

***Colonias and Chicano/a Entrepreneurs
in Rural California***

*by Refugio I. Rochín, Rogelio Saenz,
Steve Hampton, and Bea Calo*

Research Report No. 16

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Overview

Colonias represent an emerging category of American communities, gaining prominence in recent years. *Colonias* are typically rural, located in the Southwest, and characteristically “Chicano” or “Mexican” in nature. Conversely, other residents, like Whites or “Anglos,” are numeric minorities within *colonias*. Today there may be easily 1,000 *colonias* within the Southwest, with as many as a half million residents. Their numbers are increased significantly every year, since 1990.

Unlike *barrios* or ethnic enclaves, which are sub-communities dominated by Whites, *colonias* are generally governed by Chicano leaders; although that does not necessarily mean that *colonias* are economically enriched by Chicano entrepreneurs. On the contrary, *colonias* often depend upon federal and state support for basic infrastructure and services related to water, waste disposal, health, police, and fire protection. Likewise, *colonia* conditions tend to range from lower middle class to Third World communities with few amenities and local jobs. This situation raises a number of interesting questions. Can Latinos be better off in *colonias* where they constitute the majority? Are Latino residents relatively more entrepreneurial within *colonias*, taking advantage of language and culture as driving forces for business? What types of businesses are present in *colonias*? Or, are *colonias* generally deprived of entrepreneurs and the prospects for local development?

This study examines the general conditions of *colonias* and Chicana/o entrepreneurs (the self-employed) in rural California. It is also an attempt to ascertain how changing demographics and “structural conditions” affect entrepreneurial activity among residents, including Whites and Chicanos. For this study we used data from the U.S. Censuses of Population and Economic Businesses, covering 1970-1990. We created a special database of over 145 communities with populations of 2,000 to 20,000 in 1980. The year of 1980 served as the marker from which we compared business activity and socio-demographic changes over time. Altogether, we have over 25 bits of information on each community. Census data are also supplemented by California data on factors like taxes, revenues, and school districts. Analysis of Variance (ANOVA) and multiple regression techniques give us answers to several hypothesis, based upon our review of literature and our “structuralist model” of entrepreneurship.

Our results both confirm and contradict some of the hypothesis of our study. To begin with, we find striking differences between White and Chicano entrepreneurs in rural California, especially with regard to the *colonia* conditions, the relative employment options for residents, and their levels of education. We also notice that self-employment among Chicana/os is closely correlated with structural conditions. That is, the higher the proportion of Latinos in a community, the more the self-employment of Chicanos in relative terms. Structuralist conditions, however, not only infer more Chicano entrepreneurs, they also relate to fewer economic opportunities for residents, higher unemployment, higher concentrations of workers in agriculture, limited educational attainment among Latinos, and general economic deprivation within *colonias*. All combined, Chicana/o entrepreneurs are relatively more evident in *colonias* with high proportions of Latinos, but their customers are generally poor.

To a degree, *colonia* entrepreneurs are self-employed as part of their own means for survival.

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Colonias and Chicano/a Entrepreneurs in Rural California

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Colonias and Chicano/a Entrepreneurs in Rural California

Colonia Formation: The Demographics

California's population, which increased by some eight million people in the 1980's, is continuing to grow by a net amount of about 600,000 a year, or 1,644 every 24 hours. Most of this growth is in metropolitan areas, but a large "spill-over" of population is moving to rural communities. Many of the rural bound are Mexican immigrants and Latinos from other parts of Latin America. A great many end up in the seasonal work force of California agriculture. Since the passage of the Immigration Reform and Control Act of 1986, more Mexicans and Latinos have settled permanently in California's rural communities.

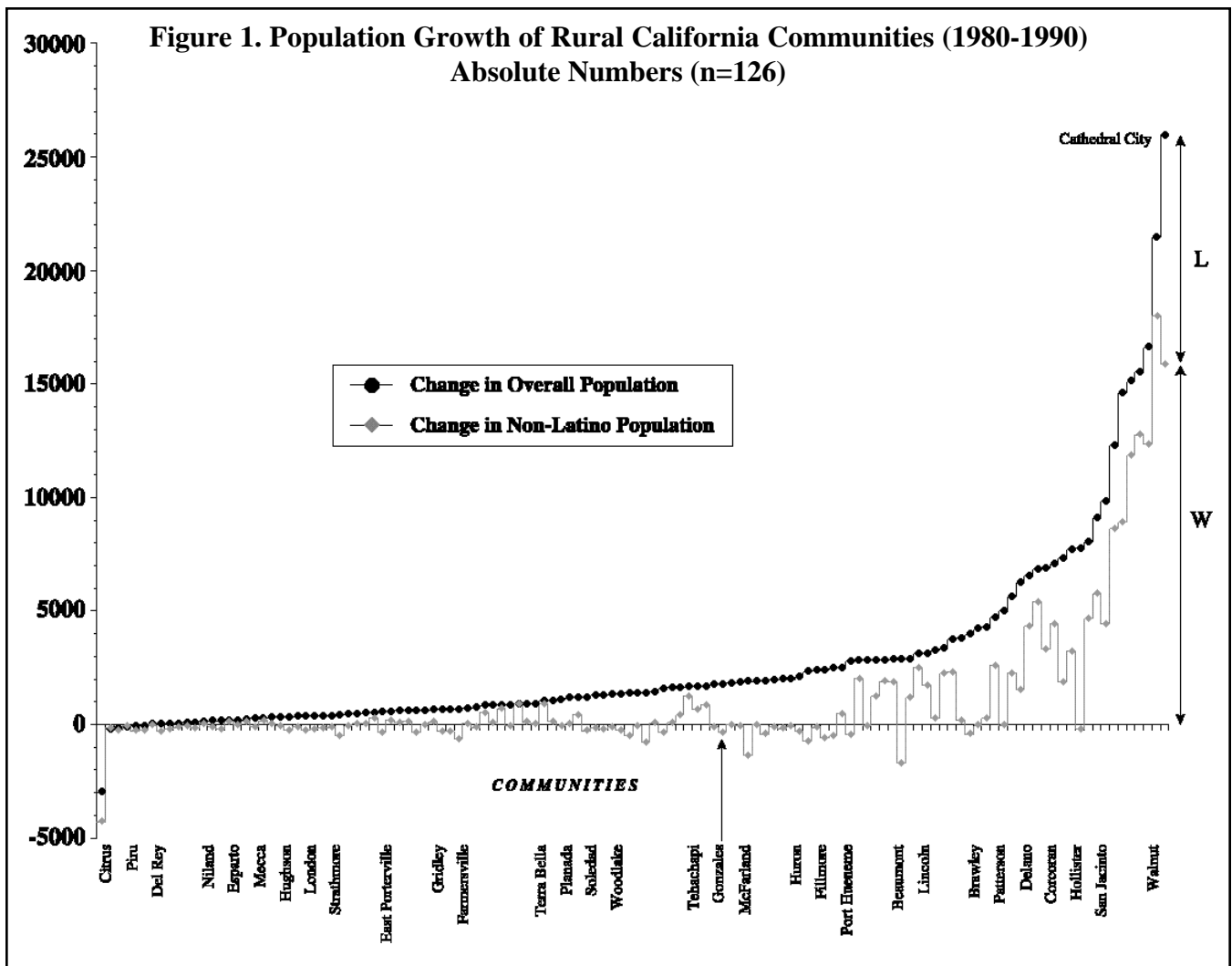
In the past, Mexican and other Latino immigrants settled temporarily within "barrios" of rural communities as numerical minorities while the communities were mostly non-Latino or White. During the 1950's and 1960's, rural Chicanos moved from agriculture to urban areas for jobs and housing. However, during the 1970's and 1980's, many Chicano and Latino immigrants made rural communities their permanent "homes." As their numbers increased, the numbers of White people decreased in absolute and relative amounts in most rural communities. (Castillo, 1993, Rochín and Castillo, 1995)

Several factors can be attributed to the residential concentration of Latinos in rural areas: agricultural employment, improved wages and working conditions, cheaper housing, extended family and friends, and the social phenomenon of "likes" attracting "likes." Although past studies have predicted a reduced demand for immigrant labor for farms and a greater use of farm machinery in California agriculture, the state's agriculture added both machinery and farm labor during the 1970's and 1980's. In particular, since the 1960's, immigrants from Mexico have entered California by the tens of thousands to harvest and process agriculture's labor-intensive crops, especially fruits and vegetables. In fact, the need for more specialized seasonal farm workers revived agriculture's dependence on labor to the point where California's farm lobbyists convinced the U.S. Congress to make special farm worker provisions within the Immigration Reform and Control Act (IRCA) of 1986. Since the passage of IRCA, over 1.2 million immigrant workers from Mexico have registered

under IRCA to work in agriculture as SAWs (special agricultural workers); many have also settled down in California with their families in rural communities. (Rochín and Castillo, 1995).

While almost all California communities have become increasingly Latino, the growth of both Latino and White population varies considerably from place to place. Recent research by Allensworth and Rochín (1995 and 1996) has examined the changing demographics of 126 rural communities in California. As illustrated in Figure 1, there are wide ranges in population. In the figure there are four things to note: first, there is a dot and a box for each of the communities (a few communities are named within the chart to illustrate examples). Second, the horizontal axis spreads out the communities from a low to a high growth in total population between 1980 and 1990, and the vertical axis measures the absolute magnitude of population change of each community from 1980 to 1990. Third, the top curve of dots shows the growth in overall population of each community and the lower curve of boxes shows the growth of non-Hispanic White population of each community. Fourth, from left to right you can determine which communities have changed the most in population in terms of Latinos. In particular, gaps between the growth in total community population and the growth in the White population indicate the amount of population growth due to changes in the Latino population.¹

To understand Figure 1, notice the community at the far left with negative growth. This community, Citrus, lost 4,003 non-Latino residents and added 1,307 Latino residents from 1980 to 1990, so its total population change was -2969. At the other extreme, is Cathedral City. This place gained 25,955 new residents between 1980-90, of which 10,082 (almost half) were Latino. Gonzalez, the community to which the arrow points in the figure, is representative of the majority of rural California communities, based on our total database of communities. That is, Gonzalez experienced a slight decrease in non-Latino population (-90), but an increase in overall population (+1,769) due to the increase in the number of its Latino residents (+1,859). Notice that in over half of



the communities depicted, there was no growth in non-Latino population, despite increase in total population. In these 126 communities, changes in Latino population account, on average, for over 100% of the population growth, making up for absolute losses in non-Latino White population. Without additions in Latinos, the overall population in most communities would have decreased between 1980 and 1990. Nonetheless, non-Latino Whites added significantly to the growth of many communities.

In Table 1, we summarize the general patterns of demographic change noted by Allensworth and Rochín (1996).² There are 15 communities that experienced large gains in White population (greater than 50% growth) as well as comparable gains in Latino population of more than 50%. There are 45 communities (13+32) that experienced increases (1-50%) in White population while simultaneously experiencing moderate or large gains in Latino population. More importantly, there are 64 communities (2+23+39) that lost White residents (non-Latinos) in absolute

Table 1. Changes in Latino and Non-Latino Population Among 126 Rural Latino California Communities (1980-1990)

<i>Number of Communities in which Latino Population:</i>	<i>Number of Communities in which non-Latino Population:</i>		
	DECREASED	INCREASED 1-50%	INCREASED 51% OR MORE
Decreased	2	0	1
Increased 1-50 percent	23	13	1
Increased 51 percent or more	39	32	15

amounts. But these losses were clearly offset by the influx of Latinos. Overall, all but two communities experienced population growth.

Extending their analysis further, Allensworth and Rochín (1996) examined the changes in socio-economic well-being associated with the changing demographics of communities. They did this analysis by various techniques of ANOVA and multiple analysis. Excluding the two communities that lost population, Allensworth and Rochín divided the communities into three groups. The first group consists of those 62 communities in which the Latino population is increased, but the non-Latino population is decreased or remained the same. The second group of communities is increasing in population size among both ethnic groups, but the Latino population is increasing by a relatively larger number. The third group of communities consists of those going through increases in population size with significant growth in both Whites (W) and Latinos (L). Table 2 provides a contrast of these three types of communities.³

As illustrated in Table 3, Allensworth and Rochín (1995) found significant differences of well-being between these three sets of communities. First, there were differences found cross-sectionally in terms of data for 1990 (Rows 1-4). Second, there were also differences in the changes in community well-being overtime, from 1980 to 1990 (Rows 5-8).

Table 2. Communities Grouped by Changes in Latino and White Population		
Group 1 +L -W	Group 2 +L +w	Group 3 +L +W
Latinos Increasing, Whites Decreasing	Large Increase in Latinos, Small Increase in Whites	Propositional Increases in Both Populations
49% of Communities	25% of Communities	22% of Communities
n = 62 (23+39)	n = 32 n = 32	n = 29 (13+1+5)

The first row of Table 3 shows large differences in poverty rates between the three types of communities, based on Latino and non-Latino population change. Communities that experienced decreases in White population (Group 1) have poverty rates that are 8% higher than communities in which the ethnic composition

changed, but both populations grew, and 13% higher than communities in which the ethnic populations grew more evenly. Poverty, therefore, seems to be tied to both increases in Latino population and decreases in non-Latino population. This finding is confirmed by row six, which compares changes in poverty with changes in population. Communities that experienced decreases in non-Latino population experienced significantly greater increases in poverty rates between 1980 and 1990 than communities that did not decline in non-Latino population.

Row 2 shows a slightly different pattern in terms of median income. Groups 1 and 2 both have significantly lower median incomes than communities in which Latino and non-Latino population grew at similar rates. However, the median incomes of the first two types of communities are not significantly different from each other. The same pattern occurs when we look at changes in median incomes from 1980 to 1990 (Row 7). The first two types of communities experienced median income growth of about \$10,000, while communities in which Latino and non-Latino population grew at similar rates experienced median income growth of about \$17,000.

The pattern for high school completion is different from the patterns for both poverty and median income. Communities in which the White population decreased over the last decade show significantly smaller percentages of high school graduates than communities in which the White population grew, *regardless of changes in ethnic composition*. On average, only 39% of adults in communities that lost White population have graduated from high school, while over 60% of the adults in communities that gained White population have high school degrees. The same pattern holds when we look at *changes* in the percentage of adults with high school degrees between 1980 and 1990. In communities that lost White population, the change in the percentage of adults with high school degrees over the last decade was less than 1%. Communities that gained White population experienced average increases in the percentage of adults with high school degrees of from 6-9%. Similar patterns emerge regarding the percentage of adults with college degrees.

Although community conditions were worse in places experiencing the exodus of White residents, an increase in the Latino population of a community is also associated with positive economic conditions. These improvements are evident in terms of the second

Table 3. Community Well-Being Variables by Changes in Latino and Non-Latino Population (1980 - 1990) n = 122

	GROUP 1	GROUP 2	GROUP 3	
	Decrease in Non-Latinos Increase in Latinos (n=62)	Small Increase in Non-Latinos Large Increase in Latinos (n=32)	Similar Increases in both Populations (n=28)	n [^]
1. 1990 % of the Community in Poverty***	26.6% ^{2,3}	18.4% ^{1,3}	13.8% ^{1,2}	118
2. 1990 Median Income***	\$24,319 ³	\$24,625 ³	\$33,817 ^{1,2}	89
3. 1990 % High School Graduates (Adults)***	39.4% ^{2,3}	60.4% ¹	65.1% ¹	118
4. 1990 % College Grads (among Adults)***	5.5% ^{2,3}	9.9% ¹	10.8% ¹	86
5. 1980-90 Change in Percentage in Poverty ***	12.9% ^{2,3}	7.8% ¹	4.1% ¹	---
6. 1980-90 Change in Median Income***	\$10,325 ³	\$10,896 ³	\$17,514 ^{1,2}	89
7. 1980-90 Change in High School Graduates***	0.4% ^{2,3}	6.3%	19.9% ¹	86
8. 1980-90 Change in College Graduates*	-0.6% ^{2,3}	1.3% ¹	1.9% ¹	86

*p<.05, **p<.01, ***p<.001 — Asterisks indicate that at least two groups are significantly different, based on ONEWAY ANOVA tests. Superscript numbers indicate which groups each figure is significantly different from (p<.05), determined through post-hoc 2-tail t-tests.
^Data was not available on every variable for every community, and so the resulting sample sizes are noted.

and third categories of communities. In fact, the best conditions overall, were found where there were significant increases in both Latinos and Whites, the third category of places. In fact, throughout rural California, places which added significant numbers of Latinos, improved in terms of family income, employment, and education. But when communities lost White residents and added Latinos in their place, there was an associated decline in the indicators of social well being.

Chicano Entrepreneurs: A Review of the Literature

In the Hispanic Business Magazine's *Handbook To a Fast-Growth Business Market*, a Chicana/o entrepreneur is a person who qualifies as a Hispanic-owned businessman. Such persons report ownership or assets of at least 51% of a business firm. According to the *Handbook*, there were as many as 585,000

Hispanic-owned businesses in the United States in 1994 with \$27.3 billion in revenue, with both indicators surpassing the number and revenue of African-owned business firms.

However, the literature on Chicano entrepreneurs is sparse and generally unrelated to rural communities. (See Appendix A). With the exception of *Hispanic Business* magazine, there is little being written to account for Chicanas/os as entrepreneurs. In a recent report by Rochín and Castillo (1993), *colonias* were analyzed in terms of the number of local establishments, their levels of employment, and the sales volume of *colonia* businesses. At the time of the study, data was available on only 12 communities, as reported in the 1982 Economic Census. Retail trade was the predominant type of business within these communities, having 1.3 businesses on average per community. To be expected were some retail stores

for general merchandise, food, liquor, eating and drinking, gasoline, and building supplies. There were far fewer Service and Wholesale establishments on average per *colonia*, indicating the likely absence of such businesses in most *colonias*. The total sales of retail trade averaged \$530,000 per community (of the 12 places with data). But there was a standard deviation of \$325,000, meaning that few businesses attained the average and a few had sales approaching \$900,000 in 1982. In short, some of the 12 *colonias* had some major business operations. In Wholesale Trade the value of sales was higher at \$586,000 on average per community. But there were few Wholesale firms among the 12 *colonias* and again a wide standard deviation, suggesting that Wholesale Trade was not common to *colonias*. The average annual payrolls per *colonias* were low, being less than 15% of the average level of sales per firm. Overall, according to Rochín and Castillo (1993), despite Latino concentration, *colonias* have not benefitted from local entrepreneurs or private sector developments.

As a prelude to our analysis of *colonia* entrepreneurs, co-author Calo (1995) completed a general overview of entrepreneurship among rural Chicanos. With data from the Census Bureau's Public Use Minority Sample (PUMS) for 1990, Calo identified and compared rural Chicana/os from others. Criteria used by Calo to determine "rural" was derived from a non-standard geographical entity called a Public Use Microdata Area (PUMA). Each PUMA represents an area with a total population of at least 100,000. A PUMA was considered rural if it was in a non-metropolitan county or was in a metropolitan county with a density of less than 1,000 people per square mile. Forty-four of California's 198 PUMA's met the study's operational definition of "rural."

Based on this sample of PUMA data for 1990, Calo (1995) found that 9% of the rural Chicano households had someone who was full-time self-employed. This is in line with estimates from the Bureau of Labor Statistics (1991) that, on average, 8.6% of the work force was self-employed in 1989. Of the 865 Chicano entrepreneurs of Calo's study, 620 were self-employed on a full-time basis, while the other 245 were also wage-employed and involved in entrepreneurial activities only on a part-time basis.

According to Calo (1995), Chicano self-employed in California's rural regions, can be described as follows:

- Self-employed Chicanos tend to be older, more educated, more likely to be married, more assimilated, and wealthier than their wage earning counterparts...
- Part of this differential (in wealth) is attributable to the longer hours worked by Chicano entrepreneurs, due in part to the higher rate of return which accrues to them for hours worked...
- The higher age of entrepreneurs may reflect the fact that it takes time to build up reputation, goodwill, contacts networks, and personal savings — opportunities which can be utilized in creating and running a business...
- A lower proportion of entrepreneurial households have children... Children in households of entrepreneurs tend to be older.
- There is a higher percentage of homeowners among entrepreneurs and the average value of their property is significantly higher than those of wage-earners. Other (spousal) household income is also higher in entrepreneurial households...
- Over 60% of rural entrepreneurs are native born versus just over half of the wage-employed. Of the immigrant (foreign-born) entrepreneurs, almost half have been resident for 20 years or more...
- On average, rural entrepreneurs are more proficient in English than their wage earnings counterparts — 85% of entrepreneurs speak only English or speak it well versus 75% of wage earners. However, bilingual individuals represent over half of the self-employed and wage-employed samples...
- Agriculture is the leading sector for both (rural) entrepreneurs and the wage employed. The self-employment rate for Chicanos is much higher in Agricultural Services (as opposed to Agricultural Production)... Retail Trade, the second most important sector for rural entrepreneurs; primarily in eating and drinking places (32% of those in Retail Trade); grocery stores (12%); furniture and home furnishings (7%).

Although Calo's findings are unique and useful for understanding Chicano self-employed in rural areas, such as the PUMA, the findings do not relate to the structural conditions and cultural conditions of rural *colonias*.

More recently, Rogelio Saenz (1997) presented a research report on the "Determinants of Mexican Self-Employment in the United States," which sought to assess the value of three prominent theoretical perspectives (human capital, simple disadvantage, and resource constraint) in understanding the self-employment patterns of Mexican Americans. He used data from the 1990 U.S. Public Use Microdata Sample (PUMS) to conduct his analysis. Saenz' findings indicate that the simple disadvantage perspective is the appropriate theoretical model for the case of native-born Mexican Americans. Mexican Americans provide an ideal group for examining this perspective since the significant rise in Mexican American self-employment activity occurred when the group, as a whole, experienced significant increase in poverty.

"Accordingly, native-born Mexican Americans who are doubly disadvantaged, with respect to their human capital endowments and labor-market opportunities, are the most likely to engage in self-employment activity. In contrast, the resource constraint perspective is the most applicable of the immigrants. As such, among immigrants, it is not the doubly disadvantaged group that is more likely to pursue self-employment, but the group that faces limited employment opportunities due to high levels of unemployment in the local area and that possesses favorable human capital endowments (i.e., a high school diploma)."

Despite the interesting findings of the Saenz study, the analysis does not relate to *colonia* or community conditions. The PUMS data is highly aggregated, based upon a 5% sample of the U.S. population enumerated in the 1990 Census and relegated to PUMS areas, defined as one or more counties which together have at least 100,000 residents. Moreover, the data is based on a dichotomous measure indicating whether or not a given person was self-employed at the time of the Census. In short, we do not know if Latino concentration contributes to self-employment or entrepreneurship among Latinos.

The Study

While much of the previous research in the area of ethnic enterprises has been based on aggregate data, steps have yet to be taken to move the analysis to a more structural *colonia* level. The interest here is in determining the degree to which Latino concentration and *colonia* conditions have or do not abet local Chicano entrepreneurs. Following the lead of Saenz (1997), this study also begins with the theoretical underpinnings advanced by others who have studied ethnic entrepreneurs in general. Their theoretical explanations of ethnic entrepreneurship have commonly been divided into those focusing on the disadvantage theory, those dealing with the cultural theory of entrepreneurship, and those based on a structural analysis of local business.

The **disadvantage theory of entrepreneurship** suggests that economic hardship in the labor market (e.g., unemployment, language problems, and discrimination) causes people to seek alternative economic routes, one of which is self-employment (Light, 1979, 1980; Sullivan and McCracken, 1988; Waldinger, 1986). The **cultural theory of entrepreneurship** argues that some groups are endowed with cultural attributes which promote entrepreneurship (Light, 1979, 1980). One line ("orthodox") of the cultural theory traces these cultural elements to the premigration stage, while another line ("reactive") points to the development of such elements in the host society. (Light, 1984; Torres, 1988; Waldinger, 1986) A more recent set of cultural theories formulate the concept of "social capital." (Robison and Siles, 1996) Under this formulation, social networks among friends and relations influence lending, borrowing, and investment behavior among neighbors. Elements like "social distance," sympathy and possibly *compadrazco*, determine the levels of social capital formation of a community.

The **structuralist theory** developed by Aldrich and Waldinger (1990; see also Waldinger et al. 1990) stands out as one with great potential in the structural analysis of the development of ethnic enterprises at the community level. This structural theory suggests that "opportunity structures," "group characteristics," and "ethnic strategies" are important components in the development of ethnic enterprises. It is this theory that will provide the framework for our study. Here we assess the main parts of this theory.

Opportunity Structures

Opportunity structures represent situations in the immediate environment that are favorable for the development of ethnic or the wider non-ethnic markets. Factors falling under the genre of opportunity structures include the presence of a large ethnic community, a condition of high ethnic segregation, and the presence of an immigrant community. This opportunity structure explanation essentially suggests that certain environmental conditions (based upon economics, geography, and ethnicity) are conducive to the establishment of ethnic enterprises.

The presence of a large ethnic community, particularly one including large numbers of immigrants, is likely to represent a “protected market” because ethnic entrepreneurs are more likely than outsiders to be able to gauge and meet the demands of the ethnic community (Aldrich et al. 1985; Chan and Cheung, 1985; Cobas, 1987; Evans, 1989; Light, 1972; Torres, 1988; Waldinger, 1986). Boyd (1990) observed that Blacks living in urban areas with larger Black populations tended to be more likely to be self-employed than their counterparts living in urban areas with fewer Blacks. Evans (1989) found the same relationship for ethnic groups in Australia.

Aldrich and his colleagues (Aldrich and Reiss, 1976; Aldrich et al. 1989) have also observed that ecological succession plays an important part in the development of ethnic enterprises. In this respect, opportunities for potential ethnic entrepreneurs arise as areas are taken over by ethnic groups or immigrants while the original majority-group inhabitants, including majority-group entrepreneurs who elect not to remain in the area, move elsewhere.

Closed employment opportunities are also an important opportunity structure, albeit in a perverse way. When employment opportunities in the local economy are limited, people are forced to undertake alternative routes for their economic survival, such as beginning entrepreneurial activities.

Group Characteristics

Group characteristics represent attributes of the ethnic group, such as human capital, monetary resources, cultural attributes promoting entrepreneurship, and selective migration, which favor the development of ethnic enterprises. This part of the model suggests that the possession of certain resources by an ethnic group facilitates the extent to which ethnic enterprises can be developed. Portes (1987) has pointed out the importance of internal class differences within a particular ethnic group for the development of ethnic enterprises. He argues that such an internal economic condition results in ethnic entrepreneurs having better access to both cheap ethnic labor and captive markets differentiated by cultural tastes.

Along with “class diversity,” Portes notes that the “immigration history” of the community is important and that a continual flow of immigrants is conducive to the establishment of ethnic businesses.

Human capital is the only variable where intuition leads us easily in both directions. A strong educational background is certainly helpful in establishing a business. On the other hand, a lack of education limits other employment opportunities, and thus may spur entrepreneurship. This, the relationship between self-employment and human capital is ambiguous.

Ethnic Strategies

Ethnic strategies come into play through the interaction between the opportunity structures and group characteristics. Ethnic strategies represent the manner in which ethnic groups adapt to their environments, such as the development of ethnic credit unions, the use of extended family networks in the operation of businesses, and the hierarchical and vertical linkages found among ethnic enterprises. Such strategies would assist in the development of entrepreneurial activities.

The Structuralist Model

The literature speaks of three types of variables that may effect entrepreneurship among minority groups: (1) opportunity structure variables, (2) group characteristic variables, and (3) ethnic strategy variables. Table 4 lists the specific variables in each group, as well as the hypothesized sign of each one’s affect on entrepreneurship.

Table 4. Explanatory Variables and their Hypothesized Effects on Entrepreneurship

<i>THEORETICAL VARIABLE</i>	<i>HYPOTHESIZED EFFECT</i>
Opportunity Structure Variables	
large ethnic community	+
high ethnic segregation	+
presence of immigrant community	+
closed employment opportunities	+
Group Characteristic Variables	
class diversity	+
immigration diversity	+
human capital	?
Ethnic Strategy Variables	
sense of ethnicity	+

The Data

Measuring theoretical concepts such as segregation, diversity, or ethnicity is inherently subjected. Nevertheless, for the purposes of analysis objective variables approximating these concepts must be defined and substituted into the model. These “proxy variables” are listed and defined below.

Most of the data came from the 1990 Census STF4B data set for California, which allowed us to obtain a “pure” Chicano population (as opposed to the more general category of “Spanish origin”). A perusal of the literature shows that these data for Chicanos have been sorely underused. Thus, we know very little about Chicanos in California.

**Operational Variables
(Concepts and Measures)**

In this section we define our measures which approximate the factors of our “structuralist model.”

%MSE (also identified as % LSE and % WSE, for Latino and White).

The dependent variable is the self-employment rate, which is defined as the percentage of working Latinos (L) or Whites (W), aged 16 and older, who are self-employed. This variable is used as a proxy for the degree of Chicano or White entrepreneurship in each community. The U.S. Bureau of the Census (1983: K-10) defines “self-employed workers” as: “Persons who work for profit or fees in their own unincorporated business, profession, or trade, or who operate a farm.” Included here are the owner-operators of large stores and manufacturing establishments as well as small merchants, independent craftspeople and professionals, farmers, peddlers, and other persons who conduct enterprises on their own.

**Table 5. Theoretical Variables, Proxies Used
*expected correlation***

CONCEPTUAL VARIABLES	OPERATIONAL VARIABLES
<i>Dependent variable</i>	
Mexican-American entrepreneurship	%MSE
<i>Opportunity structure variables</i>	
large ethnic community	#MPOP
high ethnic segregation	%MPOP
presence of immigrant community	%MFOR
closed employment opportunities (three dimensions)	%MUNEMP %MFARM MINCON
<i>Group characteristic variables</i>	
class diversity	MGINI
immigration diversity	MGINIIM
human capital	MEDUC
<i>Ethnic strategy variables</i>	
sense of ethnicity	MOTHR

The measure is likely to underestimate the degree of self-employment since some forms of self-employment are part of the “informal or underground economy” (e.g., housekeepers, babysitters, gamblers, illicit drug traders, prostitutes, etc.) which are not reported to census takers (see Light, 1979). Nevertheless, despite such problems and the absence of more accurate alternatives for such a broad base as that proposed here, we employ this measure.

#MPOP

This variable is straight-forward; it is defined as the number of people in the community who are reported in the Census as Mexican American, Latino or Chicano.

%MPOP

This is defined as the percentage of people in the total population who are Chicano.

%MFOR

This is defined as the percentage of Latinos in the community who are foreign-born.

%MUNEMP

This is the first of three variables that seek to measure closed economic opportunities. It is defined as the percentage of the Chicano civilian workforce (aged 16 and over) who are unemployed. Presumably, a high unemployment rate in the community will force individuals to start up their own entrepreneurial activities.

%MFARM

This is defined as the percentage of working Chicanos, aged 16 or older, who are employed in agriculture, fishing, or forestry. Given the towns included in the sample, we are confident that well over 90% of these people are employed in agriculture. In some of the larger towns where more disaggregated data is available, 100% of these people were employed in agriculture. If a large portion of the working Chicanos are employed in agriculture, it may mean that other employment options are limited.

MINCON

This is a measure of the industrial concentration of the Chicano workforce. It measures the degree to which workers are spread out across industries, as opposed to concentrated in a few. High concentration in a few industries, like %MFARM, implies closed economic opportunities. Industrial concentration is measured by the M6 index (see Frisbie and Poston, 1978), which is given by the following formula:

$$\text{MINCON} = N_c \cdot \{1 - ([\sum |X_j - XM|] / 2S X_j)\}$$

where N_c = # of industry categories that contain Chicano workers, X_j = # of workers in industry j , and XM = average # of workers across all industries. It ranges between zero and N_c , with a lower MINCON implying a high concentration of workers in a few industries. Fourteen industries were defined: agricul-

ture, fishing, and forestry; mining; retail; finance; construction; manufacturing; transportation; communications and utilities; wholesale; business services; personal, recreational, and entertainment services; health services; education services; other services; and public administration.

MGINI

A Gini coefficient is a measure of the distribution of income, and thus measures economic class diversity. For this variable, we plotted a Lorenz Curve using the cumulative percentage of households from 25 income categories on the horizontal axis, and the cumulative percentage of income held by households in each category on the vertical axis. Coefficients vary between zero and one; “zero” implying perfect equality of household incomes and “one” implying that one group has all the income. A higher MGINI would thus be expected to improve entrepreneurs’ opportunities.

MGINIIM

This is a unique Gini coefficient, measuring the distribution of time periods during which immigrant Chicanos came to the United States, thus providing an objective measure of immigration diversity. Here, we plot the cumulative percentage of foreign-born who arrived during one of 10 time periods (ranging from pre-1950 to 1990), and the cumulative number of years that each group has been here. A coefficient of zero implies equality — that the immigrants came here evenly over the years; coefficients closer to one imply that most immigrants arrived during one or a few time periods. It is important to note that, with this Gini, the Lorenz Curve may bend either way or even cross the diagonal line that represents perfect equality. However, in this sample that complicating situation was not encountered, and a high MGINIIM implies that most immigrants arrived very recently. A higher MGINIIM thus implies less diversity, and fewer opportunities for entrepreneurs.

MEDUC

This refers to the percentage of Chicanos aged 25 and over who have graduated from high school or earned an equivalency degree. This is meant to measure the human capital in the community, which may positively or negatively effect entrepreneurship.

MOTHR

This particularly confusing variable is defined as the percentage of Chicanos who check the box “other” when describing their race on the census form. Recall that these forms do not list Hispanic or Latino as a race, and thus list only Caucasian, Black, Native American, Asian, etc. Technically, most Chicanos would probably fall under the Caucasian and/or Native American category. However, it is assumed that, when Chicanos have a stronger sense of their ethnic identity, they do not identify with these two racial categories and will reject these options. Instead, they will check the box labeled “other”. This may seem unreasonable, but an average of 62.1% from each town in the sample checked this box. Unfortunately, more direct “ethnic strategy” variables, such as the existence of rotating-credit associations, Chicano financial institutions, mutual-aid societies, use of familial and kinship networks, and so forth are not readily available. In the absence of such information, MOTHR serves as our proxy.

BORDER

This is a control variable, and not part of the structural model. Hansen and Cardenas (1988) suggest that entrepreneurs in towns located near the U.S.-Mexico border will have an added advantage of extra clientele and workers. In order to control for that, we will include a dummy variable: 1 for towns in the Imperial Valley; 0 otherwise.

MSA

As with border towns, entrepreneurs in towns near large urban areas may also have similar advantages. This control variable is another dummy: 1 for towns within 15 miles of a city with a population greater than 100,000; 0 otherwise. In a few cases where towns lay on a major interstate highway, this 15 mile limit was extended. For comparative purposes, the analysis will be carried out for Anglos (Whites who are not of Spanish origin) living in the same rural communities. The use of these comparative cases will allow us to identify similar as well as dissimilar patterns between Chicanos and Anglos.

The Sample Frame and Economic Context

The sample frame is small rural towns in California. “Small” was defined as towns with populations under 20,000 as of 1980. Due to data limitations, the sample was also limited to towns with populations over 2,500. “Rural” was defined as towns where at least 10% of the working people (of all races) were employed in agriculture. This criteria limits the sample to 70 communities, which are listed (along with their county code) in Appendix:B. Due to confidentiality rules of the Census of Population (i.e. when population levels are below certain thresholds), only 44 of these towns could be included in the White model. The majority of the 70 communities are located in California’s Central Valley, though some are in coastal valleys and in the Imperial Valley.

To provide a sense for the level of economic activity of California’s rural regions, the state’s top 10 agricultural counties, in terms of the value of agricultural production for 1995, include the following:

1. Fresno	\$3.167 billion
2. Tulare	\$2.610 billion
3. Monterey	\$2.028 billion
4. Kern	\$1.978 billion
5. San Joaquin	\$1.223 billion
6. Merced	\$1.220 billion
7. Riverside	\$1.163 billion
8. Stanislaus	\$1.115 billion
9. San Diego	\$1.049 billion
10. Imperial	\$1.009 billion

Altogether, California’s agricultural production in 1995 went over \$22 billion in 1995 (California Department of Agriculture, 1996).

Table 6 lists the means and standard deviations of all the variables. Variables for Anglos are denoted by the prefix “A”. This model also lacks three of the explanatory variables from the Chicano model. %AFOR and AGINIIM were dropped because there were very few (usually less than 3%) foreign-born Anglos in these communities. MOTHR, of course, has no corollary for non-Hispanics, so that AOTHR does not exist. It is interesting to speculate if non-Hispanics, who are in the minority in most of these towns, employ ethnic strategies.

Table 6. Means and Standard Deviations of all Variables

(*n=70 for Chicanos, n=44 for Anglos*)

VAR.	MEAN	STD. DEV.	MIN.	MAX.
%MSE	4.0	3.0	0.0	15.5
%ASE	10.3	5.9	1.0	40.5
#MPOP	4456	3587	280	17528
#APOP	3722	2493	1100	15120
%MPOP	5.0	24.6	6.8	97.3
%APOP	44.5	17.0	15.7	75.2
%MFOR	42.3	9.3	21.8	64.0
%MUNEMP	18.7	5.9	5.3	34.0
%AUNEMP	7.2	3.4	2.2	15.2
%MFARM	39.6	14.6	0.0	70.7
%AFARM	8.2	3.9	1.6	16.8
MINCON	6.8	1.9	2.6	10.9
AINCON	10.4	0.9	8.1	11.9
MGINI	0.36	0.07	0.15	0.57
AGINI	0.39	0.05	0.30	0.52
MGINIIM	0.36	0.11	0.05	0.75
MEDUC	29.7	9.5	7.8	53.4
AEDUC	70.2	11.0	44.9	89.5
MOTHR	62.1	18.5	28.0	89.9
BORDER	0.10	0.30	0	1
MSA	0.49	0.50	0	1

See Appendix for details of each variable.

The first noteworthy fact from the data is that Anglos, despite being the minority in most of these towns, have a much higher self-employment rate than Chicanos. The other big contrasts are in the unemployment rates (%UNEMP), the percentage employed in agriculture (%FARM), and the percentage who graduated from high school (EDUC). All three of these sets of variables contain huge differences, where the extreme values (min. or max.) for Anglos do not even reach the average value for Chicanos. At the most, 15.2% of Whites are unemployed, while the average unemployment rate per community is 18.7% for Chicanos. At the most, 16.8% of Anglos are employed in agriculture, while the average level is 39.6% for Chicanos.

Finally, each town has a minimum of 44.9% of Anglos with high school diplomas, while the average level is only 29.7% for Chicanos. These last two big differences are important to keep in mind, and play a big role in interpreting the results of the regressions. INCON also has large differences. Note that Anglos have much lower levels of concentration in any particular industry (thus, a higher INCON), and a very low standard deviation of AINCON for these communities. It would seem that, throughout rural California, Anglos are well-represented in all industries.

Methodology: Testing the Hypothesis

The hypotheses will be examined using multiple regression analysis, which goes beyond simple pairwise correlations, as it can capture the correlation of many explanatory variables on a dependent variable, while controlling for each others' effects on the dependent variable and each other. This statistical technique also allows the use of both continuous and dichotomous (dummy) explanatory variables and a continuous dependent variable. Finally, it allows for the usual hypothesis testing, employing t-tests to determine the statistical significance of each variable.

The regression for Chicano entrepreneurship was estimated, using the sample of 70 towns, according to the following model:

$$\%MSE = b_0 + b_1\#MPOP + b_2\%MPOP + b_3\%MFOR + b_4\%MUNEMP + b_5\%MFARM + b_6MINCON + b_7MGINI + b_8MGINIIM + b_9MEDUC + b_{10}MOTHR + b_{11}BORDER + b_{12}MSA + e$$

The hypothesized signs of the coefficients are $b_i > 0$, except for b_6 and b_8 , which are expected to be negative, and b_9 , which is ambiguous due to the conflicting theories presented earlier.

While the functional form in the equation above appears linear, it is important to note that some of this was altered to improve the fit of the model. For example, the natural log of #MPOP was used in the regression. This emphasized the effects of #MPOP at low levels, but minimized the effects at very high levels. Intuitively, this implies that the difference between two towns with #MPOPs of 1,000 and 2,000 is more significant than the difference between two towns with #MPOPs of 11,000 and 12,000.

It is also important to note a few inherent biases in the data. Due to the fact that the data points are group averages from groups of differing sizes (depending on the number of Chicanos in each community), the errors in the regressions are heteroskedastic, which leads to a biased estimate of the covariance matrix and incorrect inferences. This problem was corrected by the standard procedure of multiplying all data by the square root of the dependent variable (Green, 1990).

Multicollinearity is also a problem in the regression. The presence of strong multicollinearity between these variables increases their variances, inhibiting hypothesis testing. The problem was solved using the standard principle components method and the test proposed by Mundlak (1981) to determine the number of principal components to be retained in the regression.

Findings

The results of the regressions for Chicanos are presented in Table 7, and for Anglos in Table 8. For the Chicano model, note that only six of the 12 variables are statistically significant. Furthermore, some of those six have the opposite effect on self-employment than the theory predicted. Interpretations of the coefficients vary depending on units of measurement. A unit-free measure of the effects of the explanatory variables on the dependent variable are the elasticities at the mean, which measure the percentage change in the dependent variable related to a 1% increase in the explanatory variable. For example, in the Chicano model, a 1% increase in the unemployment rate (%MUNEMP) is associated with a 0.99% increase in self-employment.

In the White Anglo model, note that five of the variables are statistically significant. These are primarily the same ones from the Chicano model, though %FARM and EDUC have positive, rather than negative effects here.

Table 7. Results of the Chicano Structuralist Model: Regression Results (n = 70)				
Dependent Variable: %LSE (Percent Latino Self-Employed)				
	HYP. SIGN	COEFF.	T-STAT	ELAST. AT MEAN
<i>Explanatory Variables</i>				
#MPOP	(+)	2.61	0.59	0.12
%MPOP	(+)	0.03	0.76	0.21
%MFOR	(+)	-0.05	-1.03	-0.44
%MUNEMP	(+)	0.26	3.98***	0.99
%MFARM	(+)	-0.24	-7.77***	-1.82
MINCON	(+)	-0.59	-1.62*	-0.72
MGINI	(+)	3.93	1.19	0.29
MGINIIM	(+)	-10.67	-4.16***	-0.92
MEDUC	(+ or -)	-0.15	-2.30**	-1.02
MOTHR	(+)	-0.02	-0.84	-0.26
BORDER	(+)	-2.02	-2.05**	-0.02
MSA	(+)	-0.52	-1.15	-0.04
*significantly different from zero with 90% confidence				
** 97.5% confidence				
*** 99 % confidence				

Table 8. White Structuralist Model: Regression Results (n = 44)				
Dependent variable: %WSE (Percent White Self Employed)				
	hyp. sign	coeff.	t-stat	elast. at mean
<i>Explanatory Variables:</i>				
#APOP	(+)	-1.56	-1.53*	-0.52
%APOP	(+)	-0.28	-0.47	-0.12
%WUENEMP	(+)	0.71	3.08***	0.50
%AFARM	(+)	0.49	2.27**	0.39
AINCON	(+)	-0.40	-0.64	-0.40
AGINI	(+)	-0.01	-0.09	-0.02
AEDUC	(+ or -)	2.93	2.84***	1.99
BORDER	(+)	-6.35	-1.62*	-0.04
MSA	(+)	-3.79	-2.50***	-0.22

Summary and Conclusions

This study has focused on one of the more elusive types of economic behavior, entrepreneurship. It has also focused on *colonia* conditions as a possible condition conducive for Chicano entrepreneurs. To begin with, we indicated serious concern about *colonia* conditions. They are not only poor, *colonias* are largely void of local businesses which can stimulate economic development. With regard to Chicano self-employed, our search for literature found little information which pertains specifically to rural Latinos. Consequently, the theoretical underpinnings of this study are derived from other studies of ethnic entrepreneurs. As evident throughout the text, we are just beginning to learn about Chicano entrepreneurs in rural communities.

Nonetheless, we now have evidence that Chicano self-employment is related to disadvantage and structural conditions. That is, we found few signs that investment and income generation from Chicano self-employed were related to positive socio-economic conditions within those communities with the highest concentrations of Latinos.

Out of all the factors considered, there are only five or six significant variables which correlate with the percentage of self-employed. With regard to the structuralist model, we found that all of the variables measuring "closed economic options" are significant, but not in the hypothesized direction. To a degree the strong positive impact of unemployment (%MUNEMP) and industrial concentration (MINCON) on self-employment turned out as expected. But the

findings also suggest that too many closed or negative employment options may at some point impede the chances for Chicano self-employment. It stands to reason that extreme *colonia* deprivation, limits the presence of entrepreneurs.

Another finding is that a rise in the percentage of Chicanos on farms (%MFARM), correlates with lower self employment. On the other hand, the increasing percentage of Anglos in agriculture (%AFARM in the White model), has the predicted positive correlation. In examining these results more closely, we find that when the percentage of Chicanos on farms (%MFARM) exceeds 50% of the locally employed, as in 15 of the 70 towns in the study, it is easy to surmise that such high dependence on low-wage agricultural employment, lessens their prospects to become self-employed. These 15 communities, for example, are simply too poor and deprived to expect Chicano movement to self-employment. On the other hand, since the percentage of Anglos on farms (%AFARM), never exceeds 12% for any town, it is effectively a different variable for Anglos, capturing concentration in a particular industry rather than massive dependence on low-wage jobs. Thus, it is no wonder that %MFARM has a negative impact on self-employment, while %AFARM has the predicted positive correlation.

Two of the group characteristic variables were significant. The strong and significant impact of “immigration diversity,” MGINIIM, on self-employment, confirms the notion that a continuous and even flow of immigrants influences Chicano self employment. The negative effect of Chicano education, MEDUC, is interesting, particularly when contrasted with the positive impact of education, AEDUC, among Anglos. The negative result again implies a correlation between limited economic opportunities and self-employment, as people with low levels of education have fewer employment options. Thus, the negative influence of MEDUC of Chicanos fits with the significant correlations of %MUNEMP and MINCON. In short, Chicana/os turn to self-employment when other doors are closed.

In contrast, the strong positive effect of AEDUC on Anglo self-employment implies that a high level of education assists them in entrepreneurial activities. The explanation for these contrasting effects may be the types of businesses that are established. Note that the census data does not allow us to distinguish between a family-owned laundromat and a home-

based computer consulting agency, for example, when it comes to “self-employment.” Whites, with higher levels of education and presumably more lucrative job opportunities, face a much higher opportunity cost when embarking on an entrepreneurial activity. Thus, it is likely that their enterprises are more lucrative as well.

The only ethnic strategy variable, MOTHR, is insignificant. This variable refers to the percent of a community who identified themselves as “Other” during the Census of Population. Since this variable was used as a proxy for indicating the degree of ethnic identity in a community, it probably failed to capture many of the subjective relationships that people have in a town. That is to say, we have no way of knowing why people marked themselves as “Other.” i.e. other than Hispanic or White, in the Census. The reasons may be very complex.

Of the control variables, the coefficient for BORDER, referring to communities nearer to Mexico, is significantly negative in both regressions. This surprising result suggests that close proximity to the U.S.-Mexico border, controlling for all the other variables, has a negative impact on self-employment for both Chicana/os and Anglos. Since most of the border communities were in Imperial County, we can only infer that most employment opportunities are limited to agriculture and that people may prefer to do business in Mexico, and not where they live.

Another interesting result in the negative influence of MSA, or the *colonias*’ proximity to a large city of 100,000 or more. A likely explanation is that a large city offers a multitude of employment opportunities. The most likely explanation for the importance of proximity is that *colonia* residents also prefer to shop in bigger markets. (Rochín, 1990A) In another sense, the negative impact of MSA is akin to a positive correlation between rural isolation and self-employment. Again, the story can be told of limited economic opportunities within *colonias* for spurring the development of local businesses.

To a degree, the findings can provide some insight into the development of Chicano entrepreneurs, but the findings are insufficient for conclusive proof that the structuralist model best explains the situation of Chicano entrepreneurs. It would take more research at the local level, questioning different groups of self-employed, to understand the motivations and needs of Chicano entrepreneurs.

Implications

Obviously, current *colonia* conditions, as illustrated in the first part of this report, are not conducive to successful entrepreneurship among Chicanos. The regression analysis reveals that it is the lack of “economic opportunities” that relates most to the presence of Chicano self employment. What is worse is that these “opportunities” are of the harshest kind; namely, persistent high rates of unemployment, general low education of adults (for Chicana/os), and relatively high dependence on agricultural employment. In a perverse sort of way, Chicano entrepreneurs tend to join the self-employed when wage work is limited around *colonias*. For another twist of fate, Chicana/os, though representing the majority of *colonias*, have lower self-employment rates than Anglos in the communities.

This analysis also shows that a growing concentration of Latinos in several of the communities is positively correlated with the self employment of the Chicanos. On the other hand, extreme dependence of residents on low-wage agricultural jobs, limits the effective demand of *colonia* consumers. How much can they spend and what types of goods and services do they purchase? We do not know from this study. However, it is doubtful that *colonia* customers can afford many expensive items. Likewise, the lack of a diverse business community tends to deprive *colonia* residents from learning entrepreneurial skills. One wonders what conditions are like for on-the-job training within *colonias*. Can *colonia* residents learn office management skills, banking and the latest forms of business communication and technology? Similarly, do *colonias* have clubs for Lions, Soroptimists, and Rotarians? Is there an active Chamber of Commerce? Furthermore, are there questions of business finance and where investments are promoted? We have little information about bankers, systems of “social capital,” and campaigns for businesses.

Finally, this report appeals for more attention to California’s rural *colonias* and self employed. There is clearly a need to build public and private partnerships to bridge gaps in business development. There is also a need for an infrastructure that allows the development of a diverse business community. Perhaps a program to develop entrepreneurial skills and on-the-job training could be pursued. The time is critical for federal, state, and local leaders to examine the role of Chicano entrepreneurs in rural communities.

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Appendix A: Literature Review

The plight of Chicanos located in rural areas is markedly dramatic in comparison to their counterparts living in urban areas. Studies have shown that Chicanos are particularly vulnerable to downturns in the economy in those areas that have high levels of dependence on agriculture and limited alternative employment opportunities (Jensen and Tienda, 1989; Saenz and Thomas, 1991). Such a situation is intensified given the extent to which jobs in these areas tend to be in the peripheral sector of the economy (Duncan and Tickamyer, 1988; Falk and Lyson, 1988; Lichter, 1989; Tickamyer and Duncan, 1990) as well as the low use of public assistance programs in rural settings (Hirschl and Rank, 1991; Rank and Hirschl, 1988).

The scenario describing the living conditions of *colonias* suggests the necessity for the development of alternative strategies for economic survival. Understanding how Chicanos adapt economically in rural areas is crucial because of their historical ties to agriculture and the ethnic demographic transformation patterns currently under way. Moreover, population projections (Saenz and Murdock, 1990) suggest the important role that Chicanos are likely to play in rural settings in the coming decades. Without a doubt, they will be the majority of new entrants into the labor force of California's rural communities. (Rochín, 1990). *The question arises as to the potential for economic development of such communities, based upon Chicano enterprises.*

Research on ethnic enterprises has revealed that the development of ethnic enterprises represents a strategy used by minority groups to adapt to their environments through the use of the resources at their disposal. Chicanos in the Southwest, particularly those located in rural areas, have historically exhibited high rates of poverty (Jensen and Tienda, 1989; Montejano, 1987; Saenz and Thomas, 1991). Historical (see Romo, 1983) and contemporary information suggests that, despite their limited economic resources, Chicanos have been enterprising. For example, the Census of Minority Business Enterprises (U.S. Bureau of the Census, 1991a; U.S. Bureau of the Census, 1988) indicates that there were approximately 51 Chicano-owned firms per 1,000 Chicano workers in 1987 (compare this to a rate of 116 for Cubans and 39 for Puerto Ricans). In addition, the number of Mexican-owned firms increased by 60% between 1982 and 1987 (compared to an increase of 89% among Puerto Ricans, 68%

among Cubans, 48% among Asians, 44% among American Indians, and 25% among blacks) (U.S. Bureau of the Census, 1985, 1986a, 1986b, 1991a, 1991b). Preliminary analysis of Texas (where 95% of Hispanics are Chicano) data reveals that rural Hispanics have a higher self-employment rate (52.3 per 1000 workers) compared to their urban peers (42.6).

In recent decades there has been an increase in the attention given to the study of ethnic enterprises in the United States. Research has documented the high rates of ethnic enterprises among certain segments (e.g., immigrants, Cubans, and Asians) of the minority community in this country. The work of such individuals as Alejandro Portes (1981, 1987; Portes and Bach, 1985; Portes and Manning, 1986; Wilson and Portes, 1980), Howard Aldrich (Aldrich et al. 1976, 1984, 1985; Aldrich and Reiss, 1976; Aldrich and Waldinger, 1990), Edna Bonacich (1972; Bonacich et al. 1980a, 1980b; Bonacich and Modell, 1980), Roger Waldinger (1986; Waldinger et al. 1990), Jose Cobas (1986, 1987; Cobas and DeOllós, 1989), and Ivan Light (1972, 1979, 1980, 1984; Light and Sanchez, 1987) has provided a wealth of information regarding ethnic entrepreneurs. This body of knowledge, however, has some shortcomings that have not been adequately addressed. Such shortcomings suggest that we know little about the development of ethnic enterprises in rural minority communities.

First, the overwhelming majority of research on ethnic enterprises has focused on metropolitan areas. Thus, the literature provides much information on the development of ethnic enterprises in such places as New York City, Los Angeles, Chicago, Miami, and San Francisco. Yet, with few exceptions, this body of knowledge fails to examine the existence of ethnic enterprises in smaller communities, with rural areas especially overlooked. A perusal of the literature reveals how sorely underrepresented rural areas and Chicanos are in the ethnic enterprise literature. After an extensive literature review, we turned up only one article (Gibson, 1988) focusing on rural areas. This research examined the development of orchard farms by Punjabi immigrants settling in Valleyside, Calif. Gibson's work provides an excellent illustration of the manner in which ethnic groups utilize kinship networks in the immigration and adjustment processes and in the establishment of their own farms. Of particular interest, the research illustrated how economic downturns in the fruit and vegetable industry affected changes in farm ownership patterns among the Pun-

jabi. However, the review of the literature failed to find any research undertaken on Chicanos in rural settings.

Second, previous research examining ethnic enterprises has largely been limited to the study of single cities (Bonacich et al. 1980; Chan and Cheung, 1985; Gibson, 1988; Kim, 1981; Kim and Hurh, 1985; Model, 1985; Portes, 1987; Portes and Jensen, 1989; Wilson and Martin, 1982; Wilson and Portes, 1980) or a small group of cities (Cobas, 1987; Cobas and DeOllós, 1989; Hansen and Cardenas, 1988). As a result, the theoretical perspectives developed in the study of ethnic enterprises have generally not been tested in broad settings. Hansen and Cardenas' (1988) research is based on several metropolitan areas in the Southwest. Hansen and Cardenas note that native-born and foreign-born Chicano entrepreneurs differ with respect to the ethnic composition of workers and consumers, with the latter being more dependent on fellow ethnics. They also observe that approximately 90% of Chicano entrepreneurs are in retail trade, services, and the restaurant business. Chapa and Cardenas (1991) have also conducted research on Chicano ethnic enterprises in the San Antonio Westside (a predominantly Hispanic section of the city) in Texas. Chapa and Cardenas' research shows that businesses located in the Westside tend to be in the least profitable sector of the economy, with 81% being in the retail trade, repair services, personal services, and entertainment sectors. The Chapa and Cardenas study also documents the presence of a high proportion (three-fourths of Chicano entrepreneurs) of entrepreneurship among native-born Chicanos and the high degree of dependence (with respect to employees and clientele) on co-ethnics.

Third, while past research has focused on particular segments of the ethnic community (e.g., immigrants, Asians, and Cubans), with a few exceptions, research addressing the development of Chicano ethnic enterprises, the nation's second largest minority group, has not been forthcoming. Portes and Bach (1985) have studied Mexican immigrants with respect to their participation in an ethnic enclave. However, the primary focus was on Cuban workers in Miami. One exception is the work of David Torres (1988), which represents one of the most comprehensive works on Chicano entrepreneurs. Torres' study uses individual-level data from the 1980 1% Public Use Microdata Sample (PUMS). In this work, Torres observes the relationship between certain eth-

nic, class, and industrial variables and earnings among Chicano entrepreneurs. Torres concludes that native-born Chicano entrepreneurs tend to receive more favorable payoffs from low-participation (traditionally low Chicano representation) industries, while immigrant members tend to reap higher economic gains from industries with high levels of ethnic participation (i.e., protected markets). Torres suggests that successful native-born Chicanos are better able to obtain “class” resources needed to engage in businesses beyond the confines of the ethnic economy. Yet, his work also demonstrates that Chicano entrepreneurs, native-born and immigrant alike, tend to be more successful economically in particular metropolitan areas having a large concentrated Chicano population.

Finally, despite the fact that ecological and structural perspectives have been introduced into the study of ethnic enterprises, the focus has continued to be at the individual-level where the individual entrepreneur represents the unit of analysis. Consequently, to date there has not been a study that has examined variations in the aggregate ethnic enterprise rates across a large geographic area. In a similar fashion, we only found one study (Light and Sanchez, 1987) that examined the development of ethnic enterprises exclusively at the aggregate and structural levels. However, this work dealt with entrepreneurship rates in 272 metropolitan areas. It suggested that the growth in the immigrant population in the U.S. following changes in immigration legislation in 1965 was responsible for a significant part of the unprecedented increase in the nation’s entrepreneurship rate during the 1972-1984 period.

The lack of research centered at the community level is unfortunate given the increasing importance attributed to structural-level analysis in the area of poverty (Duncan and Tickamyer, 1988; Farmer et al. 1989; Saenz and Thomas, 1991; Tickamyer and Duncan, 1990; Tomaskovic-Devey, 1987). In recent years, poverty researchers, especially those focusing on rural areas, called for the need to bring the community back into the research arena since the community provides the context within which poverty is manifested. Similarly, we argue that research in the area of ethnic enterprises needs to be expanded to the aggregate and structural levels in order to tap the parameters existing in communities which either facilitate or inhibit the creation of ethnic enterprises.

Appendix B: List of Communities in Study*

(n=70)

ArvinKER	HuronFRE
AvenalKIN	ImperialIMP
BlytheRIV	IvanhoeTUL
BrawleyIMP	KermanFRE
CalexicoIMP	KingCityMON
CalipatriaIMP	LamontKER
CalistogaNAP	LemooreKIN
CastrovilleMON	LindsayTUL
CoachellaRIV	Live Oak citySUT
CoalingaFRE	LivingstonMER
ColusaCOL	Los BanosMER
CorcoranKIN	McFarlandKER
CutlerTUL	MendotaFRE
DelanoKER	NipomoSLO
DelhiMER	OceanoSLO
DinubaTUL	OrangeCoveFRE
Dos PalosMER	OrlandGLF
DurhamBUT	OrosiTUL
E. PortervilleTUL	PajaroMON
EarlimartTUL	ParlierFRE
EIRioVEN	PattersonSTA
FallbrookSD	PlanadaMER
FarmersvilleTUL	ReedleyFRE
FirebaughFRE	St. HelenaNAP
FreedomSCR	SangerFRE
GonzalesMON	SelmaFRE
GreenfieldMON	Shafter CityKER
GridleyBUT	SoledadMON
GuadalupeSB	Terra BellaTUL
GustineMER	WascoKER
HeberIMP	WaterfordSTA
Hilmar-IrwinMER	WillowsGLE
HollisterSBT	WintersYOL
HoltvilleIMP	WintonMER
HughsonSTA	WoodlakeTUL

*Detailed statistical information corresponding to the demographics of each place, see Allensworth and Rochin, 1996.

Endnotes

1. Over 95% of the population of these rural communities are either “White, non-Latino” or “Latino.” Throughout rural California there is rarely a significant number of Asian, Black, and other racial/ethnic groups.
2. Notice, however, that the chart displayed population growth in absolute numbers, while the table displays percentage growth of each ethnic population. Percentage growth is figured as the percentage increase in population from 1980 to 1990. For example, a community that grew from a population of 1,000 Latinos in 1980 to 2,000 Latinos in 1990 would have a 100% increase in Latino population. A community that decreased from a population of 1,000 non-Latino Whites in 1980 to 500 Whites in 1990 would have a -50% population growth in non-Latino population.
3. See Appendix A for a listing of the communities used in this typology.