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Ethnic Growth and Shifts in U.S. Metropolitan Areas in the 1990s

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Growth and shifts in the three largest ethnic groups (Hispanics, Blacks, and Asians) in central and suburban cities are compared with respect to census regions (South and West versus Midwest and Northeast) and population in Metropolitan Statistical Areas (MSAs). The writing on the geography of ethnicity involves more comprehensive data collection and analysis to compare previous studies. Conclusion from this research demonstrates that the geographic characteristics of Blacks, Hispanics, and Asians differ in central and suburban cities between 1990 and 2000. Ethnic growth caused the census regions of Southern and Western metropolitan areas to become increasingly diverse ethnically and racially during the decade. The Black population grew in the central cities of census South and West regions, while Hispanic and Asian populations grew South and West suburban cities.

Keywords: U.S. Metropolitan, Ethnic Growth and Shift, Population, Central and Suburban City

1. INTRODUCTION

This research examines ethnic growth in central and suburban cities in U.S Metropolitan Statistical Areas to gain additional understanding about ethnic growth and shifts in the 1990s, and help anticipate the conditions of the 2000s that will be reported in the 2010 census. The research covers two subject locations within the 92 Metropolitan Statistical Areas (MSAs): 1) the 92 central cities having populations greater than 500,000, and 2) the 244 suburban cities out of 724 suburban cities in those MSAs that have populations greater than 25,000.

Metropolitan suburban minority populations grew from 18 percent of the overall population in 1990 to 25 percent in 2000; the Black population grew 38 percent, the Asian population grew 73 percent, and the Hispanic population grew 84 percent in metropolitan suburbs during this decade (Logan 2001, 2003). Also, Hispanic and Asian immigrants apparently continued to affect the growth of metropolitan areas (Frey 2001a, 2001b, 2005); immigrants in central cities increased by 3.5 million, and immigrants in suburban cities increased by 4.8 million (Logan 2003). Suburban cities became more heterogeneous in their ethnicity, while many central cities trended toward homogeneity, different from earlier trends (Galster and Booza 2007).

For these reasons, it is necessary to develop a comprehensive, large-scale data set to compare the population growth of Blacks, Hispanics, and Asians in central cities and their suburbs between 1990 and 2000. The comparisons should indicate that ethnic growth rates are related to 1) census regions (South and West versus Midwest and Northeast) and 2) overall population growth rate.

Generally, a lower population growth rate is settled by the Midwest and the Northeast ("Rust Belt") metropolitan regions, while a higher population growth rate is largely settled by South and West ("Sun Belt") metropolitan regions; that is, lower population growth rate is found more often in the Midwest and the Northeast, while higher population growth rate is seen in South and West census regions (Pack 2005).

Source: U.S. Census Bureau 2000.

Figure 1. 2000 Census Regions of United States

2. LITERATURE REVIEW

Ethnic growth and shifts have been an ever-present element of the American surroundings for centuries. Some may argue that it is a phenomenon that is inevitable and a way of life because of its longevity within society. Massey (2004) notes that researchers have looked at ethnic shift trends across U.S. metropolitan areas and observed that the downward trends are in newer and smaller metropolitan areas with a small ethnic population in contrast to older metropolitan areas with a large ethnic population where racial segregation levels are still high. People want to live in better urban environment; that is, they want to gain access to better schools, safer streets, and greater housing wealth residentially. Ethnic upward mobility is difficult for many ethnic groups such as Hispanic, African American, and Asians because of deep rooted anti-ethnic group prejudice and high levels of residential segregation (Massey 2004).

The institutionalization of ethnic shifts started in the early 1900s when Blacks migrated from the South in search of factory jobs. When they tried to settle in the metropolitan areas of the North and the Midwest, they met with racial segregation, threats, and hostility. Those metropolitan areas today are still plagued with ethnic group shifts' practices resulting in reduced socio-economic opportunities for ethnic groups such as African Americans and Hispanics. According to Macionis (1996), ethnic shifts are defined as the physical and social separation of categories of people by reducing socio-economic opportunities.

The Hispanic population in the United States grew by 43% in the 1990s. Population demographers show that this growth was propelled by a surge in births in the U.S rather than immigration from other countries. Others say that the Hispanics will gain political influence because they will make up a third of the U.S. population by 2050 (Logan 2003). Hispanics were more likely than non-Hispanic Whites to reside in the West and the South. They were less likely to live in the Northeast and the Midwest. The US census regional distribution of the Hispanic population is 44.2 percent in the West and 34.8 percent in the South, while the

distribution of non-Hispanic Whites ranged from 33.3 percent in the South to 19.2 percent in the West (Ramirez and Cruz 2003).

Census 2000 showed that Asians were 11.9 million, or 4.2 percent of the total US population as of April 1, 2000. US census data for the Asian reported that the West region had Asian populations greater than the national average of 4.2 percent. The West census region with the highest concentration of Asians (over 25 percent) was in Hawaii. Also, the largest number of Asians resided in the West census region. The US census regional distribution of the Asian population is 48.8 percent in the West and 18.8 percent in the South, while the distribution of Asians is 11.7 percent in the Midwest. Also, the largest Asian concentrations tended to be found in coastal and/or urban areas (Ramirez and Cruz 2003).

Wilson (1996) posited that geographically concentrated poverty and the subsequent development of a slum underclass resulted from structural changes in the economy combined with the exodus of middle- and working-class black families from many inner-city poverty neighborhoods in U.S. metropolitan areas. He argued that middle- and working-class Blacks were able to profit from residential opportunities outside of those slums in U.S. metropolitan areas. The influence of these events was a rapid upsurge in the now well-known social dislocations involved with sudden and/or long-term increases in joblessness—under- and unemployment, welfare dependence, and an obvious disregard for the law. The emigration of rich Blacks removed an important "social buffer," leaving poor Blacks in socially isolated communities that lacked material resources, access to jobs and job networks, and exposure to conventional role models (Wilson 1996). However, Massey and Denton (1989) say that these structural changes would not have produced the disastrous social and economic outcomes observed in inner cities without residential segregation in U.S. metropolitan areas. Focusing on a black middle-class flight detracts awareness from the devastating significances of residential segregation for all Blacks, irrespective of socio-economic status in U.S. metropolitan areas.

Therefore, ethnic shifts relate to racial segregation because the segregation originated with the enslavement of Africans and then was followed by the Jim Crow system which legalized racial segregation and discrimination. As a result, laws prevented the physical acquaintance between Blacks and Whites, for instance interracial marriages, separate schools, and limited use of public facilities. Massey and Denton (1987) argued that the breakdown of the officially permitted structure of segregation was set in movement by the 1954 Brown vs. Board of Education decision which invalidated earlier decisions supporting racial discrimination in public schools. The Civil Rights Act of 1964 prohibited U.S. from discriminating against people on the basis of race, color, religion, or national origin. Also, the Voting Rights Act of 1965 demonstrates another major stride against segregation by embarking on black voters into the electoral process giving them a political voice. Lyndon B. Johnson mentioned in his "Great Society" speech that in the next 40 years we must reconstruct the entire U.S. metropolitan areas to stop poverty and racial injustice. Accordingly, he passed the Civil Rights Act of 1968 which excluded racial discrimination in the sale or rental of housing.

Residential segregation is a dominant feature of most U.S. metropolitan cities (Massey and Denton 1993). Davis and Moore (1945) would argue that residential segregation is social stratification working to keep people in their suitable place within society, based on income, education, and power. Public choice supporters contend that the market determines alternatives so that people should be able to live where their money can take them. People tend to choose to work, socialize, and live with others in their own social, religious, cultural,

and economic group (Dreier, Mollenkopf, and Swanstrom 2004). Massey and Denton (1993) countered that residential segregation compounded the problems of Blacks in the cities because it confined the increase of scarcity to a small number of densely packed metropolitan areas. Wilson (1996) explained that urban distress perpetuated the practice of ethnic shifts which left Blacks in socially isolated neighborhoods that lacked resources, access to jobs and therefore made these neighborhoods detrimental in U.S. metropolitan areas.

Another aspect of maintaining residential segregation that cannot be overlooked is the role of local governments. Dreier et al. (2004) argue that local governmental policies have helped to promote and maintain racial residential segregation because they used exclusive zoning and development policies that kept out low income residents and segregated land uses to exclude unwanted residents. The federal government reinforced residential discrimination through various polices such as the practice of redlining and a rating system (Dreier et al. 2004). Those policies compelled ethnic groups, particularly Blacks, to rent housing in central cities, therefore, obstructing them from their opportunity to move to the suburb areas. However, there is no clearer signal of the government's role in maintaining and continuing the practice of residential segregation for ethnic groups.

Henslin (2000) argues that residential segregation must develop ethnic strife to create a split labor market in which workers are divided along racial, ethnic, and gender groups. Wilson concurred, arguing that residential segregation is the effect of this split labor market when manufacturing jobs and many blue collar jobs are transferred to the suburbs; that is, residential segregation is an important player in the continuous socio-economic inequality of ethnic groups.

Fainstein (1993) suggests the ethnic shift can be attributed to dynamic racial discrimination by realtors, banks, and governmental boundaries as racial barricades. These patterns of behavior characterizing society exist because they are essential to the structure of society (Davis and Moore 1945). Since ethnic shifts are universal, inequality helps societies survive because society makes certain that its positions are filled. Some positions are more important than others; therefore, important positions must be filled by the more competent people, and to inspire them to take these positions, society must present them greater returns.

Another aspect of shifting ethnic groups that cannot be overlooked is the role administration has played. For many Blacks and Hispanics the comprehension of the American dream has become an equivocal concept. Dreier et al. (2004) argues that governmental policies have helped to encourage and preserve racial residential segregation through ethnic shifts. The Federal House Administration (FHA) started the practice of redlining, a rating system used to rate borrowers and different areas in U.S. Metropolitan cities. This kind of policy forced Blacks to rent housing in cities; therefore, prohibiting them from their chances to shift to the suburbs. Actually, Drier et al. mention that in 1938 the official FHA underwriting handbook discouraged loans to neighborhoods occupied by ethnic groups such as dissonant racial or various nationality groups. It even stipulated that a change in social or racial occupancy generally contributed to unsteadiness and waning in values.

The theme that binds ethnic shifts to society is the notion of social stratification which is, everyone in society is perceived through recognition of inequality. The notion that inequality is a universal aspect of society carries on the existence of segregation in society making the possibility of improving ethnic shifts an intricate task. The mass media does not do much to lessen this conflict. In fact, the mass media magnifies the stereotypes of the slum that maintains racial fears, and the attitudes of Blacks and Whites. As a product of the slum

establishing what the continued causes of racial segregation are is not difficult. The main reason for racial segregation is when the accomplishment is used to hold Blacks and Hispanics back by amending the regulations and putting obstructions in their way, then saying Blacks and Hispanics are unskilled and require the intelligence to succeed.

American society is becoming more and more stratified, resulting in economic and often racial inequalities. Crime and a decaying infrastructure push people out of the central cities of U.S. metropolitan areas while governmental subsidies and social norms tow people to the suburbs. This incidence affects primarily middle and upper class Whites. Essentially, poor and minority people remain in the central cities of U.S. metropolitan areas, while immigration continues to ethnically diversify urban areas. Since World War II, government and social change has led to the flight of the White-middle class from the central cities to the suburbs in U.S. metropolitan areas. This has caused ethnic shifts in city and regional economies. Also, policy, social, and business changes that grew the suburbs deteriorated cities. Just as city infrastructure was getting older, wealthy residents and businesses moved from those cities. Thus, property and sales tax revenue for cities declined and poor people were forced to pay more money. This downward whirl has had an adverse effect on those cities (Garreau 1991).

Due to the escape of many White people from central cities, cities themselves have greater concentrations of ethnic groups. However, longtime minorities, such as Blacks and Hispanics, are now struggling for jobs. They also suffer from lack of political representation, particularly the Hispanics. Black people, it has been argued, have been on the receiving cessation of economic and social discrimination for centuries (Marable 1983). Now that White people were leaving the central cities, black leaders believed it was their time to receive economic and political representation in the neighborhood (Dear 2001). However, cities attract ethnic groups. In certain areas of the South and West, the Hispanic population is so large that they are now competing for the jobs and political demonstration Blacks expected for themselves. This has and will cause conflict between and among ethnic groups (Dear 2001).

Therefore, local governments must look for economic, political, and social solutions for successful long-term viability (Dreier et al. 2004). Local policies provide job training and housing aid for ethnic people to have the opportunity to move beyond urban poor status; that is, those programs should also ensure these people do not escape to the suburbs as well but have a positive influence on others remaining in the city. Also, local governments provide cities with increasing voice in regional, state, and national government because the growth of local political power must change to stop favoring suburbs and focus investment back to the central cities of U.S. metropolitan areas.

Ethnic shifts from goods- to service-producing economy associate with out-migration and residential segregation of ethnic groups. Middle and upper class move away from the central city of metropolitans to the suburbs (Dear 2001). Thus, White middle and upper class go to suburbs supported by public infrastructure, better tax base, and other related benefits of incomes generated by residents working in the suburbs (Dreier et al. 2004). The entire urban America is becoming increasingly heterogeneous ethnically and racially. However, many central cities are becoming increasingly more homogeneous economically as the middle class disappears, all at the same time.

3. METHODS, DATA, AND HYPOTHESES

3.1. Methods

MANCOVA consists of more than one dependent variable and one or more independent variables (Stevens 2002; Todman and Dugard 2007). MANCOVA also supports the use of interval scale variables as covariates. This research uses MANCOVA because it consists of multiple independent and dependent variables as covariates.

The MANCOVA model for the growth rates of the three largest ethnic groups is applied to compare groups formed by the population growth rates of Blacks, Hispanics, and Asians on group differences in a set of geographic changes in central and suburban cities in U.S. Metropolitan areas. Each city's ethnic growth rate between 1990 and 2000 is treated as an independent variable. Blacks, Hispanics, and Asians are examined with respect to two dependent variables: census regions and population growth rate for the 92 central cities and 244 suburban cities of the 92 MSAs.

The two populations consist of 1) 92 central cities selected from 92 MSAs having populations over 500,000, and 2) 244 suburban cities randomly selected from the 724 suburban cities having populations over 25,000 in the same MSAs. Although there are 97 MSAs with over 500,000 people in U.S. metropolitan areas, this research excludes the five MSAs (El Paso, McAllen, Salt Lake City, Spokane, and Boise) with Hispanic populations over 78 percent or White populations over 95 percent (Rusk 2003: 51). This method permits a reasonable review of the differences of ethnic growth independent variables against the geographic region and population growth dependent variables in both the 92 central and 244 suburban cities in the 92 MSAs.

3.2. Data

Table 1 shows that the three independent variables in this analysis are the rates of ethnic growth for Blacks, for Hispanics, and for Asians. There are two dependent variables: 1) Regions (South and West versus Midwest and Northeast: Dummy variable) and 2) population growth rate between 1990 and 2000 in the 92 U.S MSAs.

Table 2 shows the percentages of total central-city population in each the four regions. The population of the central cities is equal to that of sample central cities in the 92 MSAs. Of the total central-city population, 22.8 percent is in West, 35.9 percent in the South, 19.6

Table 1. Variables and Data Source

Independent Variables	Data Source
Ethnic Growth Rate (1990-2000) Blacks Hispanics Asians	U.S. Census Bureau
Dependent Variables	**Data Source**
Regions (South and West vs. Midwest and Northeast: dummy variable(0,1))	U.S. Census Bureau
Population Growth Rate (1990-2000)	

Table 2. Sample Central City Percentages in Four Regions

Four Regions	Population 92 Central City Percent	
West (13 States) South (16 States)	22.8% (22) 35.9% (33)	58.7% (54)
Midwest (12 States) Northeast (9 States)	19.6% (18) 21.7% (20)	41.3% (38)
Total	100% (92)	

Table 3. Population and Sample Suburban City Percentages in Four Regions

Four Regions	Population 724 Suburban City Percent		Sampling Suburban City Percent	
West (13 States) South (16 States)	34.1% (247) 21.8% (158)	55.9% (405)	25.9% (63) 26.6% (65)	52.5% (128)
Midwest (12 States) Northeast (9 States)	29.4% (213) 14.7% (106)	44.1% (319)	30.3% (74) 17.2% (42)	47.5% (116)
Total	100% (724)		100% (244)	

percent in the Midwest, and 21.7 percent in the Northeast.

Table 3 shows population percentages for sample suburban cities in the four regions. Of total suburban city population, 34.1 percent is in the West, 21.8 percent in the South, 29.4 percent in the Midwest, and 14.7 percent in the Northeast. With respect to sample city population percentages, 25.9 percent is in the West, 26.6 percent in the South, 30.3 percent in the Midwest, and 17.2 percent in the Northeast. There is a 3.4 percent difference between actual population and the population of sample cities in the West and South regions. There is an approximately 3.4 percent difference between actual population and the population of sample cities is in the Midwest and Northeast regions. Therefore, the 244 sampling cities can represent the 724 cities in the four regions.

Ethnic Growth Hypotheses

Hypothesis 1. There will be statistical differences in the means of *each dependent variable:* regions and population growth rate on ethnic growth rate for Blacks, Hispanics, and Asians *for the 92 central cities*.

Hypothesis 2. There will be statistical differences in the means of *each dependent variable:* regions and population growth rate on ethnic growth rate for Blacks, Hispanics, and Asians *for the 244 suburban cities*.

Table 4. Tests of Between-Subjects Effects

Source	Dependent Variable	Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	Census Regions (South and West vs. Midwest and Northeast)	1.935	3	.645	2.717**	.049
	Rate of Growth in Population	5381.693	3	1793.898	12.472***	.000

(*P < 0.1, **P < 0.05, and ***P < 0.01)

4. DATA ANALYSIS

4.1. Multivariate Analysis of Covariance (MANCOVA) for 92 Central Cities on Each Ethnic Growth between 1990 and 2000

The multivariate analysis of covariance summary statistics for the 92 central cities is shown in six tables below. Roy's Largest Root tests focus on the independents and their interactions to determine whether each effect is significant. For Blacks, Roy's LR's value is .088, F = 3.844, p = 0.025; for Hispanics, Roy's LR value is .257, F = 11.199, p = 0.000; for Asians, Roy's LR value is .031, F = 1.364, p = .261. Each effect for the 92 central cities indicates overall significant values for Black and Hispanic growth rates. However, the Asian growth rate does not have significant value at the 0.05 level.

The omnibus F test is the first step MANCOVA process of analysis in Table 4. The F test appears in the "Corrected Model" of the Tests of Between-Subjects Effects. Is the model significant for each dependent? In Table 4, each F value is statistically significant for each dependent. Accordingly, the F tests reject the null hypothesis that there is no difference in the means of each dependent variable for the different groups formed by the independent variables. That is, there are indeed statistical differences in the means of each dependent variable: Regions (South and West versus Midwest and Northeast), and population growth rate on ethnic growth rate for Blacks, Hispanics, and Asians *for the 92 central cities*.

4.1.1. Regions (South and West versus Midwest and Northeast)

The multivariate analysis of covariance summary statistics for census regions (South and West versus Midwest and Northeast) are presented in Table 5. The table shows a statistically significant Black growth rate, F (1, 88) = 5.897, p = .017. Black growth rate is statistically significant with respect to census regions in the 92 central cities; that is, Black growth rate increases in the central cities of the South and West census regions. Hispanic and Asian growth rates are non-significant for census regions in the 92 central cities.

4.1.2. Population Growth Rate

The multivariate analysis of covariance summary statistics for population growth rate is presented in Table 6. The table shows a statistically significant Black growth rate, F (1, 88) = 5.612, p = .020 and Hispanic growth rate, F (1, 88) = 5.612, p = .000. There is a negative relationship between Black growth rate and population growth rate in the 92 central cities, as indicated by the negative coefficient; while in the same central cities Hispanic growth rate is

Table 5. Multivariate Analysis of Covariance Summary for Census Regions (South and West versus Midwest and Northeast) in the 92 Central Cities

Source	SS	df	MS	B[a]	F	Sig.
Intercept	6.919	1	6.919	.593	6.628	.012
Black Growth Rate	1.400	1	1.400	.046***	5.897	.017
Hispanic Growth Rate	.070	1	.070	.053	.296	.588
Asian Growth Rate	.111	1	.111	.005	.467	.496
Error	20.891	88	.237	.		
Total	50.000	92				

a. Parameter Estimates B in General Linear Model
General Linear Model (MANCOVA) (*P < 0.1, **P < 0.05, and ***P < 0.01) (Covariate: The Rate of Growth in Blacks, Hispanics, and Asians)

Table 6. Multivariate Analysis of Covariance Summary for Population Growth Rate in the 92 Central Cities

Source	SS	df	MS	B[a]	F	Sig.
Intercept	4.046	1	4.046	-.453	.028	.867
Black Growth Rate	807.198	1	807.198	-.901**	5.612	.020
Hispanic Growth Rate	2794.825	1	2794.825	1.197***	19.431	.000
Asian Growth Rate	143.643	1	143.643	1.622	.999	.320
Error	12657.514	88	143.835			
Total	22012.480	92				

a. Parameter Estimates B in General Linear Model
General Linear Model (MANCOVA) (*P<0.1, **P<0.05, and ***P<0.01) (Covariate: The Rate of Growth in Blacks, Hispanics, and Asians)

related to the population growth rate increase with the positive coefficient. Asian growth rate is not statistically significant for population growth rate in the 92 central cities.

4.2. Multivariate Analysis of Covariance (MANCOVA) for the 244 Suburban Cities on Each Ethnic Growth between 1990 and 2000

The multivariate analysis of covariance summary statistics for the 244 suburban cities is shown in six tables below. Roy's Largest Root tests focus on the independents and their interactions. For Blacks, Roy's LR value is .002, F = .257, p = .760; for Hispanics, Roy's LR value is .038, F = 4.551, p = .011; for Asians, Roy's LR value is .030, F = 3.597, p = .029. The Roy's Largest Root tests for the 244 suburban cities indicate overall significant values at the 0.05 significance level for all Black and Asian Growth Rates, except for Hispanic Growth Rate.

The omnibus F test is the first step in Table 7. The F test appears in the "Corrected Model" of the Tests of Between-Subjects Effects. In Table 10, the F values are statistically significant for Census Regions. The other F values are not statistically significant for Rate of

Table 7. Tests of Between-Subjects Effects for the 244 Suburban Cities

Source	Dependent Variable	Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	Census Regions (South and West vs. Midwest and Northeast)	3.283	3	1.094	4.563***	.004
	Rate of Growth in Population	411.652	3	137.217	.176	.913

(*P < 0.1, **P < 0.05, and ***P < 0.01)

Growth in Population. For Census Regions, the F tests reject the null hypothesis that there is no difference in the means of each dependent for the different groups formed by the independent variables.

That is, there are statistical differences in the means of each of three dependent variables: census regions on ethnic growth rate for Blacks, Hispanics, and Asians *for the 244 suburban cities.* However, the other F tests fail to reject the null hypothesis that there is no difference in the means of each dependent for the different groups formed by the independent variables. Accordingly, there are no statistical differences in the means of each of two dependent variables: rate of growth in population on ethnic growth rate for Blacks, Hispanics, and Asians *for the 244 suburban cities*.

4.2.1. Regions (South and West versus Midwest and Northeast)

The multivariate analysis of covariance summary statistics for Census Regions (South and West versus Midwest and Northeast) is presented in Table 8. The table shows a statistically significant Hispanic growth rate, F (1, 240) = 9.102, p = .003 and Asian growth rate, F (1, 240) = 7.127, p = .008. Hispanic and Asian growth rate is statistically significant with respect to census regions in the 244 suburban cities; that is, Hispanic and Asian population growth rate increases in the suburban cities of the South and West census regions. Black growth rates are non-significant for census regions in the 244 suburban cities. Therefore, Black population growth rate factor does not affect the South and West census regions.

Table 8. Multivariate Analysis of Covariance Summary for Census Regions (South and West versus Midwest and Northeast) in the 244 Suburban Cities

Source	SS	df	MS	B[a]	F	Sig.
Intercept	11.341	1	11.341	.368	47.278	.000
Black Growth Rate	.110	1	.110	.005	.460	.498
Hispanic Growth Rate	2.183	1	2.183	.019***	9.102	.003
Asian Growth Rate	1.710	1	1.710	.031***	7.127	.008
Error	57.569	240	.240			
Total	128.000	244				

a. Parameter Estimates B in General Linear Model

General Linear Model (MANCOVA) (*P < 0.1, **P < 0.05, and ***P < 0.01) (Covariate: The Rate of Growth in Blacks, Hispanics, and Asians)

4.2.2. Population Growth Rate

Table 9. Multivariate Analysis of Covariance Summary for Population Growth Rate in the 244 Suburban Cities

Source	SS	df	MS	B[a]	F	Sig.
Intercept	30980.075	1	30980.075	19.237	39.719	.000
Black Growth Rate	8.306	1	8.306	-.046	.011	.918
Hispanic Growth Rate	324.540	1	324.540	.237	.416	.520
Asian Growth Rate	149.360	1	149.360	.289	.191	.662
Error	187194.138	240	779.976			
Total	292754.360	244				

a. Parameter Estimates B in General Linear Model

General Linear Model (MANCOVA) (*P < 0.1, **P < 0.05, and **P < 0.01) (Covariate: The Rate of Growth in Blacks, Hispanics, and Asians)

Black, Hispanic, and Asian growth rates are not related to overall population growth in the 244 suburban cities. Therefore, Black, Hispanic, and Asian population growth factors do not affect suburban population growth.

5. CONCLUSIONS

Black growth rate is statistically significant for the 92 central cities in all the dependent variables: census regions and population growth rate. The Black growth rate is related to census regions (South and West versus Midwest and Northeast) in the 92 central cities, as indicated by the positive coefficient; the Black growth rate has increased in the South and West regions. However, Blacks may well have moved out of central cities because the Black growth rate is related to decreases of the overall rate of growth in population, as indicated by the negative coefficients in the 92 central cities. Accordingly, the Black growth rate is statistically significant for Blacks' geographic region and population changes in the 92 central cities. However, the Black growth rate does not relate to Blacks' overall geographic region and population changes for the 244 suburban cities.

Hispanic growth rate is also significant for population growth rate except for the census regions for the 92 central cities. Hispanic growth rate has related the population growth rate increase in the 92 central cities. For the 244 suburban cities, the Hispanic growth rate is not related to population growth rate. Census region changes are statistically significant for the 244 suburban cities. There is a positive relationship between Hispanic growth rate and census regions for the 244 suburban cities; that is, Hispanic growth rate increases in the suburban cities of the South and West census regions.

Asian growth rate is not statistically significant for any of the two dependent variables in the 92 central cities. However, there is a positive relationship between Asian growth rate and census regions for the 244 suburban cities; that is, Asian growth rate increases in the suburban cities of the South and West census regions.

This article examines how ethnic growth rates related geographic region and population changes over the central and suburban cities of the 92 MSAs in the 1990s. The findings

support the conclusion that geographic changes of ethnicities are due to the growth of ethnic groups during the decade. Therefore, this research found that even though ethnic growth led suburban cities to become increasingly diverse ethnically and racially on the demography of South and West census regions' metropolitan areas during the past decade, Black and Hispanic growth, except for Asian growth, still strongly affected on demographic changes for the central cities rather than for the suburban cities in U.S. metropolitan areas. Accordingly, three ethnic groups have grown in the census regions of South and West metropolitan areas. Black growth is related to South and West central cities, while Hispanic and Asian growth rates have risen in South and West suburban cities.

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