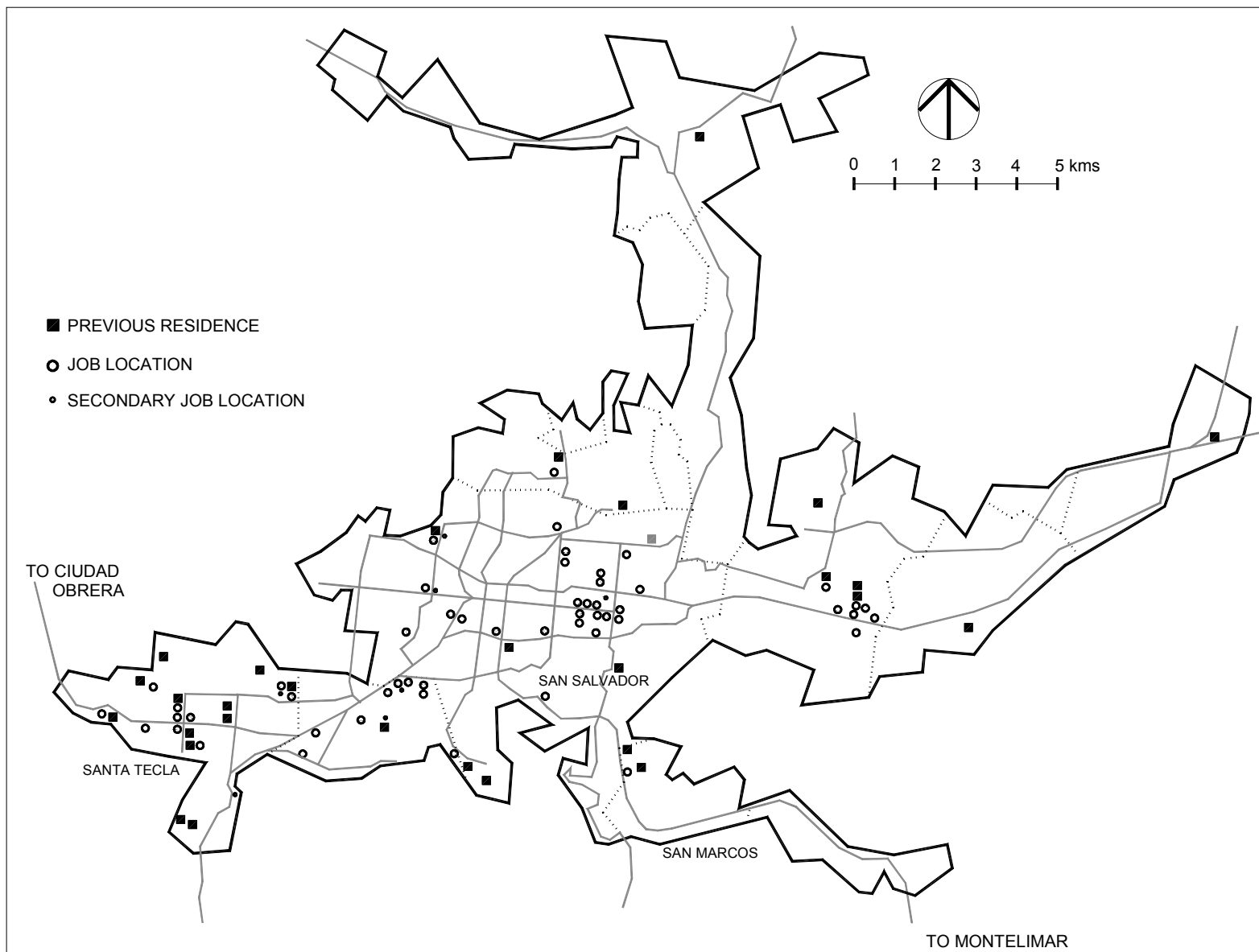


Figure 6.20 Previous Residence and Job Location at the metropolitan level (Ciudad Obrera)

Source: own elaboration based on household survey

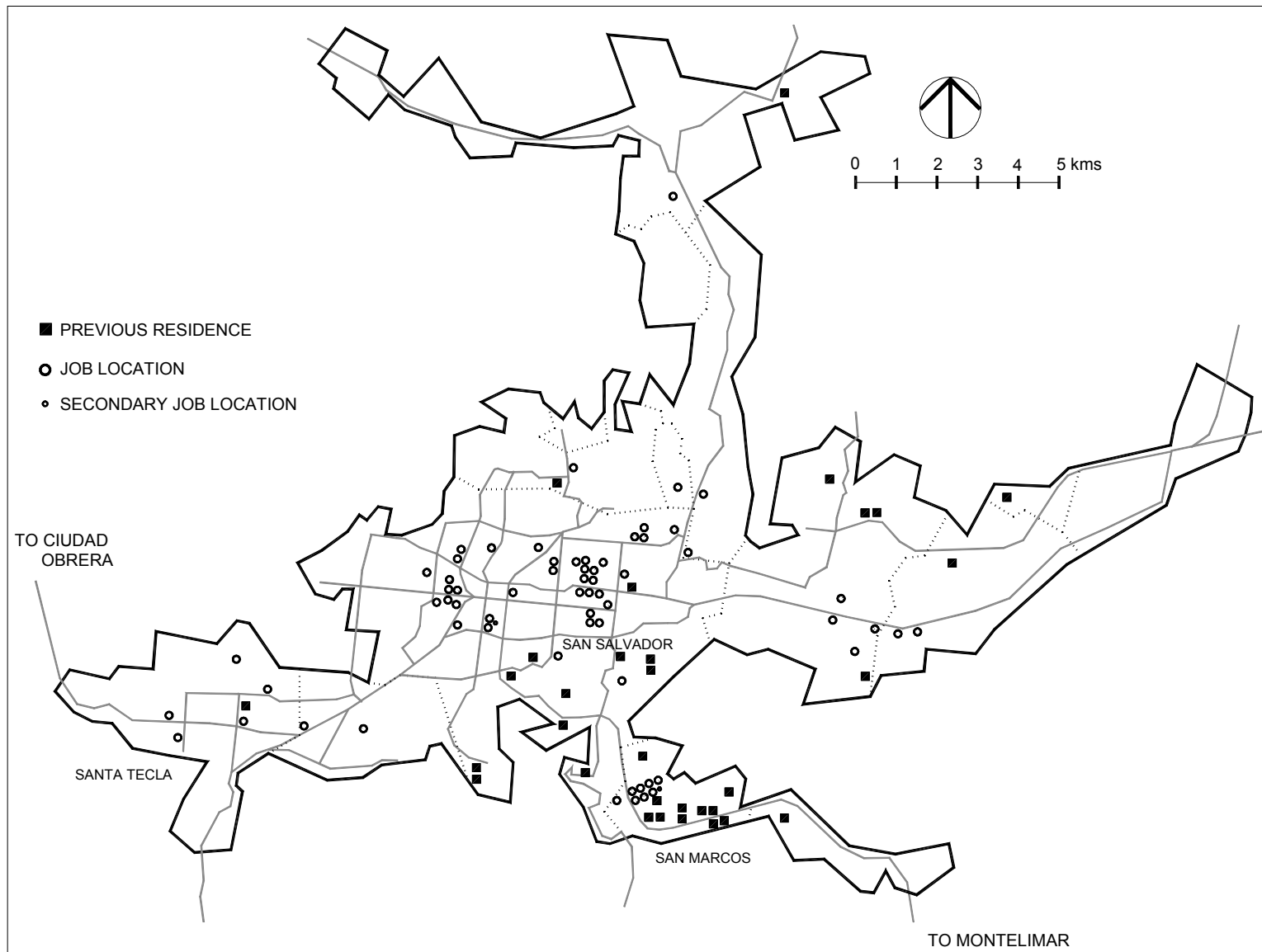


Figure 6.21 Previous Residence and Job Location at the metropolitan level (Montelimar)

Source: own elaboration based on household survey

Figures 6.20 and 6.21 show job location patterns within the Metropolitan Area. In the case of Ciudad Obrera jobs concentrate in two of the fourteen municipalities that constitute the MASS: San Salvador and Santa Tecla. San Salvador, the capital municipality concentrates more than half of the total employment while Santa Tecla concentrates nearly one quarter. For Montelimar the trend appears to be similar, since jobs concentrate in two municipalities: San Salvador and San Marcos. San Salvador concentrates three fifths of the total employment, and San Marcos one fifth. This has implications for the model of the Globalized Latin American City introduced in Chapter II since it underlines the importance of the traditional CBD, represented in this case by San Salvador. This is a significant finding since it indicates that the capital municipality plays a dominant role as job provider for these distant neighborhoods. On the other hand the other significant job providers, Santa Tecla and San Marcos, respectively, are the westernmost and southernmost municipalities of the MASS. The Pan American Highway, where Ciudad Obrera is located, originates in San Tecla. The Airport Highway, where Montelimar is located, originates in San Marcos. This analysis points to the importance of the corridors as major articulators of interaction between the neighborhoods and the metro area and indicates that none of the neighborhoods is part of an autonomous industrial residential cluster, as hypothesis (A1) speculated

Table 6.8 refines these observations by presenting the kinds of activities in which people are employed in the corridors and the MASS.

Table 6.8 **Type of activity depending on the region of work**

	CIUDAD OBRERA				MONTELMIMAR			
	MASS		Corridor		MASS		Corridor	
1. AGRICULTURE	0	0.0%	0	0.0%	0	0.0%	1	6.3%
2. INDUSTRY	7	13.0%	10	47.6%	13	20.0%	2	12.5%
3. UTILITIES	1	1.9%	1	4.8%	0	0.0%	0	0.0%
4. CONSTRUCTION	6	11.1%	1	4.8%	6	9.2%	0	0.0%
5. RETAIL-RESTAURANT	10	18.5%	1	4.8%	7	10.8%	5	31.3%
6. TRANSPORTATION	4	7.4%	1	4.8%	8	12.3%	4	25.0%
7. FINANCE AND BANKING	4	7.4%	0	0.0%	9	13.8%	1	6.3%
8. PUBLIC ADMINISTRATION	12	22.2%	3	14.3%	11	16.9%	0	0.0%
9. EDUCATION SERVICES	4	7.4%	3	14.3%	2	3.1%	0	0.0%
10. HEALTH SERVICES	0	0.0%	0	0.0%	3	4.6%	0	0.0%
11. OTHER	6	11.1%	1	4.8%	6	9.2%	3	18.8%
TOTAL	54	100.0%	21	100.0%	65	100.0%	16	100.0%

source: household survey

In the case of Ciudad Obrera the difference is striking. Almost half of the people who work in the Pan American Highway corridor are occupied in manufacturing, including those

working at the EPZs, compared to only one eight in the metropolitan area. On the other hand, people working in the MASS concentrate in activities such as public administration and retail. Montelimar presents a different pattern; people working in the metro area concentrate in manufacturing, finance, and public administration, while those working in the corridor are mostly occupied in retail and transportation. These results are consistent with the fact that San Salvador and its CBD concentrate government institutions as well as private activities such as banking, both of which are important job providers for the population of Ciudad Obrera and Montelimar as explained in section 6.4. However in the case of Ciudad Obrera results suggest that there is also a process of integration between one part of the active population and the industrial activities, whether export or domestic oriented, located along the corridor.

Hypothesis (A2) suggested that job location is a major factor for households to decide to move to these neighborhoods. Knowing whether people changed job after moving to the new neighborhoods could be used as an indicator of such tendency. The survey included that question, table 6.9 presents the results.

Table 6.9

Change in job after moving

	CIUDAD OBRERA		MONTELMAR	
1. YES	21	18.1%	22	17.7%
2. NO	95	81.9%	102	82.3%
TOTAL	116	100.0%	124	100.0%

source: household survey

In both cases the vast majority of the people, more than 80%, still have the same job as before moving to the neighborhoods. This apparently indicates that the processes of moving to the neighborhood and the pursuit of job opportunities are not substantially related. This assumption is confirmed by the answers to the question that explored the reason to move. Table 6.10 presents the results.

Table 6.10

Reason to move

	C.O.	MONT.
1.1 TO OWN A HOUSE	40.4%	41.5%
1.2 INDEPENDENCE	5.8%	15.1%
1.3 CREDIT HERE	7.7%	17.0%
1. HOMEOWNERSHIP	53.9%	73.6%
2. LIKE THE PLACE	28.8%	15.1%
3. BECAUSE OF WORK	5.8%	3.8%
4. OTHER	11.5%	7.0%

source: household survey

Only an insignificant minority, less than 6%, answered that they moved “to be close to their jobs.” Most of the people answered something related to the possibility to “become homeowners,” or “to be independent,” particularly in Montelimar. In the case of Ciudad Obrera, more than one quarter of the people mentioned the fact that they “liked the place,” which is consistent with the higher quality of the neighborhood in terms of environmental amenities. In that sense the results challenge the initial hypothesis (A2), suggesting that for the population of these neighborhoods, proximity to the workplace is not the major reason to decide where to live, in fact it seems that the answer is related to the possibility to become homeowner and in a minor proportion to the quality of the neighborhood. This suggests that the development and occupation of these neighborhoods is connected to other factors related with housing opportunities for the households.

As a summary, the evidence from the household survey does not reveal deep direct connections between EPZs and the new neighborhoods, these are not “company towns.” The pursuit of job opportunities does not appear to be a significant reason to explain the process of people moving to Ciudad Obrera and Montelimar. The next section will explore this process in a more detailed manner.

6.6. PROCESS OF RESIDENTIAL RESTRUCTURING

This section discusses the results of the household survey concerning geographic and qualitative shifts embedded in the process of residential migration for the residents of Ciudad Obrera and Montelimar. These processes are relevant to examine, in the case of the Metropolitan Area of San Salvador, the validity of the second core hypothesis presented in the model of the Globalized Latin American City introduced in Chapter II.

Core hypothesis (B), the *process of residential restructuring*, suggests that the process of economic restructuring, based on the reduction of the state and economic liberalization has particularly affected middle class groups, which are now forced to live in cheaper locations in the metropolitan periphery. This process encompasses two hypotheses, (B1) peripheral neighborhoods have a population with highly diversified social backgrounds and (B2) a significant part of the population moves to the neighborhoods searching in search of inexpensive housing (Ward, 1990; Miraftab, 1997; Browder et al, 1997, Portes, 1997; Gilbert 1998).

6.6.1. GEOGRAPHIC ORIGIN OF THE POPULATION

In order to identify possible patterns of residential migration the survey gathered data concerning the location of previous residence. According to hypothesis (B), a substantial part of the population should come from the city as a consequence of the process of middle class impoverishment. Table 6.11 indicates the place of previous residence for the household sample.

Table 6.11	Previous residence of household			
	CIUDAD OBRERA		MONTELMAR	
1. MASS	30	57.7%	32	60.4%
2. OTHER	22	42.3%	21	39.6%
TOTAL	52	100.0%	53	100.0%

source: household survey

Ciudad Obrera and Montelimar present similar patterns; around 60% of the households previously lived in the MASS, and the remaining 40% lived outside. Therefore, the majority of the households left a residence in the MASS, apparently according to Table 6.10, in search for homeownership. These results also indicate that the neighborhoods are the result of two different geographic processes, first one of migration from the MASS to these distant developments; the second is a process of regional migration. Therefore, it is necessary to analyze residential migration at two different levels, metropolitan and regional.

6.6.1.1. Displacement at the regional level

Figures 6.18 and 6.19 mapped, for both sites, the previous place of residence for those households that lived outside the MASS. In the case of Ciudad Obrera most of the region migrant households come from the provinces of La Libertad and Santa Ana, particularly along the Pan American Highway corridor. In the case of Montelimar, the geographic origin of the residents is even more concentrated, most come from the provinces of San Salvador and La Paz, along the corridor defined by the Airport Highway corridor. This emphasizes, as in the case of job location, the interconnections between neighborhoods and corridors, since a substantial part of the neighborhoods population is the result of corridor based migration.

6.6.1.2. Displacement at the metropolitan level

Figures 6.20 and 6.21 mapped, for both sites, the previous place of residence for those households that lived within the MASS. In the case of Ciudad Obrera, the municipalities of San Salvador and Santa Tecla used to be the previous residence of nearly two thirds of the

households. 40% of the total households (twelve out of thirty) used to live in Santa Tecla, where the Pan American Highway begins. In the case of Montelimar, the pattern of concentration is even clearer, nearly three quarter of the households used to live in San Salvador and San Marcos. 42% of the households (thirteen out of thirty one) used to live in San Marcos, the southernmost municipality of the MASS, and again where the Airport Highway initiates. These results indicate, as in the case of job location (see Section 6.5) that the corridors and the metropolitan municipalities where these originate play a substantial role in the definition of the Ciudad Obrera and Montelimar. In fact one could argue that metropolitan migration follows a longitudinal pattern along the corridors.

6.6.2. PATTERNS OF MIGRATION AND HOUSING QUALITY

Using data from the Metropolitan Planning Office (OPMASS, 1999) it is possible to have an idea of land and housing prices of the previous place of residence of the population of Ciudad Obrera and Montelimar that used to live in the MASS. This analysis is meant to provide only a rough estimate of probable qualitative changes during the residential restructuring process and acknowledges the fact that a more precise methodology would require information that is not provided in the data.

OPMASS divides the metropolitan area in a scale of five categories based on the average price of the land and average price of the housing units build in those areas. Even if Ciudad Obrera and Montelimar are not within the jurisdiction of the MASS, they have similar layout, lot size and services as those areas in sector 4. Figure 6.22 shows the distribution of previous residences in the MASS and the land price division of the metro area. Table 6.12 summarizes the previous residential category of the households that used to live in the MASS.

Previous residential category of households that lived in the MASS

Table 6.12

	Range land price \$/m2	Ciudad Obrera		Montelimar	
SECTOR 1	225 and up	0	0.0%	0	0.0%
SECTOR 2	[175 - 225]	5	16.7%	0	0.0%
SECTOR 3	[125 - 175]	17	56.7%	10	31.3%
SECTOR 4	[75 - 125]	7	23.3%	21	65.6%
SECTOR 5	up to 75	1	3.3%	1	3.1%
total		30	100.0%	32	100.0%

Ciudad Obrera and Montelimar are considered sector 4

Source: derived from survey and OPAMSS (2000)

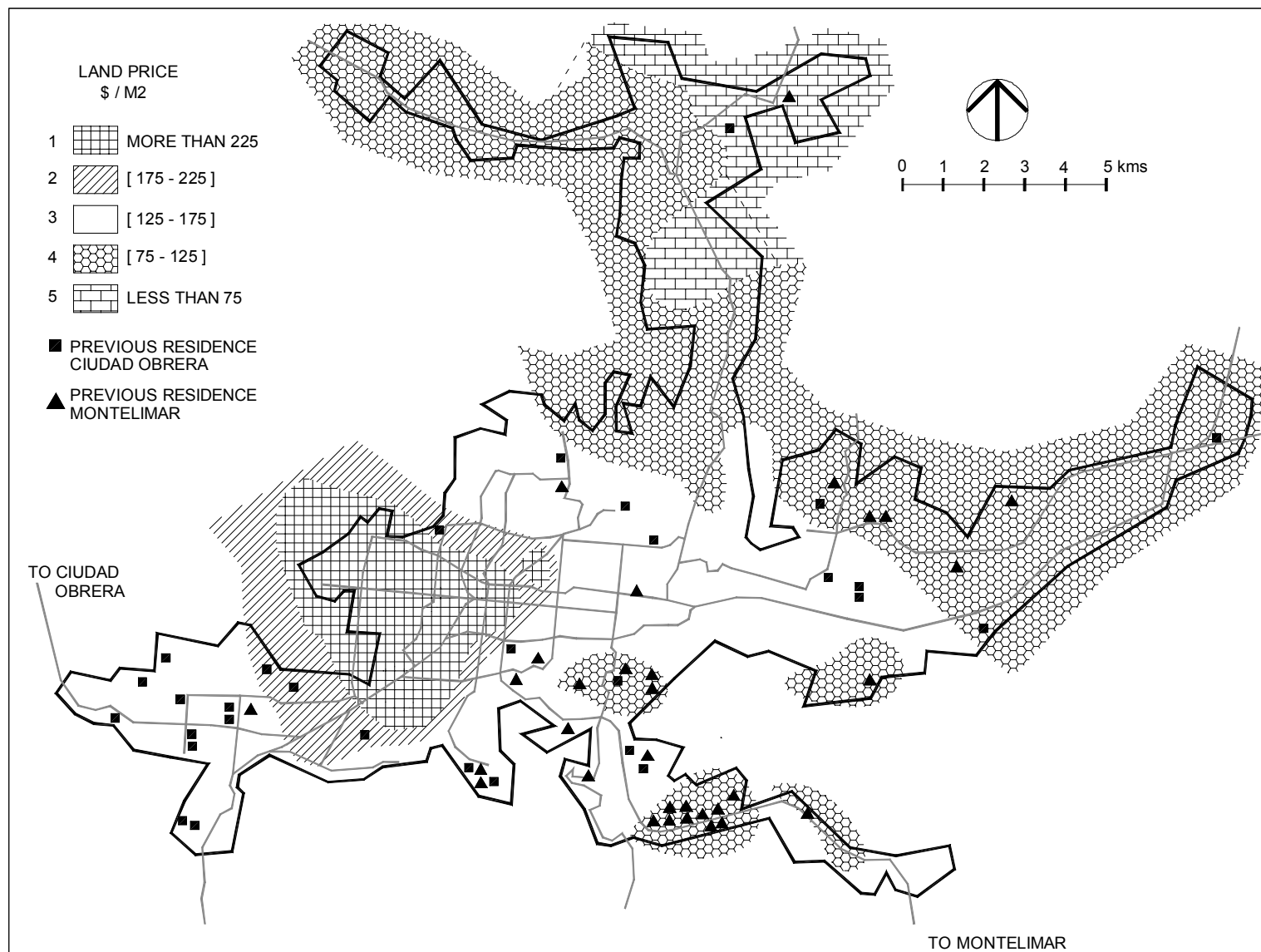


Figure 6.22 Land prices in the MASS and previous residence of households

Source: derived from OPAMSS (2000) and household survey

In the case of Ciudad Obrera, nearly three quarters of the households that used to live in the MASS have moved to lower priced areas. In the case of Montelimar nearly one third of the population has undergone the same process. Even if there is no valid data to analyze this process for those households not living in the MASS, the results suggest that a significant part of the population is now living in lower land-priced neighborhoods that what they used to, which supports the initial hypothesis about residential restructuring.

Moreover these findings can be connected to the results presented in Table 6.10, where it appeared that most of the households moved to these neighborhoods pursuing homeownership and to the housing shortage conditions that exist in the MASS. According to DIGESTYC (1998) more than one third of the households (100,000 households) in the MASS do not own their dwelling. Moreover, nearly one quarter of the housing units (80,000 units) do not have all the minimum services. Therefore, Ciudad Obrera and Montelimar would represent the achievement of affordable housing opportunities for small young households, with formal sector wage jobs, confirming the assumptions of hypothesis (B2).

6.6.2.1. Patterns of displacement and service availability

The availability and access to public services can also be used as an indicator of the household's social position. Table 6.13 shows the location and concentration of these services in the MASS and the provinces of San Salvador, La Libertad (where Ciudad Obrera is located), and La Paz (where Montelimar is located).

Table 6.13 **Regional distribution of public services**

	mSS	MASS	SS	LL	LP	TOTAL
P & S School	319	427	434	113	169	716
High School	88	122	126	38	22	186
Superior School	18	22	22	6	2	30
Hospital	13	14	14	2	2	18
Health Center	7	21	23	12	10	45
Care Center	0	3	5	8	7	20

Source: IGN (1997)

P&S schools: primary and secondary schools

mSS: municipality of San Salvador

SS: province of San Salvador

LL: province of La Libertad

LP: province of La Paz

As in most developing countries with high levels of population concentration, the metropolitan area of San Salvador enjoys the best formal education and health services, particularly in the municipality of San Salvador, which concentrates all the major national educational and health

institutions. Households that lived in the MASS lived no more than 15 kms from major public facilities, while now they live at least 30 kms away. Therefore one could argue that the population who used to live in the MASS and now lives in Ciudad Obrera or Montelimar has impaired its capacity to reach those services, in fact approaching the level of more rural population, particularly in the case of health care services.

6.6.2.2. Changes in the quality of life

The household survey explored changes in the quality of life of the household following relocation to the neighborhoods. Results again do not pretend to be precise but they give an approximate idea of household's perceptions, Table 6.14 show the results. Answers reveal four major perceptions.

Table 6.14 **Major change in quality of life**

CHANGE IN QUALITY OF LIFE	C.O.	MONT.
NEIGHBORHOOD IS PEACEFUL	11.5%	15.1%
BETTER ENVIRONMENT	9.6%	0.0%
BEING OWNERS	9.6%	18.9%
INDEPENDENCE	5.8%	13.2%
CLOSE TO JOB	9.6%	0.0%
FAR AWAY FROM JOB	32.7%	17.0%
EVERYTHING IS MORE EXPENSIVE	9.6%	11.3%
NOTHING	7.7%	17.0%
OTHER	3.9%	7.5%

Source: household survey

The first has positive connotation and refers to the fact that the neighborhoods offer a peaceful and secure environment. In the case of Ciudad Obrera the natural environmental quality of the site is also appreciated. The second positive perception relates to the fact of being homeowners and being independent from other members of the family. However it is interesting to compare Tables 6.14 and 6.10, since homeownership was perceived as the main reason to move to the neighborhoods but is not considered as important in terms of quality of life improvement. Finally in the case of Ciudad Obrera proximity to job location was also mentioned as a major change for some of the households.

On the other side, negative perceptions referred to two different aspects. The first is distance to job location, which is particularly relevant in the case of Ciudad Obrera, where almost one third of the population complained about it. The second factor refers to higher costs

of living, including housing, public services, and transportation. Both factors clearly demonstrate the downside of this newly developed distant neighborhoods.

Therefore, results appear to indicate that for one part of the population, particularly for those who used to live in the MASS, moving to these neighborhoods represents a relative decline in terms of land price category and service availability. It seems that in the pursuit of less expensive homeownership opportunities, households sacrifice other dimensions of their living, particularly extended traveling and proximity to services. This process suggests that core hypothesis (B) related with urban residential restructuring applies for Ciudad Obrera and Montelimar.

6.6.3. MULTIPLE PATTERNS OF RESIDENTIAL RELOCATION

The process of residential migration and job location of the population of Ciudad Obrera and Montelimar presents two important characteristics. First, the neighborhoods concentrate households from different geographic origins; one, the largest, comes from the MASS; the other comes from the Corridors where the neighborhoods are located. Second, the bulk of the working population is employed in the metropolitan area, and a quarter works in the corridors defined by the highways. Cross tabulation from the household survey presented in Figures 6.23 refines these results by showing the association between previous residence and current job location in Ciudad Obrera and Montelimar.

It seems that the neighborhoods crystallize four different trends of residential relocation, that refine the process of residential restructuring embedded in the model of the Globalized Latin American City (see section 3.3.4). The most important process is of people who used to live in the MASS and are still working in the metro area; in this case the neighborhoods would mainly represent the achievement of less expensive homeownership opportunities. The second process involves those persons who were previously living in the Corridor and work at the metropolitan area; here the neighborhoods could represent an affordable opportunity to “approximate” the city. The third process includes the persons who used to live in the Corridor and are still working along the corridor; in this case the neighborhoods could represent an opportunity to get closer to jobs or achieving affordable homeownership within the regional space. Finally the fourth process, the least important one, refers to those persons who used to live in the MASS and work at the Corridors; here neighborhoods could represent an opportunity to live close to jobs.

		PREVIOUS RESIDENCE	
		MASS	CORRIDOR
CURRENT JOB LOCATION	MASS	38 (50%)	16 (22%)
	CORRIDOR	8 (10%)	13 (19%)

CIUDAD OBRERA

		PREVIOUS RESIDENCE	
		MASS	CORRIDOR
CURRENT JOB LOCATION	MASS	41 (50%)	24 (29%)
	CORRIDOR	8 (10%)	9 (11%)

MONTELIMAR

Figure 6.23 **Residential migration and job location patterns in Ciudad Obrera and Montelimar**
Source: household survey

It is interesting to note that the main difference in these patterns between Ciudad Obrera and Montelimar occurs in the proportion of people who lived in the Corridors and work there too. It seems that the population of Ciudad Obrera has stronger connections with the Corridor along the Pan American Highway, a Corridor defined in sections 6.1 and 6.5 as increasingly manufacturing and export oriented. In any case this analysis provides evidence that Ciudad Obrera and Montelimar are part of a complex web of interactions that involve the MASS and the Corridors.

Some relevant conclusions can be drawn out of the examination of results concerning job location patterns and residential migration presented in sections 6.5 and 6.6, as they relate with the processes described in the model of the Globalized Latin American City introduced in Chapter III. First, although EPZs provide an important part of the manufacturing employment in both sites there is no evidence of a significant direct functional relationship between EPZs and the neighborhoods. Second, the population of both neighborhoods is the result of two parallel processes, one of metropolitan migration, the other of regional corridor-based migration. Both findings challenge the conception of the expanded metropolitan edge as an autonomous node based on industrial activity, as assumed by hypothesis (A1).

Third, job location is not an important factor for the households to decide where to live, homeownership and housing availability appear to be the main explanations, this refutes hypothesis (A1) that the neighborhoods are a destination for migrants attracted by job opportunities. Fourth, there is evidence that for a significant part of the population, particularly for those that previously lived in the MASS, moving to Ciudad Obrera and Montelimar is a mechanism to achieve home ownership in a lower priced area, this supports core hypothesis (B) concerning the residential restructuring of middle class groups. Results do indicate the integration of the neighborhoods' population in metropolitan dynamics of housing affordability and employment, suggesting that the hypothetical (A) process of mega-urbanization of the MASS is occurring but not necessarily because of export promotion transformations.

Fifth, both in terms of previous residence and in terms of employment regional Corridors, defined by the Pan American and Airport Highways, play a major role in the spatial dynamics of the neighborhoods' population. There is also evidence of multiple connections between the Corridors and the Metropolitan Area in terms of exchange of residential and job opportunities.

These results also support a hypothetical trend to mega-urbanization (A) but suggest that there are no straightforward linkages between EPZs and the emergence of residential neighborhoods as the model assumed. Based on these conclusions and on the original development tendencies observed in section 6.1, 6.2, and 6.3 it is possible to speculate that in the Salvadoran case, the interaction between economic transformations, particularly export oriented industrialization, and urbanization exists in an indirect form. The next chapter will discuss and summarize these interactions in order to suggest possible interpretations and implications.

7. LINKING URBAN AND GLOBAL TRANSFORMATIONS IN CIUDAD OBRERA AND MONTELIMAR.

The results of this research suggest that Ciudad Obrera and Montelimar are part of the larger process of mega-urbanization of the MASS, even if this process is not directly connected to the development of EPZs. These neighborhoods are part of a process of residential restructuring that integrates diverse populations in post suburban locations. These issues will be addressed in three sections. The first section will present a summary of the findings, underlining the most relevant conclusions of the research, studying their interconnections and revisiting the conceptual assumptions of the Model of the Globalized Latin American City. The second part will examine the implications of these findings for the literature on urbanization and globalization in Latin America. Finally the last part will attempt to describe the mechanisms that explain the urban processes that resulted in the development of Ciudad Obrera and Montelimar, underlining the role of global transformations and actors.

7.1. MEGA-URBANIZATION AND RESIDENTIAL RESTRUCTURING IN CIUDAD OBRERA AND MONTELIMAR

7.1.1. A MULTI CAUSAL MODEL OF MEGA-URBANIZATION

Based on the literature, the model of the Globalized Latin American City introduced in Chapter 3 assumed that the implementation of export oriented industrialization (EOI) would favor the development of remote industrial complexes that act as new magnets of population and therefore induce the development of distant urban settlements resulting in mega-urbanization defined as the process of extended and non-contiguous urban growth at the regional scale that favors a polycentric configuration of the metropolis with blurring distinctions between urban and rural (Gilbert, 1996; Portes, 1997; Dandekar, 1998b). This section revisits the conceptual model in light of the empirical research of this thesis.

7.1.1.1. EPZs as catalyst of the urban process

The review of economic transformation in El Salvador demonstrated that EOI was implemented during the 1990s, with Export Processing Zones playing a major role in the economy of the country. The analysis of the neighborhood's development background also demonstrated that there is a linkage between EPZs and neighborhoods based on the introduction of services and increased land prices (see Section 6.3). However, household data demonstrated the limits of this

hypothetical relationship, since EPZs do not represent a major source of employment for the residents. Moreover, most of the population still works in the Metropolitan Area of San Salvador. Along these same lines, job location was not a relevant reason among residents to decide to move to these sites. EPZs seem to act more as a catalyst in the process of post suburban development, whose explicit causes may rely in other dimensions of the Salvadoran social, economic and political reality. Nonetheless, the recent pattern of development of EPZs and new massive residential developments demonstrate that this catalyst role is extremely important.

7.1.1.2. Export corridors as an expression of mega-urbanization

The results of this research indicate that regional export corridors defined by major highways, play a substantial role in the migratory patterns of the neighborhoods' population, both in terms of origin of the residents and in terms of primary job location. Despite the fact that EPZ employment is relatively low, a significant proportion of the population is employed in the corridor where the neighborhood is located, particularly in the case of Ciudad Obrera. This is relevant when secondary data demonstrates that both corridors, the Pan American Highway corridor and the Airport corridor, are absorbing an important part of the country's new export oriented activities increasing their linkages with the global economy. Therefore, it would be inaccurate to characterize these neighborhoods as extensions of the metropolitan area or as footprints of global economic transformations. The data imply the presence of two different groups, one coming from the MASS, the other from the corridors with different occupational patterns in terms of activity and location but converging in the same neighborhoods. Ciudad Obrera and Montelimar seem to crystallize the transformation in the housing and occupational patterns of one part of the corridor's population, as well as the pursuit of housing opportunities by former metropolitan residents.

7.1.2. RESIDENTIAL RESTRUCTURING AT THE REGIONAL SCALE

According to the literature, the process of economic restructuring in Latin America has particularly affected middle-income groups that used to receive benefits from the state (public administration employment, subsidies, services). State reduction and the non interventionist scheme proposed by the neo liberal economic model has worsened the economic position of these wage based groups and forced them to move into less privileged areas of the metropolitan area, especially in peripheral locations (Ward, 1990, Gilbert, 1996, Portes, 1997, Miraftab, 1997). The model of the Globalized Latin American City acknowledged this phenomenon in

hypothesis (B) and introducing new middle class areas in the metropolitan periphery as well as in distant industrial residential clusters. In this case, Ciudad Obrera and Montelimar have attracted differentiated populations both in terms of geographic origin and economic activity that present more complex patterns of migration. The largest group of residents used to live in the MASS. In their case the neighborhoods appear to represent, especially Ciudad Obrera, an opportunity to achieve affordable housing in a cheaper peripheral post suburban location even if this relocation represents harder conditions to access jobs or services, just as the literature and the model assumed. Nonetheless for the significant contingent of residents who used to live in the corridors this process is not as clear, certain households appear to be approaching the city, while others have undergone a process of intra-regional migration maintaining employment connections with the region. Therefore, Ciudad Obrera and Montelimar crystallize diverse processes of migration for both metropolitan and regional populations.

7.1.2.2. Housing shortage and spatial expansion

One of the most striking findings of the empirical research is the fact that the pursuit of homeownership is the major reason for the households to move into the neighborhoods. This demonstrates the magnitude of the problem of housing shortage and the affordability issue, particularly in the Metropolitan Area. In that sense this social problem would be one of the major causes that stimulates the development of post suburban neighborhoods and makes them attractive to the population despite their inconvenient location.

In that sense residential restructuring and the trend to mega-urbanization appear to be interconnected. On the one hand, households that lived in the Metropolitan Area had to sacrifice their location “advantages” in order to access a home in an affordable location such as Ciudad Obrera or Montelimar. On the other hand the regional corridors where these neighborhoods are located became areas susceptible to industrial or residential development in part as the result of major economic transformations. These processes suggest that Ciudad Obrera and Montelimar are embedded in complex social and spatial dynamics connected to economic and social transformations at the national and global level. Finally, it is important to note that neither Ciudad Obrera nor Montelimar express any tendency related with the third and fourth processes assumed in the conceptual model: the emergence of a Latin American “Edge City” and the expansion of informal activities. In fact evidence of these processes should be explored in other

areas of the MASS and not in the post suburban neighborhoods that are apparently associated with export oriented industries

7.2. THE CASE OF EL SALVADOR IN THE FRAMEWORK OF THE LITERATURE ON GLOBALIZATION AND URBANIZATION IN LATIN AMERICA

Based on the results of the empirical and theoretical research included in this thesis, this section will summarize the connections between the assumptions and hypotheses of the literature and the empirical results of the study of the cases of Montelimar and Ciudad Obrera.

7.2.1. EXPORT ORIENTED INDUSTRIALIZATION AND THE TRANSFORMATION OF THE REGIONAL SPACE

As presented in Chapter 3 multiple authors (Castells, 1987; Roberts, 1994; Gilbert, 1996 & 1997; Portes, 1997; Dandekar, 1998a) have been concerned with the spatial effects of export promotion policies. All of them emphasize that the new outward orientation of manufacturing activities will tend to de-concentrate industry from major cities to those regions favored by the proximity of major highways and ports. As presented in Chapter 6 the Salvadoran case supports these assumptions, even if most of the industrial capacity is still concentrated in the MASS the new patterns seem to be favoring specific regions along the corridors to international borders and sea-ports.

The literature also explains that this pattern of industrial location will attract migrants searching for jobs (Gilbert, 1996; Portes, 1997), therefore diminishing the primacy of major cities. The cases of Ciudad Obrera and Montelimar do not confirm this assumption, since job seeking is not a significant reason to explain the movement of households, even if EPZs are very close. Moreover this empirical study demonstrated that there are two parallel processes of migration, one from people working at the metropolitan area, the other from people already living in the regional corridor. In fact these migration patterns appear to be connected to more complex dynamics rooted in the particular conditions of the country, particularly the availability of affordable housing in the metropolitan area. Portes (1997) showed the divergence between countries like the Dominican Republic, where export oriented activities are located in secondary cities promoting the decentralization of the country, and the case of Costa Rica where export activities were still concentrated in the capital's region, reinforcing its primacy and dominance. The Salvadoran case appears to be closer to the Costa Rican even if suggesting an increasing

importance of the regional corridors. Gilbert (1996), focusing on the cases of major Latin American cities (Sao Paulo, Rio, Buenos Aires, Mexico DF) hypothesized that the development of regional metropolitan spaces would result in a new pattern of urban form that will tend to become polycentric. The case of the MASS and its new distant residential developments do not appear to support such tendency of the development of new distant centers. New post suburban neighborhoods are connected to the metropolitan area, which still provides most of the jobs and social services required by its residents. The empirical evidence in the case of El Salvador rather underlines the importance of the corridors as regional spaces more susceptible to spatial restructuring processes related with the global economy. Simultaneously corridors, especially in the case of the Pan American Highway, also appear to be integrated with the MASS, in the sense that they are becoming recipients of new export industries as well as providers of residential space for wage based metropolitan dwellers.

The process of increasing commuting distances, for residents who go to work to the MASS, for residents who travel across the corridor to get to their jobs, and for products that are processed or assembled in EPZs and export factories can be compared at the regional and global scale to the tendency observed by Henderson & Castells (1987: 7) for “a space of flows to supersede the space of places.” Following that thought, spatial transformations resulting from the interaction between global and local conditions seem to consist more in the development of networks at the regional scale than in the clustering of autonomous production centers. Although the model presented in Chapter 3 tried to acknowledge the importance of new regional dynamics by incorporating new clusters of distant industrial and residential activities, the empirical research suggests that these new dynamics are less place centered and more flow guided. Therefore the model should incorporate this dynamic and recognize an increasing degree of complexity and plurality in urban and regional dynamics, caused in part by globalization.

7.3. THE MECHANISMS OF URBANIZATION IN CIUDAD OBRERA AND MONTELIMAR

Both quantitative and qualitative data suggest that the initial hypotheses of (A) trend to mega-urbanization and (B) the process of residential restructuring have components at the national and global scale. It seems that the interaction of both processes at both scales provides the conditions for the emergence of neighborhoods such as Ciudad Obrera and Montelimar. As explained before, these processes do not seem to follow a linear relation, but more a “web of interactions”

pattern (Goerner, 1999), involving mechanisms and actors in El Salvador and elsewhere in the World. Figure 7.1 summarizes this matrix of interactions between global and national conditions, mega-urbanization and residential restructuring, the following sections discuss those processes.

7.3.1. THE TREND TO MEGA-URBANIZATION

Economic restructuring of the global economic system includes the transformation of the mode of production, the expansion of international trade and the emergence of foreign direct investment all of which favor the relocation of specific types of production to regions that present comparative advantages in the global market. This would be one of the characteristics of what Harvey (1990: 147) calls the “regime of flexible accumulation” that pursues the internationalization of the circuits of capital (see Section 2.2). The Caribbean Basin, which includes El Salvador, would be one of these advantaged regions in the case of textile production because of its geographic proximity to the US market, reduced labor costs, and existing trade preferences granted by the United States.

At the national level these conditions have stimulated the Salvadoran government to implement export promotion policies through two special mechanisms, Export Processing Zones (EPZs) and individual Export Oriented Firms (see Section 5.5). In El Salvador, local and foreign private investors lead the process of implementation of these measures, since strategic planning was abandoned by the state in the framework of economic liberalization and state reduction. Nonetheless Salvadoran government still provides subsidized credits and tax breaks to local corporate groups and foreign investors to purchase land, build, and operate EPZs and export plants (see Section 5.5). Local and foreign corporate groups have decided to locate these export-oriented activities in very specific regions, the MASS, and the corridors defined by the Pan American and Airport Highways (see Section 6.1). This location pattern is favored by the existence of major infrastructure that facilitates connections between the region and the global market and by the presence of an extended pool of potential workers. Moreover these advantages, existing concentration of population and infrastructure, responded to the development of agricultural regions specialized in the production of coffee, sugar cane, and cotton required by the global market in a previous stage. These conditions and the decline of traditional export agriculture in the Salvadoran economy have favored the urbanization process of the regional corridors both for industrial and residential uses (see Section 6.3). At a micro scale the specific development of EPZs and export firms also depends on local and global actors.

However, specific location of industrial facilities and neighborhoods depends on decisions by local private groups since there is no national planning policy to guide it. Global actors intervene in the development and construction process, even if not in a determinant manner, since American companies based in Houston provide the buildings for the plants (interview: EPZ Director 06/01/2000), and recently privatized companies provide power and telecommunications. All these processes stimulate the development of the new neighborhoods by facilitating access to services and increasing land prices (see Section 6.3).

7.3.2. PROCESS OF RESIDENTIAL RESTRUCTURING

At the global level, the neo liberal model applied in Latin America through the Washington Consensus (Edwards, 1995) has encouraged the reduction of the state and limited its intervention in the economy. These policies have been implemented in El Salvador in several manners including the elimination of certain agencies and policies, such as the Planning Ministry and the Urban Housing Institute (see Chapter 5). All this has resulted in reduced benefits for middle-income wage-based groups. Simultaneously and encouraged during the Civil War, there has been a process of extended migration from El Salvador to the United States that has resulted in an increasing flow of family remittances that facilitates housing acquisition by certain groups of the population.

At the metropolitan level there is a high level of housing demand whether formal or informal, resulting from nearly one third of the households renting in the MASS and nearly one quarter of the units without complete services. This guarantees the market for new massive residential developments, especially in those locations where reduced land prices will favor purchase by middle-income groups, such as Ciudad Obrera and Montelimar (see section 6.6). On the other hand the process of spatial restructuring explained above for the corridors has converted them in areas of metropolitan expansion. Moreover, the institutional regulatory framework, resulting from state reform, facilitates the development of massive post suburban neighborhoods in these corridors since regulations for housing in the rural regions are looser than in the metropolitan area (interview: Developer Manager 01/17/2000). Therefore, the process of urbanization that resulted in the development of Ciudad Obrera and Montelimar appears to respond to a multiple set of social and economic conditions within El Salvador and the World, which involve private and public actors. The final chapter of this thesis will conclude the study by pointing out directions for further research and implications for planning in El Salvador.

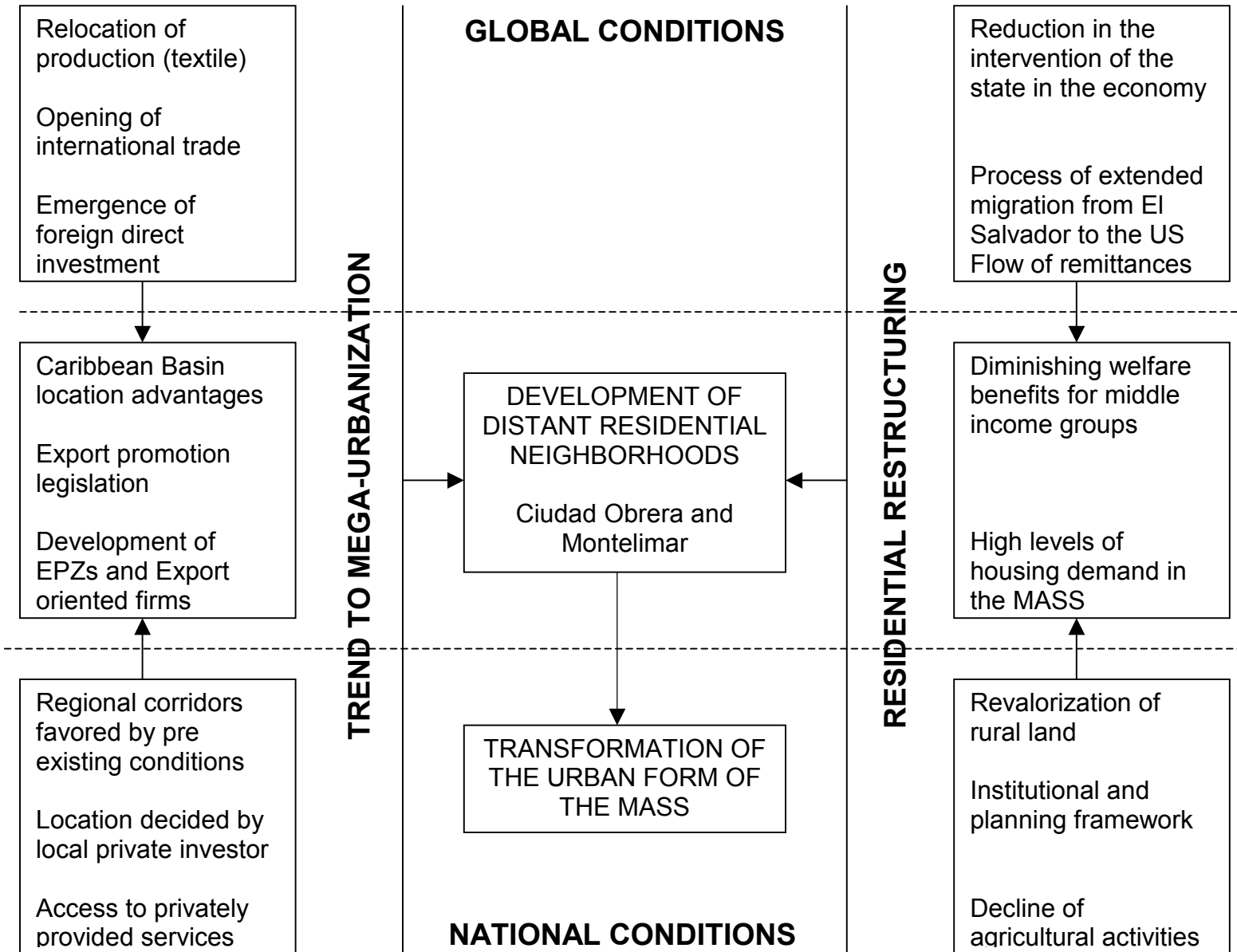


Figure 7.1 **Mechanisms of urbanization in Ciudad Obrera and Montelimar**
Source: by the author

8. CONCLUSIONS

In the framework of the model of the Globalized Latin American City that intended to synthesize economic and physical transformations in Latin American cities, this thesis has analyzed one specific case of the relationship between globalization, expressed in the development of Export Processing Zones, and the process of urban morphological change, demonstrated in the emergence of distant residential developments in the case of the Metropolitan Area of San Salvador (MASS).

The evidence presented in the thesis tends to suggest that two of the hypothetical processes embedded in the model, the trend to mega-urbanization and the process of residential restructuring, are occurring in this particular case. Nonetheless, empirical data demonstrate that the interaction between these urban phenomena and globalization, and EPZs, is not direct, nor linear, as part of literature seems to suggest (Roberts in Portes & Kincaid, 1994; Gilbert, 1996, Portes, 1997; Dandekar, 1998a). Apparently it is the interaction between a particular set of national conditions and structural global processes that explains the new trend of urbanization exemplified by Ciudad Obrera and Montelimar. Moreover, the population living in these neighborhoods is also part of complex network of metropolitan and regional migration that cannot be explained solely as the impact of globalization or the permanence of national conditions. Therefore it is significant for research to acknowledge and understand the dynamics under which these processes operate and envision their implications for planning and policy.

8.1 FURTHER RESEARCH

This thesis explored the existence of two of the core process embedded in the model of the Globalized Latin American City: mega-urbanization and residential restructuring. Further empirical research on this subject could have two objectives. The first objective would be to understand with more detail the processes studied in this paper. The second objective would be to investigate the presence of the other two processes encompassed in the model, the emergence of “Edge Cities” and the expansion of informal activities.

Mega-urbanization: from a regional and territorial perspective, a cross sectional study of different types of settlements in the regional corridors (shantytowns, informal subdivisions, villages and small cities) could provide information to characterize the integration of the regional

corridors in the process of mega-urbanization of the MASS. In addition, the study of other major corridors originated in the MASS, but without the presence of EPZs, could provide information to understand the role of global conditions and export promotion in the urbanization process.

Residential restructuring: the recollection of socio-demographic and migratory data from other neighborhoods located within the MASS, whether formal or informal, could be helpful to elucidate in a more precise manner the residential dynamics occurring in San Salvador and grasp a more complete picture about the variables that influence such process. Finally comparative research with neighborhoods influenced by EPZs in other Latin American countries that have implemented similar export promotion policies than El Salvador, could provide an idea about the importance of local conditions in the development of specific patterns of urbanization.

The processes of emergence of “Edge Cities” and the expansion of informal activities can be studied collecting data concerning the location of commercial and corporate land uses, this includes the study of the location patterns of activities related with the global economy and typically informal activities such as street vending. This implies studying other components of the urban structure, particularly the central business district and commercial areas in the periphery.

8.2 IMPLICATIONS FOR PLANNING AND POLICY

On the planning side, this study suggests that important physical and social transformations are occurring in tandem with economic restructuring. These changes have implications in terms of the populations quality of life, use of infrastructure, demand for services, energy consumption and pollution because of extended commuting, all of which represent costs to the entire society.

Planners should foresee alternative possibilities for planning within this framework of mega-urbanization and residential restructuring of the MASS. These new strategies should acknowledge that the explicit or implicit actions of global and local actors, whether public or private, have profound effects in shaping physical space and its use by society. Therefore, the transformation of the urbanization patterns, connected with global and national conditions, pose challenges in terms of urban and regional planning that need to be addressed both by planners and policy makers.

This study also indicates that at least two major urban processes occurring in San Salvador have surpassed the realm of the strict metropolitan area and are currently transforming the regional space. This means that effective policies to manage the MASS have to go beyond

current jurisdictional borders in order to address issues such as transportation, housing, and service provision at the regional scale. In that sense it seems necessary to envision policies not only in terms of metropolitan planning but also in terms of regional planning. Moreover these facts also stress the necessity for the state to reconsider strategic planning, which was dismissed in El Salvador by the neo liberal policies, as a means to manage regional development to the benefit of El Salvador and its people.

IX. APPENDIXES

9.1. KEY INFORMANTS INTERVIEWS

Anonymity requested by respondents, except indicated otherwise.

9.1.1. Planning Official (Oficina de Planificación del Área Metropolitana de San Salvador –OPAMSS), Francois Rodrigue.

- General demographic information about de AMSS (pop. per municipality and evolution in the last twenty years).
- Current trends in the expansion of urbanized area in San Salvador (formal and informal development).
- Data concerning formal development approval. In which municipalities is development occurring? Have there been any shifts in the last two decades?
- Where is industrial development occurring? (changes in the last twenty years)
- Where is commercial development occurring? (changes in the last twenty years)
- Where is low income (formal) residential development occurring? (changes in the last twenty years)
- Where is medium income residential development occurring? (changes in the last twenty years)
- Where is high income residential development occurring? (changes in the last twenty years)
- Request for graphic data (aerial photographs, satellite images, GIS).

9.1.2. EPZ Director

- General background about the EPZ
- Local investors (who are they? what other business activities do they have? amount of the investment)
- Development (who owned the land? who developed the site? why did they developed this specific site? who brought the infrastructure? is there any relationship with the residential developments nearby?)
- Which is the level of economic success of the EPZ (future trends)
- Which are the companies operating on the EPZ (name, national origin, export destination, are there any other connections between the local and foreign investors?)

9.1.3. Plant manager

- Amount of the investment
- How many workers? (type of worker)
- Criteria to hire workers
- Data about the worker's place of residence

9.1.4. Developer manager, Arturo Cisneros.

- General background about the project (investors? who owned the land originally? why did they developed this specific site? amount of the investment)
- Financial background (which bank financed the project? are there government subsidies?)
- Purchase process (which was the target population for the development? –income, size-how fast did people buy the houses?)
- Was the project successful
- Is there any relationship between the project's success and the EPZ?

9.2 HOUSEHOLD QUESTIONNAIRE

CO 21

N 14A Carlos CIUDAD OBRERA ENCUESTA DE HOGARES

1	2	3	4	5	6	7	8
PRIMER NOMBRE	RELACION FAMILIAR	EDAD	NIVEL DE EDUCACION	TRABAJO PRINC. ACTUAL	PATRONO	TIPO DE EMPLEO	LUGAR depto. municipio/col
Jose J.	Esposo	34	9°	Empleado	Hilasal	EP	Zapotitan
Mexados	M	43	3° Grado	casa			
Ruth	ha	26	3° Bach	Empleada preparar pollo.	Avicola	EP	Zapotitan
Alexandra	nieto	3	-				
Marvin	nieto	5	K				
Antonie	esposo ha	35	x	EU			

9	10	11	12	13	14
TRABAJO SECUND. ACTUAL	LUGAR depto. municipio/col	TRABAJO PRINC. ANTES DE VENIR	PATRONO	TIPO DE EMPLEO	LUGAR depto. municipio/col
		igual			
venta pollo	casa	igual			

15	16
TRABAJO SECUND. ANTES DE VENIR	LUGAR depto. municipio/col

17. ¿DONDE VIVIA LA FAMILIA ANTES DE VIVIR AQUI?

18. ¿PORQUE SE VINO LA FAMILIA A VIVIR AQUI?

Antes alquilaban ahora compraron
Fresco

19. ¿COMO HAN CAMBIADO SUS CONDICIONES DE VIDA DESPUES DE VENIR?

Mejor más seguridad
pero más caro

S.A El Congo

Figure 9.1 Example of answer sheet in Ciudad Obrera

X. BIBLIOGRAPHY

Altimir O. (1996) Economic development and social equity: a Latin American perspective. *Journal of Interamerican Studies and World Affairs*, v38 n2-3 (p.47).

Armstrong, W. & McGee T.G. (1985). *Theatres of Accumulation: Studies in Asian and Latin American Urbanization*. Methuen, New York.

Arriola, J. (1993) *Los Procesos de Trabajo en la Zona Franca de San Bartolo*. Instituto de Investigaciones Economicas y Sociales, San Salvador, El Salvador.

Banck, G. (1996) Mass consumption and urban contest in Brazil: some reflections on lifestyles and class. *Bulletin of Latin American Research*, v13 n1 (p.45).

Banco Central de Reserva de El Salvador (BCR) (1999a). *Boletin Economico, 1999*. San Salvador El Salvador.

Banco Central de Reserva de El Salvador (BCR) (1999b). *Reporte de Inversion Extranjera en Zonas Francas y Recintos Fiscales*. San Salvador, El Salvador.

Banco Central de Reserva de El Salvador (BCR), Centro de Promoción de Exportaciones, San Salvador, El Salvador (2000). Retrieved April 3, 2000 from the World Wide Web: <http://www.elsalvadortrade.gob.sv>.

Blouet, B. (1997). *Latin America: an Introductory Survey*. 3rd Edition, John Wiley & Sons, New York.

Browder, J; Bohland, J; Scarpaci, J. (1995) Patterns of development on the metropolitan fringe. *Journal of the American Planning Association* v61 n3 (p.310).

Crowley, W. (1995). Order and disorder, a model of Latin American urban land use. *Yearbook of the association of Pacific Coast Geographers*, v57 (p.9).

Dandekar, H (Ed.) (1998a). *City Space and Globalization*. College of Architecture and Urban Planning, University of Michigan, Ann Arbor, USA.

Dandekar, H. (1998b) Global space meets local space in the XXI st. century. In Dandekar, H (Ed.) *City Space and Globalization*. College of Architecture and Urban Planning, University of Michigan, Ann Arbor, USA.

Dicken, P. *Global Shift: Transforming the World Economy*. Guilford Press New York (1998).

Dirección General de Estadísticas y Censos (DIGESTYC). (1992). *V Censo Nacionales de Establecimientos Comerciales e Industriales*. Ciudad Delgado, El Salvador.

Dirección General de Estadísticas y Censos (DIGESTYC) (1998). *Encuesta de Hogares de Propósitos Múltiples, 1997*. Ciudad Delgado, El Salvador.

Douthwaite, R.(1996). *Short Circuit*. Dublin, Lilliput Press,.

Dunning in Dicken, P. *Global shift: transforming the world economy*. Guilford Press New York (1998).

Economic Commission for Latin America and the Caribbean (ECLAC). (1998). *Statistic Yearbook for Latin America and the Caribbean*. United Nations publications, Santiago, Chile,.

Economic Commission for Latin America and the Caribbean (ECLAC). (1999a). *Foreign Investment in Latin America and the Caribbean, 1998*. Santiago, Chile. Retrieved October 4, 1999 from the World Wide Web: <http://www.eclac.cl>

Economic Commission for Latin America and the Caribbean (ECLAC). (1999b) *Global Insertion of Latin America and the Caribbean 1998*. Santiago, Chile. Retrieved October 4, 1999 from the World Wide Web: <http://www.eclac.cl>

Edwards, S & van Wijnbergen, S. (1986). The welfare effects of trade and capital liberalization. *International Economic Review*, v27 n1 (p.141).

Edwards, S. (1995). *Crisis and Reform in Latin America: from Despair to Hope*. Oxford University Press, New York, USA.

Evans R. (1995). Brave new world order. *Geographical Magazine* v67 n1 (p.39).

Ford, L. (1996). A new and improved model of Latin American city structure. *The Geographical Review*, v86 n3 (p.437).

Gilbert A. (1990). *Latin America*. Routledge, London, UK.

Gilbert, A. (1996). *The Latin American Mega City*. United Nations University Press, Tokyo, Japan.

Gilbert, A. (1997). Employment and poverty during economic restructuring: the case of Bogotá, Colombia. *Urban Studies*, v34 n7 (p.1047)

Gilbert A. (1998). *The Latin American City*. The Latin American Bureau. Second Edition, London UK,

Goerner, S. (1999). *Web World and the Turning of Times*. Preliminary Publication for Virginia Tech.

Goldsmith, W. (1997). The metropolis and globalization. *American Behavioral Scientist*. v41 n3 (p.299).

- Griffin, E. & Ford, L. (1980). A model of Latin American city structure. *Geographical Review*, v37 (p.397).
- Hartshorn, T. (1992). *Interpreting the City*. John Wiley & Sons, 2 Edition, New York.
- Harvey D. (1990). *The Condition of Postmodernity*. Balckwell, Oxford UK.
- Henderson, J. & Castells, M. (Ed.). (1987). *Global Restructuring and Territorial Development*. Sage Publications, London, UK.
- Huddle, D. (1997). Post-1982 effects of neoliberalism on Latin American development and poverty: two conflicting views. *Economic Development & Cultural Change*. v45 n4 (p.881).
- Iglesias E. (1994). Economic Reform: a view from Latin America. In Williamson, J. (Ed.), *The Political Economy of Policy Reform*. Institute for International Economics, Washington DC, USA, (p.493).
- Instituto Geográfico Nacional (IGN). (1996). National aerial photographs series.
- Instituto Geográfico Nacional (IGN). (1997). *Monografías Departamentales, San Salvador, La Libertad, La Paz*. Ciudad Delgado, El Salvador.
- Inter American Development Bank (IADB). *Statistical report on member countries, 1999*. Washington DC, USA. Retrieved November 2, 1999 from the World Wide Web: <http://www.iadb.org>
- Jones G. (1994). The Latin American city as contested space: a manifesto. *Bulletin of Latin American Research*, v13 n1 (p.1).
- Jones, G; Varley, A. (1994). The contest for the City Center: street traders versus buildings. *Bulletin of Latin American Research*, v13 n1 (p.27).
- Kincaid, D. & Portes A. (Ed.). (1994). *Comparative National Development, Society and Economy in the New World Order*. University of North Carolina Press, Chapel Hill, NC.
- King, L. (1998a). Writing the transnational: the distant spaces of the Indian city. In Dandekar, H. (Ed.) *City Space and Globalization*. College of Architecture and Urban Planning, University of Michigan, Ann Arbor, USA.
- Klak, T & Lawson, V. (1990). Conceptual linkages in the study of production and reproduction in Latin American Cities. *Economic Geography*, v66 n4 (p.310).
- Marcuse, P. (1997). The Ghetto of exclusion and the fortified enclave. *American Behavioral Scientist*. v41 n3 (p.311).

Miraftab, F. (1997). Revisiting the informal sector home ownership: the relevance of household composition for housing options of the poor. *International Journal of Urban and Regional Research*, v21 n2 (p.303).

Osorio, J. (1993). Latin America: for a new reinsertion in the world economy. *Social Justice* v20 n3-4 (p.24).

Oficina de Planificacion del Area Metropolitana de San Salvador. (1999). *Base de Datos de Permisos de Construcción 1990-1999*. San Salvador, El Salvador.

Oficina de Planificacion del Area Metropolitana de San Salvador. *Sistema de Información Territorial*, San Salvador, El Salvador. Retrieved April 3, 2000 from the World Wide Web: <http://www.opamss.org.sv>

Paus, E. (1995). Exports, economic growth and consolidation of peace in El Salvador. *World Development*, v23 n12 (p.2173)

Peet in Dicken, P. *Global shift: transforming the world economy*. Guilford Press New York (1998).

Perera, G. (1998a). Globalization and the urban form: transformations in Colombo in the 1980s and 1990s. In Dandekar, H. (Ed.) *City Space and Globalization*. College of Architecture and Urban Planning, University of Michigan, Ann Arbor, USA.

Personal interview: Developer Manager (01/17/2000) San Salvador, El Salvador.

Personal interview: EPZ Director (01/01/2000) San Salvador, El Salvador.

Pfirrman O. (1999). Review of Global Shift. Transforming the world economy. *Growth and Change*, v30 (p.155).

Portes, A & Walton. (1976). *Urban Latin America*. Texas University Press. Austin TX.

Portes, A. (1989). Latin American urbanization during the years of the crisis. *Latin American Research Review*, v23 n3 (p.7).

Portes, A; Dore Cabral, C & Landolt, P. (1997). The Urban Caribbean, transition to the new global economy. The Johns Hopkins University, Baltimore, USA,.

Radice in Armstrong, W. & McGee T.G. *Theatres of accumulation: studies in Asian and Latin American urbanization*. Methuen, New York (1985).

Roberts, J. (1994). Urbanization, Development and the Household; in Portes, A & Kincaid, D. (Ed.) *Comparative National Development*. University of North Carolina Press. Chapel Hill, USA.

- Sargent, J. (1997). The Latin American city. In Blouet, B. (Ed.) *Latin America: an introductory survey*. 3rd Edition, John Wiley & Sons, New York, NY.
- Sassen, S. (1988). *The Mobility of Labor and Capital*. Cambridge University Press. Cambridge, UK.
- Scargill. (1979). *The Form of Cities*. San Martin's Press New York, NY.
- Scarpaci, J. (1998). Urban social policy in poor countries: theoretical and methodological directions. *Urban Geography*, v19 n3 (p.262).
- Scarpaci, J; Infante, R; Gaete, A. (1988). Planning residential segregation: the case of Santiago, Chile. *Urban Geography*, v9 (p.19).
- Swyngedouw in Harvey D. *The Condition of Postmodernity*. Balckwell, Oxford UK (1990).
- Sykora, L. (1994). Local urban restructuring as a mirror of the globalization process: Prague in the 1990's. *Urban Studies*, v31 (p.281).
- Todaro, M. (1997). *Economic Development*. Addison-Wesley Publishing. New York, USA.
- Trejo Jimenez. (1998a). The polarization effects of globalization on the state of Queretaro, Mexico. In Dandekar, H. *City Space and Globalization*. College of Architecture and Urban Planning, University of Michigan, Ann Arbor, USA.
- Van Kempen, R. & Marcuse, P. (1997). A New spatial order in the cities? *American Behavioral Scientist*, v41 n3 (p.285).
- Vernon in Dicken, P. *Global shift: transforming the world economy*. Guilford Press New York (1998).
- Vilas C. (1996). Latin America and the new world order. *Social Justice*, v23 n1-2 (p.293).
- Villareal in Dicken, P. *Global shift: transforming the world economy*. Guilford Press New York (1998).
- Ward, P. (1990). *Mexico City, the Production and Reproduction of an Urban Environment*. G.K. Hall & Co. Boston, USA.
- Ward, P. (1993). The Latin American inner city: differences of degree or of kind? *Environment and Planning "A"*, v25 n8 (p.1131).
- Williamson, J. (Ed.). (1994). *The Political Economy of Policy Reform*. Institute for International Economics, Washington DC, USA.

Wood, E. & Segovia, A. (1995). Macroeconomic policy and the Salvadoran peace accords. *World Development*, v23 n12 (p2079).

World Bank. *World Development Indicators*. Washington DC. Retrieved on December 6, 1999a from the World Wide Web: <http://www.worldbank.org>

World Bank. *Annual report 1999, Latin America & the Caribbean*. Washington DC. Retrieved on October 4, 1999a from the World Wide Web: <http://www.worldbank.org>

XI. VITA

PERSONAL STATEMENT

My name is Carlos E. Ferrufino. I was born in San Salvador, El Salvador on October 8, 1971. I will complete my Master in Urban and Regional Planning with concentration in International Development from Virginia Tech in May 2000. In 1995 I received my Bachelors in Architecture from the Universidad Centroamericana, UCA, of El Salvador.

My professional experience includes two years working at the Department of Architecture of UCA teaching courses in design, history of architecture, and drawing. I also worked for five years in private architecture offices in San Salvador where I collaborated in the design of buildings such as museums, banks, and hospitals. Nonetheless, my most significant professional experience has been as designer of multiple community projects in San Jose las Flores, a small rural village in the north of El Salvador.

In the future I wish to combine my background in architecture and planning to pursue my interests in teaching and research at the university. Finally and above all I want to apply my knowledge and experience to contribute to the development of rural and urban communities in El Salvador.

RESUME

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EDUCATION

Virginia Polytechnic Institute and State University, Blacksburg, VA.

Master degree in Urban and Regional Planning (MURP), 1998-2000, with concentration in Physical and International Development planning as a Fulbright grantee. Outstanding graduate student in 2000.

Universidad Centroamericana “José Simeón Cañas” (UCA), San Salvador, El Salvador.
Bachelor degree in Architect, 6-year professional degree, 1989-1995. Honors in 1993, 1994 and 1995.

Other studies

Universidad Mayor de San Simon, Cochabamba, Bolivia.

Course “Housing and Development in Latin America”, November – December 1997.

WORKING EXPERIENCE

Institute for Scientific and Environmental Awareness (ISEA) Falmouth MA, summer internship 1999.

Responsibilities

Collaboration in the planning and design of ISEA’s campus.

Projects and Accomplishments

ISEA campus, Cape Cod, MA.

Universidad Centroamericana “Jose Simeon Cañas” (UCA), Department of Architecture, San Salvador, El Salvador, 1996-1998.

Responsibilities

Teaching the courses of Historic Analysis IV and V and Drawing V.

Dada – Altschul Architects, San Salvador, El Salvador 1996-1998.

Responsibilities

Coordinator of the design department.

Construction supervisor.

Projects and Accomplishments

National Museum of Anthropology, Joya de Ceren Archaeological Museum, and private residences.

Leonel Aviles Architect, San Salvador, El Salvador 1995-1996.

Responsibilities

Project Manager, design and drawing

Projects and accomplishments

Banco de Comercio headquarters, Social Security general hospital, Banco Salvadoreño Headquarters, Theology Center, “Moseñor Romero”

Personal projects

Community architect

San Jose Las Flores Church, Chalatenango, El Salvador

OTHER SKILLS

Languages

- Fluency in writing and speaking in Spanish, English and French.