CEOs for Cities

The Changing Dynamics of Urban America

APPENDICES

March 30, 2004

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APPENDIX A: SUMMARY DESCRIPTION OF DATABASE

During the course of the project, CEOs for Cities and RW Ventures assembled the Urban Ventures Database, an extensive information resource encompassing thousands of variables bearing on the social and economic characteristics of American cities and regions. The Urban Ventures Database was developed as a comprehensive depository for warehousing, querying, manipulating and analyzing information relating to urban economic development. In addition to the more common public data sources, such as the decennial Census of the population, the database includes a wide array of private sources, web sources, surveys, academic research, and customized datasets. The database also contains variables derived from the original datasets to be included in the regression models that investigate the factors defining and influencing urban economic performance. Currently, in addition to the variables identified in the paper, the database contains indicators that measure phenomena ranging from voter turnout to bank deposits, from home mortgages to commuting patterns.

The database is structured into three geographic tables covering multiple geographic levels and years of history: a first table contains data at the MSA level, dating from 1969 to 2002; a second table contains data at the county level, also dating from 1969 to 2002; finally, a third table contains data at the city level, dating from 1980 to 2000. The content of each table is described in more detail below. A complete list of data sources is also included.

The MSA table comprises data at the MSA level, which includes Primary Metropolitan Statistical Areas (PMSAs) and Consolidated Metropolitan Statistical Area (CMSA). The data covers varying time periods, going back as far 1969, and current through 2002 where available. At the present time, the MSA table contains 1,564 unique variables on 349 MSAs, PMSAs or CMSAs. In addition to the available Census data, the MSA table contains several economic indicators from the Regional Economic Information System (REIS), the data assembled by Janet Rothenberg Pack and Richard Voith, as well as the Urban Growth Form datasets and the New Economy Index variables that were used for the analysis presented in the report.

The county level table contains county level data dating back as far as 1969 through 2002 where available. At the present time, the County table contains 688 unique variables on over 3,108 counties. These variables include Census data, business data from the 1997 Economic Census, employment data, building permits, housing starts, and new homes construction data from the National Association of Realtors. The County table also includes data on government fragmentation, expenditures and finances from the City and County Data Book.

The city level table contains unique data elements aggregated for municipal boundaries. This table contains information on over 25,000 cities and towns through 438 variables. Some data, however, is only available for larger cities. The city table contains extensive Census data, City and County Data Book data on government expenditures and finances, and all of the data assembled and kindly shared by Janet Rothenberg Pack and Richard Voith.

Data Sources:

The primary data sources are as follows:

U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Information System (REIS), 1969 to 2001.
Bureau of Labor Statistics, Current Population Survey, 1998 to 2001
U.S. Patent and Trademark Office, 2001
2000 Census
1998 City and County Databook
1998 U.S. County Database
1997-1998 State and Metro Data Book
1997 U.S. Economic Census
1994 U.S. Statistical Abstract for Counties
1994 City and County Databook
1992 U.S. Economic Census
1990 Census
American Housing Survey
County Business Patterns
Statistical Abstract of the United States
DDB Needham Life Style Survey Archive
The Yearbook of American and Canadian Churches
Places Rated Almanac

The database also includes data sets from the research studies listed below:

- Janet Rothenberg Pack, Growth and Convergence in Metropolitan America, Brookings Institution Press, (Washington, DC 2002), incorporating Richard Voith, "Do Suburbs Need Cities?" *Journal of Regional Science* , Vol. 38, Issue 3 (1998) 445-464.
- Saurav Dev Bhatta, "Are Inequality and Poverty Harmful for Economic Growth," *Journal of Urban Affairs* , Vol. 23, No.3-4 (2001).
- Stephen Malpezzi and Stephen K. Mayo, "Housing and Urban Development Indicators: A Good Idea Whose Time Has Returned," *Real Estate Economics* , Vol. 25, Issue 1 (1997), pp. 1-11.
- Reid Ewing, Rolf Pendall, and Don Chen, "Measuring Sprawl and Its Impact," Smart Growth America, <www.smartgrowthamerica.org>
- Robert Atkinson and Paul Gottlieb, "The New Economy Index," Progressive Policy Institute (2001), available at <www.neweconomyindex.org/metro>
- Chris Forman, Avi Goldfarb and Shane Greenstein, "Digital Dispersion," NBER Working Paper 9287 (October 2002), <http://www.nber.org/papers/w9287>

For further details on the data and database, please contact the authors.

APPENDIX B: METHODOLOGY – DISCUSSION, REGRESSION TABLES, VARIABLES AND DATA SOURCES

Introduction

As described in the text, the project analyzed four dependent variables over the period 1990 to 2000: change in city per capita income; change in city population; change in MSA per capita income; and change in MSA average wage. The models were developed in two stages. First, the project developed a "base model" for each dependent variable, including a set of core explanatory variables derived largely from prior studies of urban growth. These base models are intended to identify the key variables that should – based on previous theoretical and empirical research, as well as analysis of the 1990-2000 data – appear on the right-hand side of any growth regression. In the second stage of model development, the project sequentially added new variables from each of the five study dimensions to the base model.

This technical note proceeds as follows. The first section describes some basic parameters that apply to all of the reported models. The second section discusses the creation of the base model for each of the four dependent variables. The next section illustrates the development of the extension models for the five dimensions, providing some examples. This appendix does not, however, attempt to describe thoroughly each of the extension models. The most important results from these models are discussed in the text of the report, and the reader may examine the included regression tables for complete details of any of the results reported in the paper. Finally, the last part of this appendix reports the complete set of regression tables for all of the base and extension models for each dependent variable, as well as a list of the MSAs and central cities in the sample and the summary statistics and data sources for all of the variables included in the models.

Basic Parameters

Each of the dependent variables is measured as log change from 1990 to 2000.[1] The analytical strategy is to regress log change from 1990 to 2000 on initial conditions in 1990. This modeling approach was popularized by Barro (1991)[2] in an influential paper on cross-country growth, and adopted for urban growth models by Glaeser et al. (1995).[3] By regressing subsequent growth on initial conditions, this approach rules out spurious

[1] For example, population change is defined as: ln(2000 population) – ln(1990 population). Log change is roughly equal to percent change. For a non-technical discussion of the analytically appealing use of log change over percent change, see, e.g., Charles Jones, Introduction to Economic Growth, 2nd ed., W.W. Norton & Company, (New York, NY, 2002), p. 203-204. All variables expressing changes in dollars represent real change, adjusted per the CPI.

[2] Robert Barro, "Economic Growth in a Cross Section of Countries," *The Quarterly Journal of Economics*, Vol. 106, Issue 2 (1991), pp. 407-43.

[3] Edward Glaeser, Jose Scheinkman, and Andrei Shleifer, "Economic Growth in a Cross-Section of Cities," *Journal of Monetary Economics,* Vol. 36 (1995), 117-143.

contemporary correlation between the dependent and independent variables, and consequently is more likely to identify causal relationships.[4] All models are estimated by OLS regression, using heteroskedasticity-consistent (White) standard errors.

The initial estimation sample included 250 MSAs and their largest central city. This is the same sample used by Rothenberg Pack (2002) and Voith (1998), to which the authors added data for 2000.[5] Cities whose land area changed by more than 25 percent from 1990 to 2000 are excluded from the analysis. This restriction is adopted so that changes observed over the study period will be more likely to reflect actual economic patterns, rather than artificial shifts in city composition resulting from annexation. With this restriction, the estimation sample includes 217 MSAs and their largest central cities. A complete list of MSAs and cities used in the analysis is provided in Table B49. The data source and summary statistics for each of the variables used in the models are documented in Tables B50 and B51.

Base Models

City per Capita Income

The development of the base model for city per capita income growth is shown in Table B1. The fist column includes five independent variables, selected based on prior studies of urban growth, specifically Drennan (2002), Glaeser et al. (1995), and Rothenberg Pack (2002).[6] Whereas Glaeser et al. (1995) find that the initial share of employment in manufacturing and the initial unemployment rate are both negatively associated with subsequent income growth over their study period (1960-1990), this project finds that neither variable is significantly related to income growth in the 1990s. Initial city population is also not significant, suggesting no relationship between city size and income growth. The base model includes change in city land area to control for the possibility that cities systematically annex more affluent areas, which would artificially raise per capita income. This variable carries the expected positive sign, but is not significant.[7] In addition, this model includes initial per capita income to test for *convergence* , the neoclassical prediction that poorer cities will grow faster.[8] Initial

[4] See Edward Glaeser, "Cities, Information, and Economic Growth," *Cityscape* , Proc. of the Regional Growth and Economic Development Conference, Vol. 1, No. 1 (August 1994) for further discussion of the advantages of this modeling strategy.

[5] We gratefully acknowledge Janet Rothenberg Pack for sharing this data set with us. See Janet Rothenberg Pack, Growth and Convergence in Metropolitan America, Brookings Institution Press (Washington, D.C. 2002), p. xvii, and Richard Voith, "Do Suburbs Need Cities?" *Journal of Regional Science* , Vol. 38, Issue 3 (1998) 445-464 for further details related to the initial data set.

[6] In particular, the specification in column 1 of our Table A1 is nearly identical to column 5 of Table 5 in Glaeser et al. (1995), with the exception that we have added change in land area and used robust standard errors. Column 2 of our Table A1 is comparable to column 5 of Table 6 in Glaeser et al. (1995), with the same exceptions.

[7] Also recall that cities whose land area changed by more than 25 percent between 1990 and 2000 were excluded from the analysis.

[8] The economic literature on convergence is enormous. For a recent review, see Robert Barro and Xavier Sala-I-Martin, Economic Growth, MIT Press (Cambridge, MA, 2001).

income is not significant in column 1. Indeed, the only significant variables in the first model are the regional dummies. The results suggest that cities in all of the other regions grew significantly faster than cities in the Northeast, which is the excluded category.

In column 2, the percentage of adults with a college degree or higher is added to the model. Consistent with previous studies, the education variable is highly significant ($p<.001$) and positively related to income growth. Interestingly, and consistent with Glaeser et al. (1995), this model shows that initial income attains significance only after controlling for education. Initial income is negatively related to subsequent income growth, as in the convergence literature. However, the result is significant only at the 10% level.

To further explore income convergence, a quadratic term (i.e., per capita income squared) is added to the model in column 3, in order to detect a possible nonlinear relationship between initial income and subsequent growth. The quadratic relationship is highly significant and robust across a wide range of alternative specifications. The coefficient on initial income is negative, and the coefficient on income squared is positive, indicating a U-shaped pattern. A similar result, pertaining to initial wages and wage growth, is portrayed in Figure 8 in the text, where the substantive implications of the finding are also discussed. This pattern of nonlinear convergence is one of the most important results of this project. To the author's knowledge, this pattern has not been uncovered in the previous literature.[9]

In column 4, lagged population growth is added to the model; that is, log population growth from 1980 to 1990. As discussed in Glaeser et al. (1995), controlling for lagged population growth is important in order to confirm that results related to income growth actually reflect productivity improvements, rather then convergence to nationwide average wages resulting from slow migration.[10] That is, where lagged population growth is significant and negatively related to subsequent income growth, it is possible that income changes reflect population movements rather than productivity changes. Indeed, column 4 reveals just such a pattern, with 1980-90 population growth significantly negatively related to 1990-2000 income growth.

The process of exploratory data analysis revealed that 8 of the 10 slowest growing cities, in terms of income, were located in California. However, many of these same California cities were also growing rapidly in population during both the 1980s and 1990s. This phenomenon gave rise to the concern that unique dynamics of the California economy could be driving some of the results.[11] In order to control for the influence of California

[9] Several previous studies of cross-country growth have attempted to model nonlinear convergence. See, for example, Steven Durlauf and Paul Johnson, "Multiple Regimes and Cross-Country Growth Behavior," *Journal of Applied Ec onometrics*, Vol. 10, Issue 4 (October 1995), 365-384.

[10] Specifically, lagged population growth is taken as a proxy for δ_2 in the formal model of Glaeser et al. (1995).

[11] Within the scope of this project, we do not attempt to investigate the particular dynamics of growth in California. We hypothesize that areas with high levels of (legal and illegal) immigration in the 1980s and 1990s may grow slower in income, but we leave investigation and explanation of this relationship for future work.

in the models, a California dummy was added in column 5. The California dummy is significant and negative, indicating that California cities grew on average about 6 percent slower than cities in other Western states, ceteris paribus.[12] Two other interesting changes are observed when the California dummy is added. First, lagged population growth becomes insignificant, which suggests that the negative relationship between past population growth and subsequent income growth is a California phenomenon. Importantly, because lagged growth is insignificant in column 5, the other effects observed in this column are more likely attributable to productivity movements. Second, with the inclusion of the California dummy, the point estimate for Western region dummy increases in size. In other words, California was depressing the overall estimate for the West.

In the final column of Table B1, the variables that failed to attain statistical significance are dropped, reaching the final base model for city income growth. The final base model includes the following independent variables: initial income, initial income squared, percent of adults with a college degree or higher, a set of regional indicators, and a dummy variable for California. The effects of these variables can be summarized as follows. Initial income is related quadratically to income growth. The quadratic function is minimized at $14,560 in 1990 income.[13] In other words, below $14,560, initial income is negatively related to subsequent growth; above $14,560, initial income is positively related to growth.[14] We find that a one-standard deviation change in the percent of adults with a college degree or higher is associated with a .28 standard deviation change in income growth. Put differently, a 10 percent increase in the proportion of adults with a BA or higher in 1990 yields approximately 2.2 percent growth in income from 1990 to 2000.[15] The Midwest, South, and West grew from 7-9 percent faster than the Northeast. Using an *F* test, it was impossible to reject the hypothesis that the three included regional dummies are equal. California cities grew on average 7 percent slower than other Western cities, essentially nullifying the state's positive coefficient for being in the West.

City Population

Table B2 reports the development of the base model for city population growth. This model begins with the same initial specification as in column 1 from Table B1. Initial population is positively associated with growth, meaning that larger cities grew faster.[16] Initial income shows no significant relationship to population growth. The initial unemployment rate is highly significant and negatively related to population growth. That is, while unemployment did not hinder income growth, it did stifle population growth. In contrast, Glaeser et al. (1995) find that initial unemployment is negatively associated with both income and population growth from 1960-90. This project found no

[12] The model is specified such that California cities are coded 1 for the West dummy and the California dummy. So the effect for California cities should be interpreted as the sum of these two dummies.
[13] Note that $14,560 is almost exactly one standard deviation above the mean (see Table B50).
[14] See the text of the report, Section IIC, for further discussion.
[15] Below, when we explore education in more detail, we will see that these effects are in fact even larger. See Table B5.
[16] Glaeser et al. (1995) find a negative relationship between city size and population growth from 1960-90, although this result is not robust.

relationship between initial manufacturing employment and population growth.[17] Unsurprisingly, the model revealed a strong positive relationship between growth in land area and growth in population. Finally, two of the three regional indicators – for the West and the South – attain significance (the Northeast is again the excluded category).

In column 2 initial education – the percentage of adults with a college degree or higher as of 1990 – is added to the model. This variable is never significant, in contrast with Glaeser et al. (1995), who find a positive relationship between initial education and population growth from 1960-1990. In the remaining columns of Table B2 several modifications are introduced. Initial population squared is added to the model, but turns out not to be significant (column 3). A California dummy variable is also added, but is not significant (column 6), indicating that what distinguishes California cities in the 1990s is not unusually high population growth, but unusually low income growth, relative to the rest of the West. Finally, lagged population growth (i.e., log change in population from 1980-90) is added in column 4. Past growth is positively and significantly related to subsequent growth; cities that grew fast in the 1980s were more likely to do so in the 1990s.[18]

In column 7, insignificant variables are dropped to arrive at the final base model for city population growth. The base model includes initial population, the initial unemployment rate, change in land area, and regional dummies.[19] Substantively, a one-standard deviation increase in log of initial population is associated with approximately one-fourth of a standard deviation increase in population growth. A one-standard deviation increase in the initial unemployment rate is associated with a .4 standard deviation decrease in population growth. Cities in the South grew about 2.5 percent faster than the Northeast, while Western cities grew nearly 12 percent faster.

MSA Income Growth

Table B3 presents results for MSA-level income growth. The procedure, and hence the column specifications, are identical to those reported in Table B1 for city income growth. The results for the MSA analysis are similar to those for city income growth, with two notable exceptions. First, the share of employment in manufacturing is significant and positively related to MSA income growth.[20] Second, the initial unemployment rate is significant and negatively related to MSA income growth. That these relationships are

[17] Glaeser et al. (1995) find that manufacturing employment is negatively associated with population growth from 1950-1970, but insignificantly related to growth from 1970-1990.

[18] Interestingly, we find that the California dummy is significantly negative only after controlling for lagged population growth (column 5). That is, California grew slower than expected in the 1990s, *given* how fast it grew in the 1980s.

[19] We do not include lagged population growth in the base model because it is not explanatory as such; rather, the significance of lagged growth merely begs the question of why these cities grew faster in the 1980s. However, we do test the robustness of all our extension models by running versions that include lagged growth. We follow a similar approach with the California dummy, which is significant only when lagged growth is also included.

[20] Rothenberg Pack (2002), p. 117, also finds that manufacturing employment is positively related to MSA income growth from 1980-90, although the effect is significant only at the 10 percent level.

significant for the MSA sample but not the city sample suggests that manufacturing and unemployment may be particularly important variables in the suburbs. Otherwise, the final base model for MSA income growth is roughly equivalent to that for city income growth: a quadratic fit for initial income, a positive effect for education, a negative dummy for California, and positive dummies for the South, West, and Midwest regions.

The quadratic fit for initial income is minimized at $17,780, or nearly the 95th percentile of the distribution; that is, income growth is declining in initial income for all but the very top MSAs. Among the remaining variables, the initial unemployment rate has the largest standardized effect, with a one-standard deviation increase leading to a .3 standard deviation decrease in income growth. On the other hand, a one-standard deviation increase in the initial proportion of adults with a BA or higher is associated with a one-quarter standard deviation increase in income growth. A one-standard deviation increase in the initial share of employment in manufacturing is associated with a .16 standard deviation increase in income growth. Southern cities grew about 3.7 percent faster, and Midwestern and Western cities about 5 percent faster, than Northeastern cities.

MSA Wage Grow th

Results for MSA wage growth are shown in Table B4. The analysis follows the same sequence as for city and MSA income growth shown in Tables B1 and B3. Several of the results are broadly consistent with what is seen in the preceding tables. Specifically, the quadratic, U-shaped effect of initial wages is again evident, and education has a strongly positive effect on growth, as seen in both the city income model and the MSA income model. In addition, initial employment in manufacturing has a positive effect on wage growth, whereas the initial unemployment rate is negatively related to wage growth, both consistent with findings from the MSA income growth model. However, several important departures are also evident in the wage growth model. First, initial population is positively associated with wage growth – large cities grew wages faster. In contrast, population was not significant for either city or MSA per capita income growth, suggesting that large cities must have relatively declining employment and/or labor force participation rates (recall that the model is controlling for initial unemployment). Second, regional effects appear to be less important in wage growth than income growth. The California indicator is not significant in the wage growth model, and the West is the only significant regional dummy. In other words, the South and Midwest grew per capita income faster than the Northeast, but not average wages, suggesting that labor force participation and/or employment rates must have increased more rapidly in these two regions.[21] The reverse would appear to be the case for California relative to other Western cities.

Finally, lagged population growth is significant and positive in the MSA wage growth model. That is, MSAs that grew faster in population from 1980-90 subsequently grew faster in wages from 1990-2000. Note that this is precisely the opposite effect that would be expected if in-migration slowly met labor demand and drove wages down. On the

[21] The difference between income growth and wage growth effects is an interesting finding in its own right and warrants further study. We leave this for future work.

contrary, this result would seem to lend support to a productivity-based, "increasing returns" explanation of regional wage growth.

The final base model for MSA wage growth thus includes the following variables: initial average wage, initial average wage squared, log change in population from 1980-90, the initial unemployment rate, initial share of employment in manufacturing, initial education, log of initial population, and a dummy for Western cities.[22] The quadratic fit for initial average wages is minimized at $21,090, which is approximately the median of the distribution. In other words, the range of increasing returns, or divergence, is wider when measured in terms of wages rather than per capita income. A one-standard deviation increase in initial education is associated with a one-third standard deviation increase in wage growth. A one standard deviation increase in the share of employment in manufacturing results in nearly one-quarter of a standard deviation increase in wage growth. A one standard deviation increase in population growth from 1980-90 yields a .15 standard deviation increase in wage growth. A one standard deviation increase in initial city population is associated with a .14 standard deviation increase in wage growth. In contrast, a one standard deviation increase in the initial unemployment rate brings a .17 standard deviation decrease in subsequent wage growth. Western cities grew about 6 percent faster than other cities.

Model Extensions

The second phase of the analysis was to add new variables from each of the five study dimensions to the base models. For instance, in studying the "knowledge economy" dimension, the project added several variables related to cultural and educational amenities and information sector employment, as shown for the MSA wage growth model in Table B12. The results show that the "art score" from the *Places Rated Almanac* in 1990 is positively related to wage growth from 1990 to 2000 (column 1). Specifically, a one-standard deviation increase in the art score is associated with a .15 standard deviation increase in wage growth. However, the *Places Rated* "education score" was unrelated to wage growth (column 2).[23] Finally, the initial share of employment in the "information sector," as defined by Drennan, was significant and positively related to wage growth. A one standard deviation increase in information sector employment was associated with a one-quarter standard deviation increase in wage growth.

In some cases, extending the models required substituting a new set of variables for one in the base model. For example, in order to examine the effects of initial education in more detail, detailed educational variables were substituted for the percent of adults with a college degree or higher in the base models. Table B5 illustrates this approach for the city income growth model. As discussed in the text of the report, the project found that

[22] In the extension models, we also ran specifications including a complete set of regional dummies plus a dummy for California.

[23] Recall that we are also controlling for the educational level of the population. The education score, in contrast, is intended to measure the educational opportunities available in the MSA.

the percent of adults with a college degree (but not higher) is highly significant and strongly related to income growth. A one-standard deviation increase in the proportion of adults with a BA is associated with two-thirds of a standard deviation increase in income growth. The proportion of adults with a high school degree only is also positively associated with income growth, although less powerfully: a one standard deviation increase in high school education is associated with a .16 standard deviation increase in income growth. Interestingly, the share of adults with a graduate degree carries a negative coefficient, although this effect is not significant. The last column of Table B5 examines educational inequality – the ratio of college graduates to high-school dropouts – and finds no significant relationship with income growth.

Space limitations do not permit describing each step of the analysis for all four dependent variables and all five study dimensions. However, the most important findings are reported in the text of the report, and the complete set of regression tables is attached for reference.

Table B1: Base Model, Log Change in City per Capita Income, 1990-2000

	(1)	(2)	(3)	(4)	(5)	(6)
Income per Capita 1989	-0.000	-0.000*	-0.000**	-0.000**	-0.000**	-0.000***
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Log of 1990 Population	-0.002	-0.002	0.000	0.003	0.002	
	[0.004]	[0.004]	[0.004]	[0.004]	[0.004]	
Log Change in Land Area 1990-2000	0.046	0.046	0.066	0.107*	0.068	0.043
	[0.064]	[0.059]	[0.058]	[0.060]	[0.059]	[0.052]
% Employed in Manufacturing 1990	-0.096	0.035	0.030	0.030	0.029	
	[0.070]	[0.075]	[0.075]	[0.076]	[0.077]	
Unemployment Rate 1990	0.000	0.003	-0.000	-0.002	-0.001	
	[0.002]	[0.002]	[0.002]	[0.002]	[0.002]	
Dummy = 1 for Midwest Region	0.090***	0.084***	0.082***	0.079***	0.082***	0.085***
	[0.012]	[0.013]	[0.012]	[0.012]	[0.012]	[0.012]
Dummy = 1 for South Region	0.071***	0.071***	0.069***	0.071***	0.072***	0.071***
	[0.013]	[0.013]	[0.013]	[0.013]	[0.013]	[0.012]
Dummy = 1 for West Region	0.055***	0.051***	0.045***	0.065***	0.080***	0.075***
	[0.018]	[0.017]	[0.017]	[0.017]	[0.015]	[0.015]
% Adults w BA or Higher 1990		0.003***	0.003***	0.003***	0.002***	0.002***
		[0.001]	[0.001]	[0.001]	[0.001]	[0.001]
Quadratic: Income per Capita Squared			0.000**	0.000**	0.000**	0.000**
			[0.000]	[0.000]	[0.000]	[0.000]
Log Change in Population 1980-90				-0.129***	-0.067	
				[0.046]	[0.053]	
Dummy = 1 for California					-0.057**	-0.071***
					[0.028]	[0.023]
Constant	0.075	0.035	0.405**	0.350**	0.359**	0.404***
	[0.069]	[0.067]	[0.169]	[0.160]	[0.170]	[0.136]
Observations	217	217	217	215	215	217
R-squared	0.24	0.30	0.33	0.36	0.38	0.38

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B2: Base Model, Log Change in City Population, 1990-2000

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Income per Capita 1989	-0.000	-0.000	-0.000	-0.000	0.000	-0.000	
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	
Log of 1990 Population	0.026***	0.026***	0.056	0.016***	0.014***	0.026***	0.025***
	[0.005]	[0.005]	[0.080]	[0.005]	[0.005]	[0.005]	[0.005]
Log Change in Land Area 1990-2000	0.458***	0.458***	0.460***	0.345***	0.284***	0.462***	0.463***
	[0.079]	[0.078]	[0.078]	[0.064]	[0.064]	[0.077]	[0.078]
% Employed in Manufacturing 1990	0.001	0.059	0.060	0.043	0.041	0.059	
	[0.073]	[0.092]	[0.092]	[0.082]	[0.082]	[0.092]	
Unemployment Rate 1990	-0.016***	-0.015***	-0.015***	-0.008***	-0.006***	-0.015***	-0.015***
	[0.002]	[0.002]	[0.002]	[0.002]	[0.002]	[0.002]	[0.002]
Dummy = 1 for Midwest Region	0.010	0.007	0.006	0.018	0.024**	0.006	0.010
	[0.013]	[0.013]	[0.014]	[0.012]	[0.012]	[0.013]	[0.013]
Dummy = 1 for South Region	0.024*	0.023*	0.023	0.022*	0.025**	0.023*	0.023*
	[0.014]	[0.014]	[0.014]	[0.012]	[0.012]	[0.014]	[0.013]
Dummy = 1 for West Region	0.117***	0.115***	0.114***	0.061***	0.086***	0.110***	0.115***
	[0.020]	[0.020]	[0.020]	[0.018]	[0.018]	[0.022]	[0.019]
% Adults w BA or Higher 1990		0.001	0.001	0.001	0.000	0.001	
		[0.001]	[0.001]	[0.001]	[0.001]	[0.001]	
Quadratic: Log of 1990 Population, Squared			-0.001				
			[0.003]				
Dummy = 1 for California					-0.087***	0.013	
					[0.024]	[0.031]	
Log Change in Population 1980-90				0.374***	0.468***		
				[0.058]	[0.056]		
Constant	-0.175**	-0.192***	-0.373	-0.147**	-0.185***	-0.185**	-0.195***
	[0.071]	[0.073]	[0.488]	[0.065]	[0.062]	[0.076]	[0.056]
Observations	217	217	217	215	215	217	217
R-squared	0.60	0.60	0.60	0.70	0.72	0.60	0.59

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B3: Base Model, Log Change in MSA per Capita Income, 1990-2000

	(1)	(2)	(3)	(4)	(5)	(6)
Income per	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
Capita 1989	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Log of 1990	-0.004	-0.004	-0.002	-0.002	-0.001	
Population	[0.004]	[0.004]	[0.004]	[0.004]	[0.003]	
% Employed in	0.102*	0.142**	0.142**	0.129**	0.121**	0.130**
Manufacturing	[0.057]	[0.058]	[0.055]	[0.054]	[0.054]	[0.054]
1990						
Civilian	-0.013***	-0.010***	-0.011***	-0.010***	-0.008***	-0.008***
unemployment	[0.002]	[0.002]	[0.002]	[0.002]	[0.002]	[0.002]
rate 1991						
Dummy = 1 for	0.043***	0.044***	0.046***	0.045***	0.050***	0.051***
Midwest Region	[0.007]	[0.008]	[0.008]	[0.007]	[0.007]	[0.007]
Dummy = 1 for	0.038***	0.039***	0.034***	0.040***	0.041***	0.037***
South Region	[0.008]	[0.008]	[0.007]	[0.008]	[0.008]	[0.007]
Dummy = 1 for	0.034***	0.030**	0.027**	0.036***	0.056***	0.052***
West Region	[0.012]	[0.012]	[0.011]	[0.012]	[0.012]	[0.010]
% Adults w/ BA		0.224***	0.199**	0.234***	0.230***	0.205***
or higher 1990		[0.083]	[0.084]	[0.082]	[0.076]	[0.077]
Quadratic:			0.000**	0.000**	0.000**	0.000**
Income per			[0.000]	[0.000]	[0.000]	[0.000]
Capita Squared						
Dummy = 1 for					-0.052***	-0.058***
California					[0.018]	[0.018]
Log Change in				-0.072*	-0.050	
Population 1980-				[0.039]	[0.038]	
1990						
Constant	0.297***	0.266***	0.539***	0.466***	0.461***	0.506***
	[0.045]	[0.046]	[0.115]	[0.110]	[0.120]	[0.125]
Observations	214	214	214	213	213	214
R-squared	0.43	0.46	0.49	0.50	0.53	0.53

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B4: Base Model, Log Change in MSA Average Wage per Job, 1990-2000

	(1)	(2)	(3)	(4)	(5)
Average Wage per Job 1990	0.000***	0.000**	-0.000***	-0.000***	-0.000***
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Log of 1990 Population	0.003	0.006	0.010**	0.010**	0.010**
	[0.006]	[0.006]	[0.005]	[0.005]	[0.005]
% Employed in Manufacturing 1990	0.175**	0.268***	0.291***	0.291***	0.285***
	[0.085]	[0.089]	[0.080]	[0.080]	[0.082]
Civilian unemployment rate 1991	-0.016***	-0.008***	-0.008***	-0.008***	-0.007***
	[0.003]	[0.002]	[0.002]	[0.002]	[0.002]
Log Change in Population 1980-1990	0.131***	0.059	0.084**	0.084**	0.100**
	[0.047]	[0.042]	[0.042]	[0.042]	[0.043]
Dummy = 1 for Midwest Region	-0.003	-0.002	0.006	0.006	0.008
	[0.014]	[0.013]	[0.013]	[0.013]	[0.012]
Dummy = 1 for South Region	0.001	0.006	0.008	0.008	0.009
	[0.015]	[0.015]	[0.013]	[0.013]	[0.013]
Dummy = 1 for West Region	0.051**	0.049**	0.049***	0.049***	0.061***
	[0.023]	[0.021]	[0.019]	[0.019]	[0.017]
MSA % w BA or higher 1990		0.494***	0.436***	0.436***	0.437***
		[0.137]	[0.155]	[0.155]	[0.154]
Quadratic: Avg Wage per Job Squared			0.000***	0.000***	0.000***
			[0.000]	[0.000]	[0.000]
Dummy = 1 for California					-0.030
					[0.026]
Constant	-0.173***	-0.273***	0.477**	0.477**	0.475*
	[0.056]	[0.057]	[0.234]	[0.234]	[0.247]
Observations	212	212	212	212	212
R-squared	0.50	0.55	0.60	0.60	0.61

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B5: Education, Log Change in City per Capita Income, 1990-2000

	(1)	(2)	(3)
Income per Capita 1989	-0.000***	-0.000***	-0.000**
	[0.000]	[0.000]	[0.000]
Quadratic: Income per Capita Squared	0.000***	0.000***	0.000**
	[0.000]	[0.000]	[0.000]
Log Change in Land Area 1990-2000	0.020	0.020	0.046
	[0.052]	[0.052]	[0.055]
Dummy = 1 for Midwest Region	0.079***	0.089***	0.086***
	[0.011]	[0.012]	[0.012]
Dummy = 1 for South Region	0.073***	0.084***	0.075***
	[0.013]	[0.014]	[0.013]
Dummy = 1 for West Region	0.065***	0.086***	0.081***
	[0.015]	[0.018]	[0.015]
Dummy = 1 for California	-0.056**	-0.066***	-0.076***
	[0.023]	[0.023]	[0.025]
% Adults w/ HS Degree 1990	0.211**	0.171*	
	[0.098]	[0.102]	
% Adults w/ BA 1990	0.854***	0.917***	
	[0.178]	[0.182]	
%. Adults w/ Grad/Prof Degree, 1990	-0.179	-0.264	
	[0.178]	[0.200]	
% Adults w/ Associate's Degree 1990		0.277	
		[0.223]	
% Adults w/ Some College, No Degree 1990		-0.266*	
		[0.153]	
Ratio of % BA or Higher to % No HS 1990			0.007
			[0.004]
Constant	0.437***	0.465***	0.365**
	[0.140]	[0.136]	[0.144]
Observations	217	217	217
R-squared	0.42	0.43	0.34

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B6: Education, Log Change in City Population, 1990-2000

	(1)	(2)	(3)
Log of 1990 Population	0.017***	0.016***	0.025***
	[0.005]	[0.005]	[0.005]
Log Change in Land Area 1990-2000	0.444***	0.432***	0.463***
	[0.074]	[0.073]	[0.078]
Unemployment Rate 1990	-0.013***	-0.014***	-0.014***
	[0.002]	[0.002]	[0.002]
Dummy = 1 for Midwest Region	0.004	-0.006	0.009
	[0.012]	[0.016]	[0.013]
Dummy = 1 for South Region	-0.006	-0.020	0.023*
	[0.014]	[0.017]	[0.013]
Dummy = 1 for West Region	0.073***	0.055**	0.113***
	[0.020]	[0.026]	[0.020]
% Adults w/ HS Degree 1990	-0.402**	-0.410**	
	[0.168]	[0.183]	
% Adults w/ BA 1990	0.568***	0.473**	
	[0.215]	[0.225]	
% Adults w Grad/Prof Degree, 1990	-0.803***	-0.745***	
	[0.173]	[0.210]	
% Adults w/ Associate's Degree 1990		-0.373	
		[0.309]	
% Adults w/ Some College, No Degree 1990		0.287	
		[0.213]	
Ratio of % BA or Higher to % No HS 1990			0.002
			[0.004]
Constant	0.000	0.012	-0.201***
	[0.116]	[0.136]	[0.057]
Observations	217	217	217
R-squared	0.64	0.64	0.60

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B7: Education, Log Change in MSA per Capita Income, 1990-2000

Income per Capita 1989	-0.000***
	[0.000]
Quadratic: Income per Capita Squared	0.000**
	[0.000]
% Employed in Manufacturing 1990	0.118**
	[0.055]
Civilian unemployment rate 1991	-0.008***
	[0.002]
Dummy = 1 for Midwest Region	0.051***
	[0.007]
Dummy = 1 for South Region	0.041***
	[0.009]
Dummy = 1 for West Region	0.055***
	[0.012]
Dummy = 1 for California	-0.053***
	[0.018]
% Adults w/ HS Degree 1990	0.087
	[0.083]
% Adults w/ BA 1990	0.292
	[0.180]
% Adults w/ Grad/Prof Degree 1990	0.113
	[0.150]
Constant	0.478***
	[0.129]
Observations	214
R-squared	0.52

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B8: Education, Log Change in MSA Average Wage per Job, 1990-2000

Average Wage per Job 1990	-0.000***
	[0.000]
Quadratic: Average Wage per Job Squared	0.000***
	[0.000]
Log of 1990 Population	0.008
	[0.005]
% Employed in Manufacturing 1990	0.304***
	[0.076]
Civilian unemployment rate 1991	-0.004*
	[0.002]
Log Change in Population 1980-1990	0.070*
	[0.039]
Dummy = 1 for Midwest Region	0.003
	[0.013]
Dummy = 1 for South Region	0.011
	[0.016]
Dummy = 1 for West Region	0.052***
	[0.019]
Dummy = 1 for California	-0.023
	[0.024]
% Adults w/ HS Degree 1990	0.084
	[0.127]
% Adults w/ BA 1990	1.311***
	[0.258]
% Adults w/ Grad/Prof Degree 1990	-0.450*
	[0.239]
Constant	0.502**
	[0.219]
Observations	212
R-squared	0.64

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B9: Culture, Log Change in City per Capita Income, 1990-2000

	(1)	(2)	(3)	(4)
Income per Capita 1989	-0.000***	-0.000***	-0.000**	-0.000***
	[0.000]	[0.000]	[0.000]	[0.000]
Quadratic: Income per Capita	0.000**	0.000**	0.000*	0.000**
Squared	[0.000]	[0.000]	[0.000]	[0.000]
Log of 1990 Population	-0.002	-0.000		-0.003
	[0.006]	[0.005]		[0.005]
% Adults w/ BA or Higher 1990	0.002***	0.002***	0.003**	0.002***
	[0.001]	[0.001]	[0.001]	[0.001]
Log Change in Land Area 1990-2000	0.055	0.040	0.021	0.043
	[0.056]	[0.056]	[0.067]	[0.058]
Dummy = 1 for Midwest Region	0.085***	0.086***	0.101***	0.089***
	[0.012]	[0.012]	[0.013]	[0.013]
Dummy = 1 for South Region	0.072***	0.071***	0.081***	0.077***
	[0.013]	[0.013]	[0.014]	[0.013]
Dummy = 1 for West Region	0.075***	0.076***	0.088***	0.083***
	[0.015]	[0.015]	[0.018]	[0.015]
Dummy = 1 for California	-0.069***	-0.072***	-0.068***	-0.066***
	[0.024]	[0.024]	[0.026]	[0.025]
Art Score	0.000			
	[0.000]			
Education Score		0.000		
		[0.000]		
Total Information Sector as % Total Earnings, 1990				0.110
				[0.110]
Total Goods Production and Distribution Sector as % Total Earnings, 1990				0.044
				[0.048]
Constant	0.416***	0.406***	0.265**	0.376***
	[0.143]	[0.143]	[0.129]	[0.143]
Observations	217	216	156	216
R-squared	0.38	0.38	0.44	0.39

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B10: Culture, Log Change in City Population, 1990-2000

	(1)	(2)	(3)	(4)	(5)
Log of 1990 Population	0.035***	0.025***	0.016**	0.027***	0.013
	[0.006]	[0.006]	[0.006]	[0.006]	[0.012]
Log Change in Land Area 1990-2000	0.417***	0.453***	0.626***	0.457***	0.760***
	[0.082]	[0.079]	[0.089]	[0.079]	[0.112]
Unemployment Rate 1990	-0.015***	-0.015***	-0.011***	-0.015***	-0.013***
	[0.002]	[0.002]	[0.002]	[0.002]	[0.003]
Dummy = 1 for Midwest Region	0.011	0.010	0.002	0.010	-0.034
	[0.013]	[0.013]	[0.014]	[0.014]	[0.028]
Dummy = 1 for South Region	0.017	0.022	0.020	0.021	0.014
	[0.014]	[0.014]	[0.015]	[0.014]	[0.027]
Dummy = 1 for West Region	0.114***	0.115***	0.123***	0.110***	0.083***
	[0.019]	[0.019]	[0.018]	[0.019]	[0.029]
Art Score	-0.001**				
	[0.000]				
Education Score		-0.000			
		[0.000]			
Information Sector $ Total Annual Payroll					-0.000*
					[0.000]
Goods Production & Distribution $ Total Annual Payroll 1992					0.000**
					[0.000]
Total Information Sector as % Total Earnings, 1990				-0.089	
				[0.130]	
Total Goods Production and Distribution Sector as % Total Earnings, 1990				-0.058	
				[0.073]	
Constant	-0.274***	-0.196***	-0.142**	-0.174***	-0.064
	[0.064]	[0.059]	[0.066]	[0.067]	[0.139]
Observations	217	216	156	216	88
R-squared	0.60	0.60	0.64	0.60	0.63

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table A11: Culture, Log Change in MSA per Capita Income, 1990-2000

	(1)	(2)	(3)	(4)
Income per Capita 1989	-0.000***	-0.000***	-0.000**	-0.000***
	[0.000]	[0.000]	[0.000]	[0.000]
Quadratic: Income per Capita Squared	0.000**	0.000**	0.000*	0.000**
	[0.000]	[0.000]	[0.000]	[0.000]
Log of 1990 Population	-0.003	-0.006		-0.000
	[0.005]	[0.004]		[0.004]
% Adults w/ BA or higher 1990	0.202**	0.142*	0.269***	0.193**
	[0.079]	[0.084]	[0.097]	[0.079]
% Employed in Manufacturing 1990	0.130**	0.122**	0.138**	0.159*
	[0.054]	[0.051]	[0.059]	[0.096]
Civilian unemployment rate 1991	-0.008***	-0.008***	-0.009***	-0.008***
	[0.002]	[0.002]	[0.002]	[0.002]
Dummy = 1 for Midwest Region	0.050***	0.051***	0.054***	0.052***
	[0.008]	[0.007]	[0.008]	[0.008]
Dummy = 1 for South Region	0.038***	0.041***	0.038***	0.037***
	[0.007]	[0.007]	[0.009]	[0.008]
Dummy = 1 for West Region	0.052***	0.055***	0.050***	0.051***
	[0.010]	[0.010]	[0.012]	[0.011]
Dummy = 1 for California	-0.056***	-0.058***	-0.050***	-0.059***
	[0.018]	[0.018]	[0.019]	[0.019]
Art Score	0.000			
	[0.000]			
Education Score		0.000**		
		[0.000]		
Total Information Sector as % Total Earnings, 1990				-0.042
				[0.079]
Total Goods Production and Distribution Sector as % Total Earnings, 1990				-0.038
				[0.058]
Constant	0.527***	0.570***	0.456***	0.530***
	[0.129]	[0.126]	[0.152]	[0.135]
Observations	214	213	154	214
R-squared	0.53	0.54	0.57	0.53

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B12: Culture, Log Change in MSA Average Wage per Job, 1990-2000

	(1)	(2)	(3)	(4)
Avg Wage per Job 1990	-0.000***	-0.000***	-0.000***	-0.000*
	[0.000]	[0.000]	[0.000]	[0.000]
Quadratic: Avg Wage per Job Squared	0.000***	0.000***	0.000***	0.000**
	[0.000]	[0.000]	[0.000]	[0.000]
Log of 1990 Population	0.002	0.011*	0.007	0.002
	[0.006]	[0.006]	[0.007]	[0.006]
MSA % w BA or higher 1990	0.399**	0.449***	0.698***	0.408***
	[0.157]	[0.169]	[0.152]	[0.130]
% Employed in Manufacturing 1990	0.290***	0.288***	0.344***	0.410***
	[0.082]	[0.083]	[0.108]	[0.115]
Civilian unemployment rate 1991	-0.006***	-0.007***	-0.005**	-0.006**
	[0.002]	[0.002]	[0.003]	[0.002]
Log Change in Population 1980-1990	0.108**	0.099**	0.058	0.100**
	[0.044]	[0.044]	[0.048]	[0.045]
Dummy = 1 for Midwest Region	0.005	0.008	0.020	0.015
	[0.012]	[0.012]	[0.014]	[0.013]
Dummy = 1 for South Region	0.012	0.008	0.020	0.016
	[0.013]	[0.013]	[0.015]	[0.014]
Dummy = 1 for West Region	0.060***	0.060***	0.059***	0.072***
	[0.017]	[0.017]	[0.019]	[0.018]
Dummy = 1 for California	-0.027	-0.030	-0.020	-0.027
	[0.025]	[0.026]	[0.024]	[0.026]
Art Score	0.000**			
	[0.000]			
Education Score		-0.000		
		[0.000]		
Total Information Sector as % Total Earnings, 1990				0.344***
				[0.115]
Total Goods Production and Distribution Sector as % Total Earnings, 1990				-0.013
				[0.077]
Constant	0.586**	0.464*	0.473*	0.289
	[0.249]	[0.253]	[0.252]	[0.283]
Observations	212	211	152	212
R-squared	0.61	0.61	0.67	0.63

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B13: Specialization, Log Change in City per Capita Income, 1990-2000

	(1)	(2)	(3)	(4)
Income per Capita 1989 (Census)	-0.000***	-0.000***	-0.000**	-0.000**
	[0.000]	[0.000]	[0.000]	[0.000]
Quadratic: Per Capita Income Squared	0.000**	0.000***	0.000*	0.000**
	[0.000]	[0.000]	[0.000]	[0.000]
% Adults w/ BA or Higher 1990	0.002***	0.004***	0.002***	0.002***
	[0.001]	[0.001]	[0.001]	[0.001]
Log Change in Land Area 1990-2000	0.053	0.009	0.068	0.063
	[0.052]	[0.078]	[0.052]	[0.057]
Dummy = 1 for Midwest Region	0.088***	0.097***	0.089***	0.082***
	[0.012]	[0.021]	[0.012]	[0.012]
Dummy = 1 for South Region	0.071***	0.082***	0.071***	0.072***
	[0.012]	[0.022]	[0.012]	[0.013]
Dummy = 1 for West Region	0.077***	0.099***	0.071***	0.076***
	[0.015]	[0.023]	[0.015]	[0.016]
Dummy = 1 for California	-0.068***	-0.094***	-0.067***	-0.064***
	[0.024]	[0.023]	[0.023]	[0.024]
Number of Specializations = 1, 1990	-0.007			
	[0.008]			
Number of Specializations = 2, 1990	0.008			
	[0.011]			
Number of Specializations = 3, 1990	0.026			
	[0.018]			
Number of City Specializations (Excl Primary Prod) = 1, 1992		0.009		
		[0.011]		
Number of City Specializations (Excl Primary Prod) = 2, 1992		0.041**		
		[0.018]		
Manufacturing as % Total Earnings, 1990				0.046
				[0.050]
Distribution as % Total Earnings, 1990				0.311**
				[0.145]
Financial Producer Services as % Total Earnings, 1990				-0.128
				[0.236]
Other Producer Services as % Total Earnings, 1990				0.093
				[0.173]
Advanced Consumer Services as % Total Earnings, 1990				0.121
				[0.173]
Dummy = 1 if MSA specialized in Manufacturing in 1990			-0.004	
			[0.010]	
Dummy = 1 if MSA specialized in Distribution in 1990			0.016	
			[0.010]	
Dummy = 1 if MSA specialized in Financial Producer Services in 1990			-0.018	
			[0.013]	

Dummy = 1 if MSA specialized in Other Producer Services in 1990			0.034** [0.014]	
Dummy = 1 if MSA specialized in Advanced Consumer Services in 1990			0.005 [0.009]	
Constant	0.408*** [0.129]	0.559*** [0.195]	0.335** [0.152]	0.351** [0.157]
Observations	216	88	216	216
R-squared	0.40	0.49	0.42	0.40

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B14: Specialization, Log Change in City Population, 1990-2000

	(1)	(2)	(3)	(4)
Log of 1990 Population	0.023***	0.022**	0.021***	0.021***
	[0.006]	[0.009]	[0.006]	[0.007]
Log Change in Land Area 1990-2000	0.464***	0.725***	0.479***	0.476***
	[0.079]	[0.114]	[0.081]	[0.077]
Unemployment Rate 1990 [city]	-0.015***	-0.013***	-0.015***	-0.014***
	[0.002]	[0.003]	[0.002]	[0.002]
Dummy = 1 for Midwest Region	0.011	-0.023	0.012	0.010
	[0.013]	[0.023]	[0.014]	[0.014]
Dummy = 1 for South Region	0.024*	0.021	0.020	0.013
	[0.014]	[0.025]	[0.014]	[0.014]
Dummy = 1 for West Region	0.117***	0.083***	0.109***	0.099***
	[0.020]	[0.023]	[0.021]	[0.021]
Number of Specializations = 1, 1990	0.001			
	[0.012]			
Number of Specializations = 2, 1990	0.011			
	[0.014]			
Number of Specializations = 3, 1990	0.010			
	[0.024]			
Number of City Specializations (Excl Primary Prod) = 1, 1992		-0.027*		
		[0.016]		
Number of City Specializations (Excl Primary Prod) = 2, 1992		0.005		
		[0.025]		
Manufacturing as % Total Earnings, 1990				-0.103
				[0.071]
Distribution as % Total Earnings, 1990				0.135
				[0.203]
Financial Producer Services as % Total Earnings, 1990				-0.183
				[0.270]
Other Producer Services as % Total Earnings, 1990				0.108
				[0.213]
Advanced Consumer Services as % Total Earnings, 1990				-0.476**
				[0.234]
Dummy = 1 if MSA specialized in Manufacturing in 1990			-0.013	
			[0.010]	
Dummy = 1 if MSA specialized in Distribution in 1990			0.001	
			[0.013]	
Dummy = 1 if MSA specialized in Financial Producer Services in 1990			-0.006	
			[0.017]	
Dummy = 1 if MSA specialized in Other Producer Services in 1990			0.014	
			[0.017]	
Dummy = 1 if MSA specialized in Advanced Consumer Services in 1990			-0.016	
			[0.013]	

Constant		-0.150	-0.150**	-0.094
-0.182***				
	[0.065]	[0.111]	[0.064]	[0.077]
Observations	216	88	216	216
R-squared	0.60	0.64	0.60	0.61

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B15: Specialization, Log Change in MSA per Capita Income, 1990-2000

	(1)	(2)	(3)	(4)
Income per Capita 1989	-0.000***	-0.000*	-0.000***	-0.000***
	[0.000]	[0.000]	[0.000]	[0.000]
Quadratic: Income per Capita Squared	0.000**	0.000	0.000**	0.000**
	[0.000]	[0.000]	[0.000]	[0.000]
% Adults w/ BA or higher 1990	0.153*	0.073	0.178**	0.198**
	[0.081]	[0.212]	[0.081]	[0.084]
Civilian unemployment rate 1991	-0.008***	-0.013***	-0.007***	-0.008***
	[0.002]	[0.004]	[0.002]	[0.002]
Dummy = 1 for Midwest Region	0.053***	0.058***	0.048***	0.046***
	[0.007]	[0.016]	[0.007]	[0.008]
Dummy = 1 for South Region	0.032***	0.048***	0.031***	0.033***
	[0.007]	[0.016]	[0.007]	[0.007]
Dummy = 1 for West Region	0.046***	0.062***	0.045***	0.048***
	[0.010]	[0.017]	[0.011]	[0.011]
Dummy = 1 for California	-0.061***	-0.049*	-0.060***	-0.057***
	[0.019]	[0.026]	[0.019]	[0.019]
Number of Specializations = 1, 1990	-0.000			
	[0.006]			
Number of Specializations = 2, 1990	-0.004			
	[0.008]			
Number of Specializations = 3, 1990	0.007			
	[0.017]			
Number of City Specializations (Excl Primary Prod) = 1, 1992		0.022**		
		[0.009]		
Number of City Specializations (Excl Primary Prod) = 2, 1992		0.035**		
		[0.015]		
1990 Manufacturing as % Total Earnings				0.074*
				[0.040]
1990 Distribution as % Total Earnings				0.123
				[0.099]
1990 Financial Producer Services as % Total Earnings				-0.049
				[0.177]
1990 Other Producer Services as % Total Earnings				-0.028
				[0.150]
1990 Advanced Consumer Services as % Total Earnings				-0.135
				[0.126]
Dummy = 1 if MSA specialized in Manufacturing in 1990			0.010	
			[0.007]	
Dummy = 1 if MSA specialized in Distribution in 1990			0.013*	
			[0.008]	
Dummy = 1 if MSA specialized in Financial Producer Services in 1990			-0.007	
			[0.009]	

Dummy = 1 if MSA specialized in Other Producer Services in 1990			0.006 [0.010]	
Dummy = 1 if MSA specialized in Advanced Consumer Services in 1990			-0.006 [0.007]	
Constant	0.526*** [0.130]	0.493** [0.204]	0.523*** [0.130]	0.531*** [0.139]
Observations	215	86	215	215
R-squared	0.51	0.58	0.52	0.53

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B16: Specialization, Log Change in MSA Average Wage per Job, 1990-2000

	(1)	(2)	(3)	(4)
Avg Wage per Job 1990	-0.000**	-0.000	-0.000*	-0.000**
	[0.000]	[0.000]	[0.000]	[0.000]
Quadratic: Avg Wage per Job Squared	0.000**	0.000	0.000**	0.000**
	[0.000]	[0.000]	[0.000]	[0.000]
Log of 1990 Population	0.006	-0.004	0.003	-0.001
	[0.005]	[0.015]	[0.006]	[0.006]
% Adults w/ BA or higher 1990	0.347**	0.517*	0.334**	0.346***
	[0.146]	[0.304]	[0.141]	[0.120]
Civilian unemployment rate 1991	-0.006**	-0.005	-0.005*	-0.005*
	[0.003]	[0.005]	[0.003]	[0.002]
Log Change in Population 1980-1990	0.090*	0.107	0.094**	0.124***
	[0.046]	[0.094]	[0.047]	[0.041]
Dummy = 1 for Midwest Region	0.010	0.039	0.006	-0.001
	[0.012]	[0.034]	[0.013]	[0.012]
Dummy = 1 for South Region	0.001	0.036	-0.003	-0.005
	[0.013]	[0.034]	[0.013]	[0.012]
Dummy = 1 for West Region	0.052***	0.086**	0.047***	0.048***
	[0.017]	[0.039]	[0.018]	[0.017]
Dummy = 1 for California	-0.033	-0.054*	-0.031	-0.022
	[0.028]	[0.031]	[0.027]	[0.025]
Number of Specializations = 1, 1990	0.017*			
	[0.009]			
Number of Specializations = 2, 1990	0.028***			
	[0.010]			
Number of Specializations = 3, 1990	0.030*			
	[0.018]			
Number of City Specializations (Excl Primary Prod) = 1, 1992		0.023**		
		[0.011]		
Number of City Specializations (Excl Primary Prod) = 2, 1992		0.031		
		[0.023]		
Manufacturing as % Total Earnings, 1990				0.233***
				[0.061]
Distribution as % Total Earnings, 1990				0.516**
				[0.208]
Financial Producer Services as % Total Earnings, 1990				0.242
				[0.240]
Other Producer Services as % Total Earnings, 1990				0.590**
				[0.245]
Advanced Consumer Services as % Total Earnings, 1990				-0.150
				[0.180]
Dummy = 1 if MSA specialized in Manufacturing in 1990			0.016	
			[0.012]	

Dummy = 1 if MSA specialized in Distribution in 1990			0.023** [0.009]	
Dummy = 1 if MSA specialized in Financial Producer Services in 1990			0.005 [0.014]	
Dummy = 1 if MSA specialized in Other Producer Services in 1990			0.031** [0.015]	
Dummy = 1 if MSA specialized in Advanced Consumer Services in 1990			0.004 [0.010]	
Constant	0.439 [0.279]	0.305 [0.414]	0.469* [0.279]	0.486* [0.261]
Observations	213	84	213	213
R-squared	0.58	0.65	0.60	0.64

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B17: Occupational Concentration, Log Change in City per Capita Income, 1990-2000

	(1)	(2)	(3)	(4)	(5)
Income per Capita 1989	-0.000***	-0.000***	-0.000***	-0.000**	-0.000**
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Quadratic: 1990 per	0.000***	0.000***	0.000**	0.000**	0.000**
Capita Income Squared	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
% Adults w/ BA or	0.004***	0.000	0.001	0.003***	0.002***
Higher 1990	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]
Log Change in Land Area	-0.004	0.046	0.039	0.010	0.025
1990-2000	[0.082]	[0.051]	[0.053]	[0.060]	[0.051]
Dummy = 1 for Midwest	0.087***	0.086***	0.081***	0.092***	0.089***
Region	[0.021]	[0.012]	[0.013]	[0.013]	[0.012]
Dummy = 1 for South	0.069***	0.068***	0.060***	0.075***	0.076***
Region	[0.023]	[0.012]	[0.017]	[0.014]	[0.013]
Dummy = 1 for West	0.083***	0.074***	0.066***	0.083***	0.079***
Region	[0.023]	[0.014]	[0.016]	[0.017]	[0.015]
Dummy = 1 for California	-0.096***	-0.072***	-0.060**	-0.066***	-0.073***
	[0.023]	[0.023]	[0.026]	[0.024]	[0.024]
High Tech Jobs as % All	0.061				
Jobs 1992	[0.725]				
Professional Jobs as % all		0.384**			
Jobs 1990		[0.176]			
Production Jobs as % all		0.057			
Jobs 1990		[0.122]			
Professional Specialty &			0.327		
Technical Occupations as			[1.705]		
% Employed Workers					
1990					
Index of Industry					0.141
Fragmentation					[0.201]
1993 Export Sales as %				0.050*	
1990 total census income				[0.026]	
Exec Managerial &			0.787		
Admin Occupations as %			[1.758]		
Employed Workers 1990					
Sales Occupations as %			0.153		
Employed Workers 1990			[1.620]		
Admin Support including			-0.088		
Clerical Occupations as %			[1.634]		
Employed Workers 1990					
Precision Production &			0.094		
Skilled Crafts			[1.750]		
Occupations as %					
Employed Workers 1990					

Machine Operator Occupations as % Employed Workers 1990			-0.021 [1.625]		
Transportation Equipment Operator Occupations as % Employed Workers 1990			0.419 [1.828]		
Material Handler & Laborer Occupations as % Employed Workers 1990			0.825 [1.805]		
Farming Occupations as % Employed Workers 1990			-0.453 [1.671]		
Non-Household Service Occupations as % Employed Workers 1990			0.095 [1.716]		
Constant	0.639*** [0.228]	0.362** [0.145]	0.271 [1.628]	0.344** [0.139]	0.265 [0.200]
Observations	88	217	217	182	208
R-squared	0.47	0.39	0.41	0.40	0.39

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B18: Occupational Concentration, Log Change in City Population, 1990-2000

	(1)	(2)	(3)	(4)	(5)
Log of 1990 Population	0.025***	0.026***	0.032***	0.024***	0.028***
	[0.008]	[0.005]	[0.006]	[0.005]	[0.005]
Log Change in Land Area	0.730***	0.462***	0.446***	0.580***	0.484***
1990-2000	[0.118]	[0.079]	[0.075]	[0.077]	[0.076]
Unemployment Rate 1990	-0.013***	-0.016***	-0.014***	-0.013***	-0.015***
	[0.003]	[0.002]	[0.002]	[0.002]	[0.002]
Dummy = 1 for Midwest	-0.024	0.011	0.001	0.010	0.013
Region	[0.024]	[0.013]	[0.013]	[0.013]	[0.013]
Dummy = 1 for South	0.016	0.025*	0.011	0.020	0.020
Region	[0.027]	[0.013]	[0.020]	[0.014]	[0.013]
Dummy = 1 for West	0.085***	0.118***	0.083***	0.135***	0.115***
Region	[0.025]	[0.020]	[0.019]	[0.020]	[0.019]
High Tech Jobs as % All	-0.420				
Jobs 1992	[0.867]				
Professional Jobs as % all		-0.213			
Jobs 1990		[0.201]			
Production Jobs as % all		-0.135			
Jobs 1990		[0.185]			
Professional Specialty &			1.371		
Technical Occupations as			[2.506]		
% Employed Workers					
1990					
Index of Industry					0.852***
Fragmentation					[0.276]
1993 Export Sales as %				-0.014	
1990 total census income				[0.031]	
Exec Managerial &			1.647		
Admin Occupations as %			[2.591]		
Employed Workers 1990					
Sales Occupations as %			2.368		
Employed Workers 1990			[2.493]		
Admin Support incl			1.436		
Clerical Occupations as %			[2.467]		
Employed Workers 1990					
Precision Production &			1.160		
Skilled Crafts Occupations			[2.509]		
as % Employed Workers					
1990					
Machine Operator			1.766		
Occupations as %			[2.462]		
Employed Workers 1990					

Transportation Equipment Operator Occupations as % Employed Workers 1990			0.217 [2.561]		
Material Handler & Laborer Occupations as % Employed Workers 1990			1.922 [2.642]		
Farming Occupations as % Employed Workers 1990			3.473 [2.519]		
Non-Household Service Occupations as % Employed Workers 1990			1.519 [2.567]		
Private Household Service Occupations as % Employed Workers 1990			0.000 [0.000]		
Constant	-0.169 [0.114]	-0.109 [0.119]	-1.826 [2.517]	-0.203*** [0.058]	-0.931*** [0.235]
Observations	88	217	217	182	208
R-squared	0.62	0.60	0.66	0.65	0.63

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B19: Occupational Concentration, Log Change in MSA per Capita Income, 1990-2000

	(1)	(2)	(3)	(4)	(5)
Income per Capita 1989	-0.000	-0.000***	-0.000***	-0.000***	-0.000***
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Quadratic: Income per	0.000	0.000**	0.000**	0.000**	0.000**
Capita Squared	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
% Adults w/ BA or higher	0.118	0.131	0.104	0.190**	0.152*
1990	[0.210]	[0.110]	[0.141]	[0.087]	[0.080]
Civilian unemployment	-0.013***	-0.008***	-0.007***	-0.009***	-0.008***
rate 1991	[0.004]	[0.002]	[0.002]	[0.002]	[0.002]
Dummy = 1 for Midwest	0.053***	0.054***	0.057***	0.052***	0.052***
Region	[0.018]	[0.007]	[0.007]	[0.008]	[0.007]
Dummy = 1 for South	0.043**	0.034***	0.053***	0.035***	0.032***
Region	[0.017]	[0.007]	[0.010]	[0.008]	[0.007]
Dummy = 1 for West	0.051***	0.051***	0.064***	0.050***	0.047***
Region	[0.018]	[0.010]	[0.011]	[0.012]	[0.011]
Dummy = 1 for California	-0.053**	-0.058***	-0.047**	-0.047**	-0.061***
	[0.026]	[0.018]	[0.020]	[0.018]	[0.019]
High Tech Jobs as % All	0.090				
Jobs 1992	[0.558]				
Professional Jobs as % all		0.274			
Jobs 1990		[0.176]			
Production Jobs as % all		0.261***			
Jobs 1990		[0.084]			
Professional Specialty &			4.271*		
Technical Occupations as			[2.279]		
% Employed Workers					
1990					
Index of Industry					0.032
Fragmentation					[0.148]
% Employed in				0.097	
Manufacturing 1990				[0.065]	
1993 Export Sales as %				0.017	
1990 total census income				[0.021]	
Exec Managerial &			3.800*		
Admin Occupations as %			[2.276]		
Employed Workers 1990					
Sales Occupations as %			3.915*		
Employed Workers 1990			[2.350]		
Admin Support including			4.173*		
Clerical Occupations as %			[2.254]		
Employed Workers 1990					

Precision Production & Skilled Crafts Occupations as % Employed Workers 1990			3.915* [2.281]		
Machine Operator Occupations as % Employed Workers 1990			4.111* [2.211]		
Transportation Equipment Operator Occupations as % Employed Workers 1990			3.420 [2.319]		
Material Handler & Laborer Occupations as % Employed Workers 1990			4.973** [2.249]		
Farming Occupations as % Employed Workers 1990			3.652 [2.325]		
Non-Household Service Occupations as % Employed Workers 1990			4.016* [2.226]		
Private Household Service Occupations as % Employed Workers 1990			0.000 [0.000]		
Constant	0.482**	0.402***	-3.484	0.500***	0.495***
	[0.221]	[0.137]	[2.212]	[0.128]	[0.176]
Observations	86	215	215	180	207
R-squared	0.54	0.53	0.56	0.54	0.50

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B20: Occupational Concentration, Log Change in MSA Average Wage per Job, 1990-2000

	(1)	(2)	(3)	(4)	(5)
Avg Wage per Job 1990	-0.000	-0.000**	-0.000**	-0.000***	-0.000**
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Quadratic: Avg Wage per Job Squared	0.000	0.000***	0.000***	0.000***	0.000**
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Log of 1990 Population	-0.009	0.010*	-0.005	0.013**	0.007
	[0.017]	[0.006]	[0.007]	[0.005]	[0.006]
MSA % w BA or higher 1990	0.586*	0.423	0.086	0.376**	0.338**
	[0.301]	[0.286]	[0.277]	[0.145]	[0.161]
Civilian unemployment rate 1991	-0.004	-0.007***	-0.004	-0.008***	-0.007**
	[0.005]	[0.002]	[0.003]	[0.003]	[0.003]
Log Change in Population 1980-1990	0.091	0.097**	0.064	0.080	0.105**
	[0.095]	[0.049]	[0.054]	[0.049]	[0.047]
Dummy = 1 for Midwest Region	0.036	0.012	0.010	0.010	0.012
	[0.036]	[0.012]	[0.013]	[0.014]	[0.013]
Dummy = 1 for South Region	0.035	0.002	0.004	0.007	-0.003
	[0.038]	[0.012]	[0.016]	[0.015]	[0.013]
Dummy = 1 for West Region	0.080**	0.057***	0.060***	0.051***	0.050***
	[0.040]	[0.017]	[0.016]	[0.018]	[0.018]
Dummy = 1 for California	-0.056*	-0.032	-0.037	-0.010	-0.040
	[0.029]	[0.026]	[0.026]	[0.024]	[0.029]
High Tech Jobs as % All Jobs 1992	0.356				
	[1.389]				
Professional Jobs as % all Jobs 1990		0.271			
		[0.435]			
Production Jobs as % all Jobs 1990		0.469***			
		[0.165]			
Professional Specialty & Technical Occupations as % Employed Workers 1990 [msa]			1.524		
			[3.640]		
Index of Industry Fragmentation					0.212
					[0.196]
% Employed in Manufacturing 1990				0.198**	
				[0.089]	
1993 Export Sales as % 1990 total census income				0.079**	
				[0.032]	
Exec Managerial & Admin Occupations as % Employed Workers 1990			2.801		
			[3.552]		
Sales Occupations as % Employed Workers 1990			1.953		
			[3.655]		

Admin Support incl Clerical Occupations as % Employed Workers 1990			1.237 [3.405]		
Precision Production & Skilled Crafts Occupations as % Employed Workers 1990			0.977 [3.518]		
Machine Operator Occupations as % Employed Workers 1990			1.826 [3.422]		
Transportation Equipment Operator Occupations as % Employed Workers 1990			-0.509 [3.390]		
Material Handler & Laborer Occupations as % Employed Workers 1990			3.491 [3.641]		
Farming Occupations as % Employed Workers 1990			1.255 [3.492]		
Non-Household Service Occupations as % Employed Workers 1990			0.755 [3.408]		
Private Household Service Occupations as % Employed Workers 1990			0.000 [0.000]		
Constant	0.288 [0.411]	0.338 [0.256]	-0.732 [3.276]	0.474* [0.260]	0.302 [0.354]
Observations	84	213	213	179	205
R-squared	0.64	0.60	0.67	0.63	0.57

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B21: Ethnic Composition, Log Change in City per Capita Income, 1990-2000

	(1)	(2)	(3)	(4)	(5)
Income per Capita 1989	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Quadratic: 1990 per Capita	0.000**	0.000***	0.000**	0.000***	0.000***
Income Squared	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
% Adults w BA or Higher	0.002***	0.002**	0.002**	0.001*	0.002*
1990	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]
Log Change in Land Area	0.034	0.050	0.051	0.042	0.055
1990-2000	[0.054]	[0.057]	[0.057]	[0.058]	[0.058]
Dummy = 1 for Midwest	0.084***	0.080***	0.080***	0.084***	0.071***
Region	[0.012]	[0.013]	[0.012]	[0.013]	[0.013]
Dummy = 1 for South Region	0.073***	0.072***	0.076***	0.071***	0.058***
	[0.013]	[0.016]	[0.016]	[0.015]	[0.016]
Dummy = 1 for West Region	0.074***	0.076***	0.078***	0.072***	0.061***
	[0.015]	[0.017]	[0.017]	[0.016]	[0.017]
Dummy = 1 for California	-0.066***	-0.101***	-0.100***	-0.104***	-0.096***
	[0.024]	[0.031]	[0.031]	[0.030]	[0.032]
Population % White 1990	0.021				
	[0.023]				
Population % Black 1990		-0.018	0.064	0.009	0.001
		[0.026]	[0.039]	[0.030]	[0.028]
Population % American Indian		-0.931**	-0.885**	-0.960***	-0.866**
1990		[0.363]	[0.358]	[0.333]	[0.364]
Population % Asian/Pacific		0.453**	0.599***	0.484**	0.437*
1990		[0.207]	[0.209]	[0.200]	[0.225]
Population % Hispanic 1990		-0.076*	0.009	-0.071*	-0.010
		[0.042]	[0.045]	[0.042]	[0.050]
Population % Other Race 1990		-3.286	-0.973	-2.421	-1.613
		[4.770]	[4.803]	[4.788]	[4.680]
Ethnic Fractionalization, 1990			-0.116***		
			[0.041]		
Hispanic Segregation					-0.117**
					[0.053]
Black Segregation				-0.070*	
				[0.041]	
Constant	0.417***	0.425***	0.383***	0.476***	0.482***
	[0.140]	[0.123]	[0.122]	[0.125]	[0.134]
Observations	217	217	217	217	217
R-squared	0.38	0.43	0.44	0.43	0.45

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B22: Ethnic Composition, Log Change in City Population, 1990-2000

	(1)	(2)	(3)	(4)	(5)
Log of 1990 Population	0.022***	0.019***	0.019***	0.021***	0.019***
	[0.006]	[0.006]	[0.006]	[0.007]	[0.006]
Log Change in Land Area	0.465***	0.424***	0.424***	0.420***	0.423***
1990-2000	[0.079]	[0.078]	[0.078]	[0.077]	[0.078]
Unemployment Rate 1990	-0.016***	-0.015***	-0.015***	-0.014***	-0.015***
	[0.002]	[0.002]	[0.002]	[0.002]	[0.002]
Dummy = 1 for Midwest	0.011	0.036***	0.036***	0.038***	0.038***
Region	[0.013]	[0.014]	[0.014]	[0.014]	[0.014]
Dummy = 1 for South	0.020	0.049***	0.050***	0.048***	0.053***
Region	[0.014]	[0.016]	[0.016]	[0.016]	[0.017]
Dummy = 1 for West	0.115***	0.116***	0.116***	0.111***	0.120***
Region	[0.019]	[0.022]	[0.022]	[0.022]	[0.022]
Population % White 1990	-0.030				
	[0.040]				
Population % Black 1990		-0.038	-0.027	-0.028	-0.043
		[0.044]	[0.062]	[0.045]	[0.046]
Population % American		0.984	0.990	0.915	0.983
Indian 1990		[0.938]	[0.944]	[0.927]	[0.947]
Population % Asian/Pacific		-0.128	-0.108	-0.123	-0.126
1990		[0.145]	[0.159]	[0.145]	[0.149]
Population % Hispanic 1990		0.168***	0.179**	0.163***	0.152**
		[0.060]	[0.072]	[0.062]	[0.069]
Population % Other Race		9.955***	10.293***	10.392***	9.575***
1990		[3.102]	[3.260]	[3.197]	[3.159]
Ethnic Fractionalization,			-0.016		
1990			[0.053]		
Hispanic Segregation					0.028
					[0.052]
Black Segregation				-0.052	
				[0.049]	
Constant	-0.133	-0.158**	-0.158**	-0.159**	-0.165**
	[0.102]	[0.070]	[0.070]	[0.070]	[0.072]
Observations	217	217	217	217	217
R-squared	0.60	0.65	0.65	0.65	0.65

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B23: Ethnic Composition, Log Change in MSA per Capita Income, 1990-2000

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Income per Capita 1989	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Quadratic: Income per Capita Squared	0.000**	0.000**	0.000**	0.000**	0.000*	0.000**	0.000**
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
% Adults w/ BA or higher 1990	0.219***	0.206**	0.211**	0.223**	0.223**	0.183**	0.212**
	[0.077]	[0.085]	[0.087]	[0.089]	[0.086]	[0.087]	[0.085]
% Employed in Manufacturing 1990	0.121**	0.066	0.068	0.067	0.075	0.077	0.075
	[0.055]	[0.048]	[0.047]	[0.048]	[0.049]	[0.049]	[0.047]
Civilian unemployment rate 1991	-0.007***	-0.006***	-0.006***	-0.006***	-0.006***	-0.006***	-0.006***
	[0.002]	[0.002]	[0.002]	[0.002]	[0.002]	[0.002]	[0.002]
Dummy = 1 for Midwest Region	0.051***	0.047***	0.046***	0.046***	0.045***	0.042***	0.045***
	[0.007]	[0.007]	[0.007]	[0.007]	[0.007]	[0.008]	[0.007]
Dummy = 1 for South Region	0.041***	0.034***	0.032***	0.034***	0.038***	0.027***	0.030***
	[0.008]	[0.008]	[0.008]	[0.008]	[0.009]	[0.009]	[0.008]
Dummy = 1 for West Region	0.052***	0.056***	0.054***	0.057***	0.056***	0.049***	0.048***
	[0.010]	[0.011]	[0.011]	[0.011]	[0.011]	[0.011]	[0.011]
Dummy = 1 for California	-0.052***	-0.078***	-0.079***	-0.076***	-0.074***	-0.076***	-0.077***
	[0.018]	[0.023]	[0.023]	[0.023]	[0.023]	[0.023]	[0.023]
Population % White 1990	0.031						
	[0.025]						
Population % Black 1990		-0.004	-0.071	-0.012	-0.247**	0.008	0.005
		[0.029]	[0.093]	[0.032]	[0.115]	[0.030]	[0.028]
Population % American Indian 1990		-1.175***	-1.266***	-1.167***	-1.183***	-1.164***	-1.127***
		[0.271]	[0.303]	[0.264]	[0.261]	[0.261]	[0.257]
Population % Asian/Pacific 1990		0.574**	0.509*	0.563**	0.582**	0.546*	0.578**
		[0.277]	[0.294]	[0.277]	[0.279]	[0.277]	[0.282]
Population % Hispanic 1990		-0.067*	-0.116*	-0.067*	-0.075**	-0.038	0.259
		[0.038]	[0.067]	[0.038]	[0.037]	[0.042]	[0.190]
Population % Other Race 1990		-13.804**	-15.038**	-14.045**	-12.941**	-12.552*	-13.310**
		[6.318]	[6.773]	[6.351]	[6.132]	[6.585]	[6.329]
Ethnic Fractionalization, 1990			0.055				
			[0.069]				
Interaction: Hispanic Segregation * % Hispanic 1990							-0.657*
							[0.383]
Hispanic Segregation						-0.048*	
						[0.027]	
Interaction: Black Segregation * % Black 1990					0.357**		
					[0.160]		
Black Segregation				0.015			
				[0.024]			
Constant	0.484***	0.447***	0.463***	0.445***	0.452***	0.470***	0.450***
	[0.125]	[0.100]	[0.103]	[0.101]	[0.099]	[0.101]	[0.098]
Observations	214	214	214	214	214	214	214
R-squared	0.53	0.60	0.60	0.60	0.60	0.60	0.61

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B24: Ethnic Composition, Log Change in MSA Average Wage per Job, 1990-2000

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Avg Wage per Job 1990	-0.000***	-0.000**	-0.000**	-0.000**	-0.000**	-0.000**	-0.000***
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Quadratic: Avg Wage per Job Squared	0.000***	0.000***	0.000***	0.000***	0.000**	0.000***	0.000***
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Log of 1990 Population	0.010*	0.010*	0.010**	0.011**	0.009	0.010**	0.012***
	[0.005]	[0.005]	[0.005]	[0.006]	[0.006]	[0.005]	[0.005]
MSA % w BA or higher 1990	0.436***	0.377**	0.376**	0.366**	0.378**	0.374**	0.393**
	[0.154]	[0.167]	[0.169]	[0.169]	[0.167]	[0.171]	[0.170]
% Employed in Manufacturing	0.290***	0.262***	0.262***	0.260***	0.267***	0.265***	0.270***
	[0.081]	[0.077]	[0.078]	[0.077]	[0.078]	[0.078]	[0.076]
Civilian unemployment rate 1991	-0.007***	-0.007***	-0.007***	-0.006***	-0.007***	-0.007***	-0.006**
	[0.002]	[0.002]	[0.003]	[0.002]	[0.002]	[0.003]	[0.002]
Log Change in Population 1980-1990	0.100**	0.100**	0.100**	0.097**	0.104**	0.101**	0.088**
	[0.043]	[0.042]	[0.040]	[0.043]	[0.043]	[0.043]	[0.038]
Dummy = 1 for Midwest Region	0.008	0.011	0.011	0.012	0.010	0.009	0.010
	[0.013]	[0.013]	[0.013]	[0.012]	[0.013]	[0.015]	[0.013]
Dummy = 1 for South Region	0.007	0.014	0.014	0.014	0.015	0.012	0.012
	[0.016]	[0.015]	[0.016]	[0.015]	[0.015]	[0.018]	[0.015]
Dummy = 1 for West Region	0.060***	0.064***	0.064***	0.062***	0.064***	0.061***	0.058***
	[0.018]	[0.018]	[0.019]	[0.019]	[0.018]	[0.022]	[0.021]
Dummy = 1 for California	-0.032	-0.078**	-0.078**	-0.079**	-0.078**	-0.077**	-0.074**
	[0.027]	[0.038]	[0.039]	[0.038]	[0.038]	[0.038]	[0.037]
Population % White 1990	-0.012						
	[0.041]						
Population % Black 1990		-0.031	-0.025	-0.028	-0.130	-0.030	-0.031
		[0.044]	[0.115]	[0.043]	[0.165]	[0.044]	[0.044]
Population % American Indian 1990		-1.231***	-1.222***	-1.246***	-1.225***	-1.236***	-1.206***
		[0.404]	[0.414]	[0.413]	[0.401]	[0.403]	[0.408]
Population % Asian/Pacific 1990		0.742*	0.747*	0.747*	0.763*	0.730*	0.690*
		[0.420]	[0.429]	[0.420]	[0.417]	[0.412]	[0.415]
Population % Hispanic 1990		-0.007	-0.003	-0.010	-0.007	0.001	0.331
		[0.040]	[0.081]	[0.041]	[0.040]	[0.050]	[0.333]
Population % Other Race 1990		3.580	3.714	3.723	4.014	3.880	3.988
		[7.544]	[7.872]	[7.533]	[7.600]	[7.781]	[7.509]
Ethnic Fractionalization, 1990			-0.005				
			[0.089]				
Interaction: Hispanic Segregation * % Hispanic 1990							-0.692
							[0.671]

Hispanic						-0.016	
Segregation						[0.047]	
Interaction:					0.155		
Black					[0.256]		
Segregation * %							
Black 1990							
Black				-0.017			
Segregation				[0.041]			
Constant	0.483*	0.396*	0.395*	0.385*	0.399*	0.402*	0.436**
	[0.248]	[0.222]	[0.224]	[0.220]	[0.222]	[0.223]	[0.217]
Observations	212	212	212	212	212	212	212
R-squared	0.61	0.63	0.63	0.63	0.63	0.63	0.64

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B25: Immigration, Log Change in City per Capita Income, 1990-2000

	(1)	(2)	(3)	(4)	(5)
Income per Capita 1989	-0.000***	-0.000***	-0.000***	-0.000**	-0.000**
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Quadratic: 1990 per Capita	0.000***	0.000**	0.000**	0.000**	0.000**
Income Squared	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
% Adults w/ BA or Higher	0.003***	0.002***	0.002***	0.002***	0.002***
1990	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]
Log Change in Land Area	0.055	0.040	0.041	0.062	0.067
1990-2000	[0.053]	[0.052]	[0.053]	[0.051]	[0.051]
Dummy = 1 for Midwest	0.078***	0.084***	0.085***	0.084***	0.083***
Region	[0.012]	[0.012]	[0.012]	[0.012]	[0.012]
Dummy = 1 for South	0.066***	0.069***	0.071***	0.074***	0.073***
Region	[0.013]	[0.013]	[0.013]	[0.013]	[0.012]
Dummy = 1 for West	0.049***	0.074***	0.075***	0.077***	0.078***
Region	[0.016]	[0.015]	[0.015]	[0.015]	[0.015]
Foreign Born as % Total	-0.123	-0.044	-0.086	0.001	-0.002
Pop, 1990	[0.085]	[0.067]	[0.090]	[0.066]	[0.067]
Dummy = 1 for California		-0.066***	-0.067***	-0.057**	-0.055**
		[0.025]	[0.025]	[0.025]	[0.026]
Interaction: % Foreign Born			0.120		
* Dummy for % BA+ >			[0.127]		
Median 1990					
Log Change in Foreign Born				-0.025**	-0.023*
Pop 1980-90				[0.012]	[0.013]
Log Change in Native-Born					-0.015
Pop 1980-90					[0.052]
Constant	0.444***	0.421***	0.410***	0.353***	0.345**
	[0.130]	[0.137]	[0.134]	[0.130]	[0.134]
Observations	217	217	217	217	217
R-squared	0.34	0.38	0.38	0.39	0.39

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B26: Immigration, Log Change in City Population, 1990-2000

	(1)	(2)	(3)	(4)	(5)
Log of 1990 Population	0.020***	0.019***	0.021***	0.016***	0.015***
	[0.006]	[0.006]	[0.006]	[0.006]	[0.005]
Log Change in Land Area	0.473***	0.466***	0.472***	0.417***	0.320***
1990-2000	[0.077]	[0.079]	[0.078]	[0.071]	[0.064]
Unemployment Rate 1990	-0.015***	-0.015***	-0.015***	-0.011***	-0.009***
	[0.002]	[0.002]	[0.002]	[0.002]	[0.002]
Dummy = 1 for Midwest	0.018	0.020	0.017	0.018	0.024**
Region	[0.013]	[0.013]	[0.013]	[0.012]	[0.012]
Dummy = 1 for South	0.029**	0.030**	0.028**	0.017	0.024*
Region	[0.013]	[0.013]	[0.013]	[0.012]	[0.012]
Dummy = 1 for West	0.109***	0.118***	0.110***	0.094***	0.065***
Region	[0.019]	[0.022]	[0.019]	[0.018]	[0.017]
Foreign Born as % Total	0.183*	0.215**	0.206	0.035	0.107
Pop, 1990	[0.103]	[0.109]	[0.125]	[0.086]	[0.075]
Dummy = 1 for California		-0.023			
		[0.031]			
Interaction: % Foreign Born			-0.055		
* Dummy for % BA+ >			[0.140]		
Median 1990					
Log Change in Foreign Born				0.071***	0.029*
Pop 1980-90				[0.017]	[0.015]
Log Change in Native-Born					0.339***
Pop 1980-90					[0.065]
Constant	-0.148**	-0.145**	-0.153**	-0.124**	-0.131**
	[0.062]	[0.062]	[0.060]	[0.060]	[0.055]
Observations	217	217	217	217	217
R-squared	0.61	0.61	0.61	0.65	0.71

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B27: Immigration, Log Change in MSA per Capita Income, 1990-2000

	(1)	(2)	(3)	(4)	(5)
Income per Capita 1989	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Quadratic: Income per	0.000***	0.000**	0.000***	0.000**	0.000**
Capita Squared	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
% Adults w/ BA or higher	0.252***	0.242***	0.234***	0.262***	0.262***
1990	[0.077]	[0.075]	[0.076]	[0.074]	[0.074]
% Employed in	0.118**	0.115**	0.108**	0.124**	0.124**
Manufacturing	[0.052]	[0.053]	[0.052]	[0.054]	[0.057]
Civilian unemployment rate	-0.007***	-0.006***	-0.006***	-0.007***	-0.007***
1991	[0.002]	[0.002]	[0.002]	[0.002]	[0.002]
Dummy = 1 for Midwest	0.044***	0.048***	0.048***	0.050***	0.050***
Region	[0.008]	[0.007]	[0.007]	[0.007]	[0.007]
Dummy = 1 for South	0.032***	0.035***	0.034***	0.043***	0.043***
Region	[0.007]	[0.007]	[0.007]	[0.008]	[0.008]
Dummy = 1 for West	0.039***	0.052***	0.051***	0.057***	0.057***
Region	[0.011]	[0.010]	[0.010]	[0.011]	[0.011]
Foreign Born as % Total	-0.303***	-0.226**	-0.281***	-0.175	-0.175
Pop, 1990	[0.112]	[0.108]	[0.107]	[0.116]	[0.113]
Dummy = 1 for California		-0.039**	-0.038**	-0.035**	-0.035*
		[0.019]	[0.018]	[0.018]	[0.018]
Interaction: % Foreign Born			0.072		
* Dummy for % BA+ >			[0.079]		
Median 1990					
Log Change in Foreign Born				-0.020*	-0.020
Pop 1980-90				[0.012]	[0.013]
Log Change in Native-Born					0.001
Pop 1980-90					[0.044]
Constant	0.551***	0.529***	0.528***	0.479***	0.479***
	[0.119]	[0.127]	[0.123]	[0.123]	[0.122]
Observations	214	214	214	214	214
R-squared	0.54	0.55	0.55	0.56	0.56

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B28: Immigration, Log Change in MSA Average Wage per Job, 1990-2000

	(1)	(2)	(3)	(4)	(5)
Avg Wage per Job 1990	-0.000**	-0.000**	-0.000**	-0.000**	-0.000**
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Quadratic: Avg Wage per	0.000**	0.000**	0.000**	0.000**	0.000**
Job Squared	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Log of 1990 Population	0.010*	0.009*	0.009*	0.009*	0.009*
	[0.006]	[0.005]	[0.005]	[0.005]	[0.006]
MSA % w BA or higher	0.431***	0.423***	0.408**	0.423***	0.426***
1990	[0.158]	[0.156]	[0.160]	[0.156]	[0.158]
% Employed in	0.295***	0.294***	0.286***	0.295***	0.295***
Manufacturing	[0.080]	[0.082]	[0.081]	[0.085]	[0.082]
Civilian unemployment rate	-0.009***	-0.008***	-0.007***	-0.008***	-0.008***
1991	[0.003]	[0.003]	[0.003]	[0.003]	[0.003]
Log Change in Population	0.077	0.087*	0.092*	0.090*	0.200
1980-1990	[0.054]	[0.050]	[0.049]	[0.051]	[0.867]
Dummy = 1 for Midwest	0.006	0.009	0.009	0.009	0.009
Region	[0.013]	[0.012]	[0.012]	[0.012]	[0.012]
Dummy = 1 for South	0.008	0.010	0.009	0.011	0.010
Region	[0.013]	[0.013]	[0.012]	[0.013]	[0.013]
Dummy = 1 for West	0.048**	0.060***	0.058***	0.060***	0.060***
Region	[0.020]	[0.017]	[0.017]	[0.017]	[0.017]
Foreign Born as % Total	0.052	0.143	0.065	0.146	0.117
Pop, 1990	[0.228]	[0.235]	[0.212]	[0.242]	[0.280]
Dummy = 1 for California		-0.040	-0.040	-0.040	-0.042
		[0.030]	[0.030]	[0.030]	[0.033]
Interaction: % Foreign Born			0.102		
* Dummy for % BA+ >			[0.114]		
Median 1990 [city]					
Log Change in Foreign				-0.002	-0.004
Born Pop 1980-90				[0.014]	[0.026]
Log Change in Native-Born					-0.106
Pop 1980-90					[0.842]
Constant	0.454*	0.412	0.414	0.412	0.409
	[0.259]	[0.284]	[0.287]	[0.286]	[0.282]
Observations	212	212	212	212	212
R-squared	0.60	0.61	0.61	0.61	0.61

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B29: Age, Log Change in City per Capita Income, 1990-2000

Income per Capita 1989	-0.000***
	[0.000]
Quadratic: 1990 per Capita Income Squared	0.000***
	[0.000]
% Adults w/ BA or Higher 1990	0.003**
	[0.001]
Log Change in Land Area 1990-2000	0.057
	[0.047]
Dummy = 1 for Midwest Region	0.086***
	[0.011]
Dummy = 1 for South Region	0.065***
	[0.013]
Dummy = 1 for West Region	0.058***
	[0.017]
Dummy = 1 for California	-0.047**
	[0.021]
Population Aged 18-24, 1990 %	0.559**
	[0.222]
Population Aged 25-34, 1990 %	0.710**
	[0.332]
Population Aged 35-44, 1990 %	2.168***
	[0.631]
Population Aged 45-54, 1990 %	1.810**
	[0.785]
Population Aged 55-64, 1990 %	0.584
	[0.754]
Population Over 65, 1990 %	0.559***
	[0.210]
Constant	-0.179
	[0.202]
Observations	217
R-squared	0.48

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B30: Age, Log Change in City Population, 1990-2000

Log of 1990 Population	0.013**
	[0.006]
Log Change in Land Area 1990-2000	0.440***
	[0.067]
Unemployment Rate 1990	-0.014***
	[0.002]
Dummy = 1 for Midwest Region	0.002
	[0.013]
Dummy = 1 for South Region	0.021
	[0.014]
Dummy = 1 for West Region	0.076***
	[0.021]
Population Aged 18-24, 1990 %	-0.384**
	[0.155]
Population Aged 25-34, 1990 %	-0.347
	[0.379]
Population Aged 35-44, 1990 %	-0.251
	[0.515]
Population Aged 45-54, 1990 %	1.477
	[0.926]
Population Aged 55-64, 1990 %	-3.585***
	[1.034]
Population Over 65, 1990 %	-0.348
	[0.285]
Constant	0.299**
	[0.142]
Observations	217
R-squared	0.68

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B31: Age, Log Change in MSA per Capita Income, 1990-2000

Income per Capita 1989	-0.000***
	[0.000]
Quadratic: Income per Capita Squared	0.000***
	[0.000]
% Adults w/ BA or higher 1990	0.226*
	[0.116]
% Employed in Manufacturing	0.110*
	[0.060]
Civilian unemployment rate 1991	-0.007***
	[0.002]
Dummy = 1 for Midwest Region	0.053***
	[0.008]
Dummy = 1 for South Region	0.034***
	[0.008]
Dummy = 1 for West Region	0.045***
	[0.013]
Dummy = 1 for California	-0.053***
	[0.017]
Population Aged 18-24, 1990 %	0.142
	[0.185]
Population Aged 25-34, 1990 %	0.287
	[0.429]
Population Aged 35-44, 1990 %	1.341**
	[0.537]
Population Aged 44-54, 1990 %	0.023
	[0.701]
Population Aged 55-64, 1990 %	0.684
	[0.815]
Population Over 65, 1990 %	0.082
	[0.251]
Constant	0.299*
	[0.177]
Observations	214
R-squared	0.57

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B32: Age, Log Change in MSA Average Wage per Job, 1990-2000

Avg Wage per Job 1990	-0.000***
	[0.000]
Quadratic: Avg Wage per Job Squared	0.000***
	[0.000]
Log of 1990 Population	0.008*
	[0.005]
% Adults w/ BA or higher 1990	0.397**
	[0.166]
% Employed in Manufacturing	0.347***
	[0.082]
Civilian unemployment rate 1991	-0.002
	[0.002]
Log Change in Population 1980-1990	-0.017
	[0.047]
Dummy = 1 for Midwest Region	0.007
	[0.011]
Dummy = 1 for South Region	0.008
	[0.013]
Dummy = 1 for West Region	0.046**
	[0.018]
Dummy = 1 for California	-0.036*
	[0.020]
Population Aged 18-24, 1990 %	-0.541**
	[0.261]
Population Aged 25-34, 1990 %	1.968***
	[0.680]
Population Aged 35-44, 1990 %	1.441*
	[0.769]
Population Aged 44-54, 1990 %	0.076
	[0.861]
Population Aged 55-64, 1990 %	-2.077**
	[0.838]
Population Over 65, 1990 %	1.015***
	[0.243]
Constant	0.464*
	[0.262]
Observations	212
R-squared	0.72

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B33: Inequality, Log Change in City per Capita Income, 1990-2000

	(1)	(2)
Income per Capita 1989	-0.000**	-0.000***
	[0.000]	[0.000]
Quadratic: 1990 per Capita Income Squared	0.000**	0.000**
	[0.000]	[0.000]
% Adults w/ BA or Higher 1990	0.002***	0.002***
	[0.001]	[0.001]
Log Change in Land Area 1990-2000	0.066	0.043
	[0.053]	[0.052]
Log Change in Population 1980-90	-0.065	
	[0.051]	
Dummy = 1 for Midwest Region	0.086***	0.085***
	[0.012]	[0.012]
Dummy = 1 for South Region	0.071***	0.072***
	[0.013]	[0.013]
Dummy = 1 for West Region	0.083***	0.075***
	[0.016]	[0.015]
Dummy = 1 for California	-0.058**	-0.071***
	[0.027]	[0.023]
Gini Coefficient of Income Inequality, 1990	0.087	
	[0.202]	
Mean-Median Income Ratio 1990		-0.019
		[0.055]
Constant	0.313**	0.442**
	[0.155]	[0.183]
Observations	213	217
R-squared	0.39	0.38

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B34: Inequality, Log Change in City Population, 1990-2000

	(1)	(2)
Log of 1990 Population	0.024***	0.025***
	[0.005]	[0.005]
Log Change in Land Area 1990-2000	0.448***	0.465***
	[0.078]	[0.077]
Unemployment Rate 1990	-0.015***	-0.014***
	[0.002]	[0.002]
Dummy = 1 for Midwest Region	0.011	0.009
	[0.013]	[0.013]
Dummy = 1 for South Region	0.021	0.030**
	[0.017]	[0.015]
Dummy = 1 for West Region	0.116***	0.115***
	[0.020]	[0.019]
Gini Coefficient of Income Inequality, 1990	0.172	
	[0.289]	
Mean-Median Income Ration 1990		-0.075
		[0.058]
Constant	-0.249**	-0.105
	[0.108]	[0.086]
Observations	215	217
R-squared	0.59	0.60

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B35: Inequality, Log Change in MSA per Capita Income, 1990-2000

	(1)	(2)
Income per Capita 1989	-0.000***	-0.000***
	[0.000]	[0.000]
Quadratic: Income per Capita Squared 1990	0.000**	0.000**
	[0.000]	[0.000]
MSA % w BA or higher 1990	0.230***	0.239***
	[0.082]	[0.077]
% Employed in Manufacturing	0.119**	0.128**
	[0.057]	[0.052]
Civilian unemployment rate 1991	-0.007***	-0.008***
	[0.002]	[0.002]
Dummy = 1 for Midwest Region	0.051***	0.050***
	[0.007]	[0.007]
Dummy = 1 for South Region	0.040***	0.042***
	[0.008]	[0.008]
Dummy = 1 for West Region	0.051***	0.051***
	[0.010]	[0.010]
Dummy = 1 for California	-0.057***	-0.060***
	[0.018]	[0.018]
Gini Coefficient of Income Inequality, 1990	-0.186	
	[0.201]	
Mean-Median Income Ration 1990		-0.065**
		[0.031]
Constant	0.598***	0.615***
	[0.179]	[0.140]
Observations	214	214
R-squared	0.53	0.54

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B36: Inequality, Log Change in MSA Average Wage per Job, 1990-2000

	(1)	(2)
Avg Wage per Job 1990	-0.000***	-0.000***
	[0.000]	[0.000]
Quadratic: Avg Wage per Job Squared	0.000***	0.000***
	[0.000]	[0.000]
Log of 1990 Population	0.014***	0.014***
	[0.005]	[0.005]
MSA % w BA or higher 1990	0.503***	0.512***
	[0.146]	[0.151]
% Employed in Manufacturing	0.241***	0.283***
	[0.077]	[0.077]
Civilian unemployment rate 1991	-0.004	-0.006**
	[0.003]	[0.002]
Log Change in Population 1980-1990	0.049	0.073*
	[0.052]	[0.042]
Dummy = 1 for Midwest Region	0.011	0.007
	[0.012]	[0.012]
Dummy = 1 for South Region	0.027	0.023*
	[0.017]	[0.013]
Dummy = 1 for West Region	0.064***	0.062***
	[0.017]	[0.017]
Dummy = 1 for California	-0.030	-0.035
	[0.024]	[0.024]
Gini Coefficient of Income Inequality, 1990	-0.711**	
	[0.312]	
Mean-Median Income Ration 1990		-0.144***
		[0.046]
Constant	0.869***	0.660**
	[0.306]	[0.254]
Observations	212	212
R-squared	0.62	0.63

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B37: Sprawl, Log Change in City per Capita Income, 1990-2000

	(1)	(2)	(3)	(4)	(5)	(6)
Income per Capita 1989	-0.000***	-0.000***	-0.000***	-0.000*	-0.000*	-0.000*
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Quadratic: per Capita Income Sqaured	0.000***	0.000***	0.000**	0.000	0.000	0.000
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
% Adults w/ BA or Higher 1990	0.002**	0.003**	0.007***	0.006***	0.006***	0.005***
	[0.001]	[0.001]	[0.002]	[0.002]	[0.002]	[0.002]
Log Change in Land Area 1990-2000	0.015	0.059	0.037	0.127	0.126	0.110
	[0.059]	[0.058]	[0.117]	[0.123]	[0.121]	[0.134]
Dummy = 1 for Midwest Region	0.077***	0.072***	0.124***	0.120***	0.119***	0.114***
	[0.015]	[0.014]	[0.019]	[0.017]	[0.016]	[0.017]
Dummy = 1 for South Region	0.062***	0.061***	0.096***	0.103***	0.101***	0.110***
	[0.016]	[0.015]	[0.024]	[0.024]	[0.021]	[0.022]
Dummy = 1 for West Region	0.070***	0.079***	0.095***	0.110***	0.108***	0.120***
	[0.021]	[0.021]	[0.029]	[0.032]	[0.029]	[0.028]
Dummy = 1 for California	-0.082***	-0.061**	-0.057*	-0.031	-0.030	-0.024
	[0.024]	[0.027]	[0.033]	[0.036]	[0.036]	[0.036]
Sprawl: Malpezzi Component 1 (pop adj.) [msa]	-0.000	-0.000*				
	[0.000]	[0.000]				
Sprawl: Malpezzi Component 3 (pop adj.) [msa]	-0.000*	-0.000**				
	[0.000]	[0.000]				
Log Change in Population 1980-90		-0.116**		-0.145*	-0.145*	-0.188**
		[0.057]		[0.087]	[0.085]	[0.083]
Sprawl: Density Factor			0.000	0.000		
			[0.000]	[0.000]		
Sprawl: Overall Index						0.001**
						[0.000]
Sprawl: Centers Factor			0.000	0.000	0.000	
			[0.000]	[0.000]	[0.000]	
Sprawl: Streets Factor			0.001*	0.001*	0.001***	
			[0.000]	[0.000]	[0.000]	
Constant	0.527***	0.428***	0.377**	0.223	0.229	0.219
	[0.142]	[0.136]	[0.180]	[0.197]	[0.192]	[0.196]
Observations	174	172	72	72	72	72
R-squared	0.43	0.45	0.54	0.56	0.56	0.52

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B38: Sprawl, Log Change in City Population, 1990-2000

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Log of 1990 Population	0.019*** [0.006]	0.011** [0.005]	0.016 [0.012]	0.012 [0.011]	0.019** [0.009]	0.012 [0.009]	0.018* [0.009]
Log Change in Land Area 1990-2000	0.475*** [0.088]	0.351*** [0.069]	0.805*** [0.198]	0.622*** [0.154]	0.797*** [0.195]	0.622*** [0.150]	0.764*** [0.187]
Unemployment Rate 1990	-0.014*** [0.002]	-0.009*** [0.002]	-0.012*** [0.003]	-0.005* [0.003]	-0.011*** [0.003]	-0.005* [0.003]	-0.011*** [0.003]
Dummy = 1 for Midwest Region	0.005 [0.018]	0.022 [0.016]	0.010 [0.023]	0.021 [0.020]	0.005 [0.021]	0.021 [0.019]	0.007 [0.022]
Dummy = 1 for South Region	0.026 [0.021]	0.030* [0.018]	0.051* [0.029]	0.045* [0.026]	0.045* [0.027]	0.045* [0.024]	0.056** [0.027]
Dummy = 1 for West Region	0.127*** [0.028]	0.071*** [0.023]	0.102*** [0.029]	0.047 [0.032]	0.099*** [0.029]	0.047 [0.031]	0.108*** [0.024]
Sprawl: Malpezzi Component 1 (pop adj.) [msa]	0.000 [0.000]	0.000 [0.000]					
Sprawl: Malpezzi Component 3 (pop adj.) [msa]	-0.000 [0.000]	-0.000 [0.000]					
Log Change in Population 1980-90		0.378*** [0.068]		0.368*** [0.097]		0.368*** [0.096]	
Sprawl: Density Factor			0.000 [0.001]	0.000 [0.000]			
Sprawl: Overall Index							0.001 [0.000]
Sprawl: Centers Factor			0.000 [0.000]	0.000 [0.000]	0.000 [0.000]	0.000 [0.000]	
Sprawl: Streets Factor			0.000 [0.000]	0.001* [0.000]	0.001 [0.000]	0.001*** [0.000]	
Constant	-0.133* [0.071]	-0.072 [0.063]	-0.203 [0.133]	-0.228* [0.127]	-0.233** [0.109]	-0.229** [0.102]	-0.216** [0.107]
Observations	174	172	72	72	72	72	72
R-squared	0.63	0.72	0.59	0.68	0.59	0.68	0.59

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B39: Sprawl, Log Change in MSA per Capita Income, 1990-2000

	(1)	(2)	(3)	(4)	(5)	(6)
Income per Capita 1989	-0.000**	-0.000**	-0.000*	-0.000	-0.000	-0.000
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Quadratic: Income per Capita Squared	0.000*	0.000	0.000	0.000	0.000	0.000
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
% Adults w/ BA or higher 1990	0.283***	0.301***	0.335	0.386	0.367	0.248
	[0.096]	[0.094]	[0.251]	[0.278]	[0.285]	[0.278]
% Employed in Manufacturing	0.067	0.043	0.141	0.085	0.096	0.038
	[0.065]	[0.057]	[0.119]	[0.122]	[0.124]	[0.130]
Civilian unemployment rate 1991	-0.008***	-0.007***	-0.015***	-0.013***	-0.015***	-0.014**
	[0.002]	[0.002]	[0.005]	[0.005]	[0.005]	[0.005]
Dummy = 1 for Midwest Region	0.054***	0.052***	0.054***	0.059***	0.060***	0.061***
	[0.010]	[0.009]	[0.015]	[0.013]	[0.013]	[0.014]
Dummy = 1 for South Region	0.037***	0.043***	0.029*	0.045**	0.050***	0.058***
	[0.009]	[0.009]	[0.015]	[0.018]	[0.018]	[0.019]
Dummy = 1 for West Region	0.059***	0.068***	0.031*	0.056**	0.060**	0.072***
	[0.013]	[0.014]	[0.018]	[0.025]	[0.026]	[0.026]
Dummy = 1 for California	-0.063***	-0.059***	-0.023	-0.025	-0.032	-0.033
	[0.019]	[0.019]	[0.025]	[0.025]	[0.027]	[0.027]
Sprawl: Malpezzi Component 1 (pop adj.)	-0.000	-0.000				
	[0.000]	[0.000]				
Sprawl: Malpezzi Component 3 (pop adj.)	0.000	0.000				
	[0.000]	[0.000]				
Log Change in Population 1980-1990		-0.092**		-0.122	-0.115	-0.129
		[0.042]		[0.074]	[0.077]	[0.079]
Sprawl: Density Factor			-0.001**	-0.001**		
			[0.000]	[0.000]		
Sprawl: Overall Index						0.000
						[0.000]
Sprawl: Centers Factor			0.000	0.000	-0.000	
			[0.000]	[0.000]	[0.000]	
Sprawl: Streets Factor			0.001***	0.001***	0.001***	
			[0.000]	[0.000]	[0.000]	
Constant	0.473***	0.395***	0.477**	0.405*	0.456*	0.406*
	[0.137]	[0.126]	[0.237]	[0.227]	[0.239]	[0.242]
Observations	172	172	71	71	71	71
R-squared	0.54	0.56	0.60	0.63	0.60	0.56

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B40: Sprawl, Log Change in MSA Average Wage per Job, 1990-2000

	(1)	(2)	(3)	(4)	(5)	(6)
Avg Wage per Job 1990	-0.000***	-0.000***	-0.000	-0.000	-0.000	-0.000
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Quadratic: Avg Wage per	0.000***	0.000***	0.000	0.000	0.000	0.000
Job Squared	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Log of 1990 Population	0.017***	0.015***	-0.015	-0.017	-0.018	-0.011
	[0.005]	[0.006]	[0.016]	[0.017]	[0.015]	[0.016]
% Adults w/ BA or higher	0.866***	0.810***	1.174***	0.923***	0.942***	0.643*
1990	[0.149]	[0.152]	[0.413]	[0.334]	[0.326]	[0.343]
% Employed in	0.334***	0.338***	0.517***	0.540***	0.547***	0.474**
Manufacturing	[0.083]	[0.085]	[0.191]	[0.186]	[0.189]	[0.215]
Civilian unemployment	-0.004	-0.005*	-0.003	-0.005	-0.006	-0.007
rate 1991	[0.003]	[0.002]	[0.004]	[0.005]	[0.005]	[0.006]
Dummy = 1 for Midwest	0.011	0.013	0.032	0.031	0.031	0.032
Region	[0.015]	[0.015]	[0.019]	[0.021]	[0.021]	[0.026]
Dummy = 1 for South	0.009	0.007	0.044*	0.030	0.031	0.054*
Region	[0.015]	[0.015]	[0.023]	[0.025]	[0.026]	[0.029]
Dummy = 1 for West	0.053***	0.050**	0.060**	0.037	0.037	0.059*
Region	[0.019]	[0.020]	[0.027]	[0.031]	[0.031]	[0.034]
Dummy = 1 for California	-0.014	-0.020	-0.019	-0.019	-0.019	-0.018
	[0.023]	[0.024]	[0.030]	[0.028]	[0.027]	[0.029]
Sprawl: Malpezzi	-0.000*	-0.000*				
Component 1 (pop adj.)	[0.000]	[0.000]				
Sprawl: Malpezzi	-0.000	-0.000				
Component 3 (pop adj.)	[0.000]	[0.000]				
Log Change in Population		0.067		0.189**	0.185**	0.216**
1980-1990		[0.045]		[0.089]	[0.091]	[0.094]
Sprawl: Density Factor			0.000	-0.000		
			[0.001]	[0.001]		
Sprawl: Overall Index						0.001***
						[0.000]
Sprawl: Centers Factor			-0.000	0.000	0.000	
			[0.000]	[0.000]	[0.000]	
Sprawl: Streets Factor			0.001***	0.001***	0.001***	
			[0.000]	[0.000]	[0.000]	
Constant	0.703**	0.764**	0.327	0.201	0.197	-0.017
	[0.291]	[0.296]	[0.404]	[0.393]	[0.373]	[0.418]
Observations	171	171	70	70	70	70
R-squared	0.71	0.72	0.74	0.76	0.76	0.71

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B41: Government Expenditures, Log Change in City per Capita Income, 1990-2000

	(1)	(2)	(3)
Income per Capita 1989	-0.000***	-0.000***	-0.000***
	[0.000]	[0.000]	[0.000]
Quadratic: 1990 per Capita Income Squared	0.000**	0.000***	0.000***
	[0.000]	[0.000]	[0.000]
% Adults w/ BA or Higher 1990	0.002***	0.002**	0.002***
	[0.001]	[0.001]	[0.001]
Log Change in Land Area 1990-2000	0.035	0.028	0.049
	[0.056]	[0.056]	[0.054]
Dummy = 1 for Midwest Region	0.085***	0.073***	0.087***
	[0.012]	[0.013]	[0.012]
Dummy = 1 for South Region	0.071***	0.068***	0.075***
	[0.013]	[0.013]	[0.013]
Dummy = 1 for West Region	0.075***	0.069***	0.080***
	[0.015]	[0.015]	[0.015]
Dummy = 1 for California	-0.071***	-0.059**	-0.065***
	[0.024]	[0.024]	[0.024]
General Expenditures per Capita 1990-91	-0.000	-0.000	
	[0.000]	[0.000]	
% General Expenditures for Education 1990-91		-0.001	
		[0.000]	
% General Expenditures for Public Welfare 1990-91		0.001	
		[0.002]	
% General Expenditures for Health & Hospitals 1990-91		0.000	
		[0.000]	
% General Expenditures for Police 1990-91		-0.003***	-0.002
		[0.001]	[0.001]
% General Expenditures for Highways 1990-91		0.001	
		[0.001]	
% General Expenditures for Sewage & Waste 1990-91		-0.000	
		[0.001]	
Serious Crimes per 100,000 Pop 1991			-0.000
			[0.000]
Constant	0.405***	0.486***	0.451***
	[0.140]	[0.127]	[0.132]
Observations	215	215	215
R-squared	0.38	0.42	0.39

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B42: Government Expenditures, Log Change in City Population, 1990-2000

	(1)	(2)	(3)
Log of 1990 Population	0.027***	0.026***	0.021***
	[0.005]	[0.006]	[0.005]
Log Change in Land Area 1990-2000	0.460***	0.429***	0.484***
	[0.078]	[0.080]	[0.080]
Unemployment Rate 1990	-0.014***	-0.015***	-0.016***
	[0.002]	[0.002]	[0.002]
Dummy = 1 for Midwest Region	0.002	-0.009	0.014
	[0.013]	[0.015]	[0.012]
Dummy = 1 for South Region	0.017	0.011	0.016
	[0.013]	[0.014]	[0.012]
Dummy = 1 for West Region	0.106***	0.097***	0.108***
	[0.019]	[0.021]	[0.018]
General Expenditures per Capita 1990-91	-0.000***	-0.000	
	[0.000]	[0.000]	
% General Expenditures for Education 1990-91		0.000	
		[0.001]	
% General Expenditures for Public Welfare 1990-91		0.002	
		[0.002]	
% General Expenditures for Health & Hospitals 1990-91		0.002***	
		[0.001]	
% General Expenditures for Police 1990-91		0.002	0.002*
		[0.002]	[0.001]
% General Expenditures for Highways 1990-91		0.002*	
		[0.001]	
% General Expenditures for Sewage & Waste 1990-91		0.001*	
		[0.001]	
Serious Crimes per 100,000 Pop 1991			0.000**
			[0.000]
Constant	-0.196***	-0.245***	-0.191***
	[0.058]	[0.065]	[0.055]
Observations	215	215	215
R-squared	0.61	0.63	0.62

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B43: Government Expenditures, Log Change in MSA per Capita Income, 1990-2000

	(1)	(2)	(3)	(4)
Income per Capita 1989	-0.000***	-0.000***	-0.000***	-0.000***
	[0.000]	[0.000]	[0.000]	[0.000]
Quadratic: Income per Capita Squared	0.000***	0.000***	0.000**	0.000**
	[0.000]	[0.000]	[0.000]	[0.000]
% Adults w/ BA or higher 1990	0.201**	0.146*	0.180**	0.226***
	[0.077]	[0.084]	[0.079]	[0.078]
% Employed in Manufacturing	0.130**	0.119**	0.131**	0.133**
	[0.053]	[0.057]	[0.056]	[0.053]
Civilian unemployment rate 1991	-0.008***	-0.007***	-0.007***	-0.008***
	[0.002]	[0.002]	[0.002]	[0.002]
Dummy = 1 for Midwest Region	0.051***	0.050***	0.053***	0.055***
	[0.008]	[0.008]	[0.007]	[0.008]
Dummy = 1 for South Region	0.037***	0.037***	0.039***	0.043***
	[0.007]	[0.007]	[0.008]	[0.008]
Dummy = 1 for West Region	0.051***	0.053***	0.055***	0.059***
	[0.011]	[0.011]	[0.010]	[0.011]
Dummy = 1 for California	-0.059***	-0.060***	-0.057***	-0.055***
	[0.018]	[0.018]	[0.019]	[0.018]
General Expenditures per Capita 1990-91 [city]	-0.000	-0.000		
	[0.000]	[0.000]		
% General Expenditures for Education 1990-91 [city]		-0.000		
		[0.000]		
% General Expenditures for Public Welfare 1990-91 [city]		-0.000		
		[0.001]		
% General Expenditures for Health & Hospitals 1990-91 [city]		0.001*		
		[0.000]		
% General Expenditures for Police 1990-91 [city]		-0.001	-0.001	
		[0.001]	[0.001]	
% General Expenditures for Highways 1990-91 [city]		-0.000		
		[0.001]		
% General Expenditures for Sewage & Waste 1990-91 [city]		-0.000		
		[0.000]		
Serious Crimes per 100,000 Pop 1991 [city]			-0.000	
			[0.000]	
1990 City Pop as % Highest Pop 1950-1990				-0.039*
				[0.021]
Constant	0.523***	0.548***	0.511***	0.527***
	[0.120]	[0.108]	[0.124]	[0.127]
Observations	212	212	212	214
R-squared	0.53	0.56	0.54	0.54

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B44: Government Expenditures, Log Change in MSA Average Wage per Job, 1990-2000

	(1)	(2)	(3)	(4)
Avg Wage per Job 1990	-0.000***	-0.000**	-0.000***	-0.000**
	[0.000]	[0.000]	[0.000]	[0.000]
Quadratic: Avg Wage per Job Squared	0.000***	0.000**	0.000***	0.000***
	[0.000]	[0.000]	[0.000]	[0.000]
Log of 1990 Population [msa]	0.010**	0.012**	0.010**	0.014**
	[0.005]	[0.005]	[0.005]	[0.006]
MSA % w BA or higher 1990	0.449***	0.461***	0.442***	0.430***
	[0.156]	[0.155]	[0.157]	[0.154]
% Employed in Manufacturing	0.269***	0.259***	0.285***	0.276***
	[0.076]	[0.078]	[0.081]	[0.084]
Civilian unemployment rate 1991	-0.006***	-0.006***	-0.007***	-0.006**
	[0.002]	[0.002]	[0.002]	[0.002]
Log Change in Population 1980-1990	0.093**	0.087*	0.094*	0.057
	[0.043]	[0.049]	[0.048]	[0.050]
Dummy = 1 for Midwest Region	0.006	0.001	0.008	0.000
	[0.012]	[0.014]	[0.013]	[0.013]
Dummy = 1 for South Region	0.009	0.007	0.012	-0.001
	[0.012]	[0.013]	[0.013]	[0.014]
Dummy = 1 for West Region	0.059***	0.055***	0.061***	0.050***
	[0.017]	[0.018]	[0.017]	[0.017]
Dummy = 1 for California	-0.035	-0.032	-0.036	-0.032
	[0.026]	[0.026]	[0.027]	[0.026]
General Expenditures per Capita 1990-91 [city]	-0.000*	-0.000**		
	[0.000]	[0.000]		
% General Expenditures for Education 1990-91 [city]		0.000		
		[0.000]		
% General Expenditures for Public Welfare 1990-91 [city]		0.003		
		[0.002]		
% General Expenditures for Health & Hospitals 1990-91 [city]		0.000		
		[0.000]		
% General Expenditures for Police 1990-91 [city]		-0.000	0.001	
		[0.001]	[0.001]	
% General Expenditures for Highways 1990-91 [city]		0.001		
		[0.001]		
% General Expenditures for Sewage & Waste 1990-91 [city]		0.000		
		[0.001]		
Serious Crimes per 100,000 Pop 1991 [city]			-0.000	
			[0.000]	
1990 City Pop as % Highest Pop 1950-1990				0.074**
				[0.036]
Constant	0.486**	0.352	0.454*	0.321
	[0.234]	[0.292]	[0.242]	[0.263]
Observations	210	210	210	212
R-squared	0.61	0.62	0.61	0.61

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B45: Weather, Log Change in City per Capita Income, 1990-2000

	(1)	(2)	(3)
Income per Capita 1989	-0.000***	-0.000***	-0.000***
	[0.000]	[0.000]	[0.000]
Quadratic: per Capita Income Squared	0.000**	0.000***	0.000**
	[0.000]	[0.000]	[0.000]
% Adults w/ BA or Higher 1990	0.002***	0.002***	0.002***
	[0.001]	[0.001]	[0.001]
Log Change in Land Area 1990-2000	0.074	0.104*	0.105*
	[0.051]	[0.056]	[0.057]
Dummy = 1 for Midwest Region	0.091***	0.089***	0.089***
	[0.012]	[0.012]	[0.012]
Dummy = 1 for South Region	0.090***	0.092***	0.092***
	[0.015]	[0.015]	[0.015]
Dummy = 1 for West Region	0.084***	0.080***	0.080***
	[0.016]	[0.016]	[0.017]
Dummy = 1 for California	-0.066***	-0.067***	-0.067***
	[0.020]	[0.020]	[0.023]
Avg July Temp, 1961-1990	-0.003***	-0.004***	-0.004***
	[0.001]	[0.001]	[0.001]
Avg Annual Precipitation, 1961-1990	0.001*	0.001**	0.001**
	[0.000]	[0.000]	[0.000]
Log of 1990 Population		0.007*	0.007*
		[0.004]	[0.004]
Log Change in Population 1980-90			-0.001
			[0.045]
Constant	0.579***	0.548***	0.547***
	[0.146]	[0.142]	[0.144]
Observations	215	215	215
R-squared	0.42	0.43	0.43

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B46: Weather, Log Change in City Population, 1990-2000

	(1)	(2)	(3)
Weather: College vs Non-College Pop	Log Change in population 1990-2000	Log Change in College+ Adult Pop 1990-2000	Log Change in Non-College Grad Adult Pop 1990-2000
Log of 1990	0.018***	0.035***	0.008
Population	[0.005]	[0.007]	[0.005]
Log Change in Land	0.422***	0.446***	0.475***
Area 1990-2000	[0.075]	[0.101]	[0.079]
Unemployment Rate	-0.014***	-0.017***	-0.008***
1990	[0.002]	[0.002]	[0.002]
Dummy = 1 for	0.007	0.071***	-0.004
Midwest Region	[0.013]	[0.026]	[0.013]
Dummy = 1 for	0.003	0.072***	-0.008
South Region	[0.018]	[0.027]	[0.019]
Dummy = 1 for West	0.113***	0.120***	0.093***
Region	[0.019]	[0.031]	[0.021]
Avg July Temp,	0.004***	-0.003*	0.005***
1961-1990	[0.001]	[0.002]	[0.002]
Avg Annual	-0.001	0.001	-0.001*
Precipitation, 1961-1990	[0.001]	[0.001]	[0.001]
Constant	-0.352***	-0.001	-0.383***
	[0.108]	[0.135]	[0.120]
Observations	215	215	215
R-squared	0.62	0.43	0.54

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B47: Weather, Log Change in MSA per Capita Income, 1990-2000

	(1)	(2)	(3)
Income per Capita 1989	-0.000***	-0.000***	-0.000***
	[0.000]	[0.000]	[0.000]
Quadratic: Income per Capita Squared	0.000***	0.000***	0.000***
	[0.000]	[0.000]	[0.000]
% Adults w/ BA or higher 1990	0.227***	0.230***	0.238***
	[0.075]	[0.075]	[0.075]
% Employed in Manufacturing	0.096*	0.096*	0.097*
	[0.054]	[0.054]	[0.054]
Civilian unemployment rate 1991	-0.007***	-0.007***	-0.007***
	[0.002]	[0.002]	[0.002]
Dummy = 1 for Midwest Region	0.058***	0.059***	0.058***
	[0.007]	[0.007]	[0.007]
Dummy = 1 for South Region	0.051***	0.052***	0.051***
	[0.009]	[0.009]	[0.009]
Dummy = 1 for West Region	0.056***	0.056***	0.055***
	[0.012]	[0.012]	[0.013]
Dummy = 1 for California	-0.056***	-0.057***	-0.056***
	[0.018]	[0.018]	[0.018]
Avg July Temp, 1961-1990 [city]	-0.002***	-0.003***	-0.002***
	[0.001]	[0.001]	[0.001]
Avg Annual Precipitation, 1961-1990	0.001	0.001	0.000
[city]	[0.000]	[0.000]	[0.000]
Log of 1990 Population		0.002	0.002
		[0.003]	[0.003]
Log Change in Population 1980-1990			-0.007
			[0.038]
Constant	0.680***	0.679***	0.669***
	[0.127]	[0.128]	[0.131]
Observations	212	212	211
R-squared	0.58	0.58	0.58

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B48: Weather, Log Change in MSA Average Wage per Job, 1990-2000

	(1)	(2)	(3)
Avg Wage per Job 1990	-0.000**	-0.000***	-0.000***
	[0.000]	[0.000]	[0.000]
Quadratic: Avg Wage per Job Squared	0.000***	0.000***	0.000***
	[0.000]	[0.000]	[0.000]
MSA % w BA or higher 1990	0.480***	0.487***	0.403***
	[0.145]	[0.145]	[0.155]
% Employed in Manufacturing	0.253***	0.274***	0.272***
	[0.083]	[0.084]	[0.087]
Civilian unemployment rate 1991	-0.007***	-0.006**	-0.006***
	[0.002]	[0.002]	[0.002]
Dummy = 1 for Midwest Region	0.011	0.012	0.014
	[0.013]	[0.013]	[0.013]
Dummy = 1 for South Region	0.022	0.023	0.022
	[0.015]	[0.014]	[0.014]
Dummy = 1 for West Region	0.074***	0.069***	0.060***
	[0.018]	[0.017]	[0.019]
Dummy = 1 for California	-0.017	-0.023	-0.036
	[0.023]	[0.024]	[0.025]
Avg July Temp, 1961-1990 [city]	-0.000	-0.001	-0.002*
	[0.001]	[0.001]	[0.001]
Avg Annual Precipitation, 1961-1990	0.000	-0.000	0.000
[city]	[0.000]	[0.000]	[0.000]
Log of 1990 Population		0.014***	0.011**
		[0.005]	[0.005]
Log Change in Population 1980-1990			0.115***
			[0.043]
Constant	0.413*	0.464*	0.611**
	[0.236]	[0.246]	[0.258]
Observations	211	211	210
R-squared	0.58	0.60	0.61

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table B49: Sample MSAs and Central Cities

MSA Name	Central City
Abilene, TX	ABILENE
Akron, OH (PMSA)	AKRON
Albany, GA	ALBANY
Albany--Schenectady--Troy, NY	ALBANY
Albuquerque, NM	ALBUQUERQUE
Alexandria, LA	ALEXANDRIA
Allentown--Bethlehem--Easton, PA	ALLENTOWN
Altoona, PA	ALTOONA
Ann Arbor, MI (PMSA)	ANN ARBOR
Anniston, AL	ANNISTON
Asheville, NC	ASHEVILLE
Athens, GA	ATHENS
Atlanta, GA	ATLANTA
Atlantic--Cape May, NJ (PMSA)	ATLANTIC CITY
Augusta—Aiken, GA--SC	AUGUSTA
Austin--San Marcos, TX	AUSTIN
Bakersfield, CA	BAKERSFIELD
Baltimore, MD (PMSA)	BALTIMORE
Bangor, ME	BANGOR
Baton Rouge, LA	BATON ROUGE
Beaumont--Port Arthur, TX	BEAUMONT
Bellingham, WA	BELLINGHAM
Billings, MT	BILLINGS
Biloxi--Gulfport--Pascagoula, MS	BILOXI
Binghamton, NY	BINGHAMTON
Birmingham, AL	BIRMINGHAM
Bismarck, ND	BISMARCK
Bloomington, IN	BLOOMINGTON
Bloomington--Normal, IL	BLOOMINGTON
Boise City, ID	BOISE CITY
Boston, MA--NH (PMSA)	BOSTON
Boulder—Longmont, CO (PMSA)	BOULDER
Bremerton, WA (PMSA)	BREMERTON
Brownsville--Harlingen--San Benito, TX	BROWNSVILLE
Bryan--College Station, TX	BRYAN
Buffalo--Niagara Falls, NY	BUFFALO
Burlington, VT	BURLINGTON
Canton--Massillon, OH	CANTON
Casper, WY	CASPER
Cedar Rapids, IA	CEDAR RAPIDS
Champaign--Urbana, IL	CHAMPAIGN
Charleston, WV	CHARLESTON
Charlotte--Gastonia--Rock Hill, NC--SC	CHARLOTTE
Charlottesville, VA	CHARLOTTESVILLE
Chattanooga, TN--GA	CHATTANOOGA
Chicago, IL (PMSA)	CHICAGO
Cincinnati, OH--KY--IN (PMSA)	CINCINNATI
Cleveland--Lorain--Elyria, OH (PMSA)	CLEVELAND
Colorado Springs, CO	COLORADO SPRINGS

MSA Name	Central City
Columbia, MO	COLUMBIA
Columbia, SC	COLUMBIA
Columbus, OH	COLUMBUS
Corpus Christi, TX	CORPUS CHRISTI
Cumberland, MD--WV	CUMBERLAND
Dallas, TX (PMSA)	DALLAS
Danville, VA	DANVILLE
Davenport--Moline--Rock Island, IA--IL	DAVENPORT
Dayton--Springfield, OH	DAYTON
Daytona Beach, FL	DAYTONA BEACH
Decatur, IL	DECATUR
Denver, CO (PMSA)	DENVER
Des Moines, IA	DES MOINES
Detroit, MI (PMSA)	DETROIT
Dothan, AL	DOTHAN
Dubuque, IA	DUBUQUE
Duluth--Superior, MN--WI	DULUTH
Eau Claire, WI	EAU CLAIRE
El Paso, TX	EL PASO
Elkhart--Goshen, IN	ELKHART
Elmira, NY	ELMIRA
Enid, OK	ENID
Erie, PA	ERIE
Eugene--Springfield, OR	EUGENE
Evansville--Henderson, IN--KY	EVANSVILLE
Fargo—Moorhead, ND--MN	FARGO
Fayetteville, NC	FAYETTEVILLE
Flint, MI (PMSA)	FLINT
Florence, AL	FLORENCE
Fort Collins--Loveland, CO	FORT COLLINS
Fort Lauderdale, FL (PMSA)	FORT LAUDERDALE
Fort Pierce--Port St. Lucie, FL	FORT PIERCE
Fort Smith, AR--OK	FORT SMITH
Fort Wayne, IN	FORT WAYNE
Fort Worth--Arlington, TX (PMSA)	FORT WORTH
Fresno, CA	FRESNO
Gadsden, AL	GADSDEN
Gainesville, FL	GAINESVILLE
Galveston—Texas City, TX (PMSA)	GALVESTON
Gary, IN (PMSA)	GARY
Grand Forks, ND--MN	GRAND FORKS
Grand Rapids--Muskegon--Holland, MI	GRAND RAPIDS
Great Falls, MT	GREAT FALLS
Greeley, CO (PMSA)	GREELEY
Green Bay, WI	GREEN BAY
Greensboro--Winston-Salem--High Point, NC	GREENSBORO
Greenville--Spartanburg--Anderson, SC	GREENVILLE
Hagerstown, MD (PMSA)	HAGERSTOWN
Hamilton--Middletown, OH (PMSA)	HAMILTON
Harrisburg--Lebanon--Carlisle, PA	HARRISBURG
Hartford, CT	HARTFORD
Houston, TX (PMSA)	HOUSTON
Huntington--Ashland, WV--KY--OH	HUNTINGTON

MSA Name	Central City
Indianapolis, IN	INDIANAPOLIS
Iowa City, IA	IOWA CITY
Jackson, MI	JACKSON
Jackson, MS	JACKSON
Jacksonville, FL	JACKSONVILLE
Janesville--Beloit, WI	JANESVILLE
Jersey City, NJ (PMSA)	JERSEY CITY
Johnson City--Kingsport--Bristol, TN--VA	JOHNSON CITY
Johnstown, PA	JOHNSTOWN
Joplin, MO	JOPLIN
Kankakee, IL (PMSA)	KANKAKEE
Kansas City, MO--KS	KANSAS CITY
Kenosha, WI (PMSA)	KENOSHA
Knoxville, TN	KNOXVILLE
Kokomo, IN	KOKOMO
La Crosse, WI--MN	LA CROSSE
Lafayette, IN	LAFAYETTE
Lafayette, LA	LAFAYETTE
Lake Charles, LA	LAKE CHARLES
Lancaster, PA	LANCASTER
Lansing--East Lansing, MI	LANSING
Laredo, TX	LAREDO
Las Cruces, NM	LAS CRUCES
Las Vegas, NV--AZ	LAS VEGAS
Lawrence, KS	LAWRENCE
Lawton, OK	LAWTON
Lewiston--Auburn, ME	LEWISTON
Lexington, KY	LEXINGTON
Lima, OH	LIMA
Lincoln, NE	LINCOLN
Little Rock--North Little Rock, AR	LITTLE ROCK
Longview--Marshall, TX	LONGVIEW
Los Angeles--Long Beach, CA (PMSA)	LOS ANGELES
Louisville, KY--IN	LOUISVILLE
Lubbock, TX	LUBBOCK
Lynchburg, VA	LYNCHBURG
Macon, GA	MACON
Madison, WI	MADISON
Mansfield, OH	MANSFIELD
McAllen--Edinburg--Mission, TX	MC ALLEN
Memphis, TN--AR--MS	MEMPHIS
Miami, FL (PMSA)	MIAMI
Milwaukee--Waukesha, WI (PMSA)	MILWAUKEE
Minneapolis--St. Paul, MN--WI	MINNEAPOLIS
Mobile, AL	MOBILE
Modesto, CA	MODESTO
Monroe, LA	MONROE
Montgomery, AL	MONTGOMERY
Muncie, IN	MUNCIE
Nashville, TN	NASHVILLE-DAVIDSON
New Haven--Meriden, CT (PMSA)	NEW HAVEN
New London--Norwich, CT--RI	NEW LONDON

MSA Name	Central City
New Orleans, LA	NEW ORLEANS
New York, NY (PMSA)	NEW YORK CITY
Newark, NJ (PMSA)	NEWARK
Norfolk--Virginia Beach--Newport News, VA--NC	NORFOLK
Oakland, CA (PMSA)	OAKLAND
Odessa--Midland, TX	ODESSA
Oklahoma City, OK	OKLAHOMA CITY
Omaha, NE--IA	OMAHA
Orlando, FL	ORLANDO
Owensboro, KY	OWENSBORO
Panama City, FL	PANAMA CITY
Parkersburg--Marietta, WV--OH	PARKERSBURG
Pensacola, FL	PENSACOLA
Peoria--Pekin, IL	PEORIA
Philadelphia, PA--NJ (PMSA)	PHILADELPHIA
Phoenix--Mesa, AZ	PHOENIX
Pine Bluff, AR	PINE BLUFF
Pittsburgh, PA	PITTSBURGH
Pittsfield, MA	PITTSFIELD
Portland, ME	PORTLAND
Portland--Vancouver, OR--WA (PMSA)	PORTLAND
Providence--Fall River--Warwick, RI--MA	PROVIDENCE
Provo--Orem, UT	PROVO
Pueblo, CO	PUEBLO
Racine, WI (PMSA)	RACINE
Raleigh--Durham--Chapel Hill, NC	RALEIGH
Reading, PA	READING
Reno, NV	RENO
Richmond--Petersburg, VA	RICHMOND
Riverside--San Bernardino, CA (PMSA)	RIVERSIDE
Roanoke, VA	ROANOKE
Rochester, MN	ROCHESTER
Rochester, NY	ROCHESTER
Rockford, IL	ROCKFORD
Sacramento, CA (PMSA)	SACRAMENTO
Saginaw--Bay City--Midland, MI	SAGINAW
Salem, OR (PMSA)	SALEM
Salinas, CA	SALINAS
Salt Lake City--Ogden, UT	SALT LAKE CITY
San Angelo, TX	SAN ANGELO
San Antonio, TX	SAN ANTONIO
San Diego, CA	SAN DIEGO
San Francisco, CA (PMSA)	SAN FRANCISCO
San Jose, CA (PMSA)	SAN JOSE
Santa Barbara--Santa Maria--Lompoc, CA	SANTA BARBARA
Santa Cruz--Watsonville, CA (PMSA)	SANTA CRUZ
Santa Rosa, CA (PMSA)	SANTA ROSA
Sarasota--Bradenton, FL	SARASOTA
Savannah, GA	SAVANNAH
Scranton--Wilkes-Barre--Hazleton, PA	SCRANTON
Seattle--Bellevue--Everett, WA (PMSA)	SEATTLE
Sheboygan, WI	SHEBOYGAN

MSA Name	Central City
Shreveport—Bossier City, LA	SHREVEPORT
Sioux City, IA--NE	SIOUX CITY
Sioux Falls, SD	SIOUX FALLS
South Bend, IN	SOUTH BEND
Spokane, WA	SPOKANE
Springfield, IL	SPRINGFIELD
Springfield, MA	SPRINGFIELD
Springfield, MO	SPRINGFIELD
St. Cloud, MN	ST CLOUD
St. Joseph, MO	ST JOSEPH
St. Louis, MO—IL	ST LOUIS
Steubenville--Weirton, OH—WV	STEUBENVILLE
Stockton--Lodi, CA	STOCKTON
Syracuse, NY	SYRACUSE
Tacoma, WA (PMSA)	TACOMA
Tallahassee, FL	TALLAHASSEE
Tampa--St. Petersburg--Clearwater, FL	TAMPA
Terre Haute, IN	TERRE HAUTE
Texarkana, TX--Texarkana, AR	TEXARKANA
Toledo, OH	TOLEDO
Topeka, KS	TOPEKA
Trenton, NJ (PMSA)	TRENTON
Tucson, AZ	TUSCON
Tulsa, OK	TULSA
Tuscaloosa, AL	TUSCALOOSA
Tyler, TX	TYLER
Utica--Rome, NY	UTICA
Vallejo--Fairfield--Napa, CA (PMSA)	VALLEJO
Victoria, TX	VICTORIA
Vineland--Millville--Bridgeton, NJ (PMSA)	VINELAND
Waco, TX	WACO
Washington, DC--MD--VA—WV (PMSA)	WASHINGTON DC
Waterloo--Cedar Falls, IA	WATERLOO
Wausau, WI	WAUSAU
West Palm Beach--Boca Raton, FL	WEST PALM BEACH
Wheeling, WV--OH	WHEELING
Wichita Falls, TX	WICHITA FALLS
Wichita, KS	WICHITA
Williamsport, PA	WILLIAMSPORT
Wilmington, NC	WILMINGTON
Wilmington--Newark, DE--MD (PMSA)	WILMINGTON
Yakima, WA	YAKIMA
York, PA	YORK
Youngstown--Warren, OH	YOUNGSTOWN

Table B50: Variables, Data Sources, and Summary Statistics (City)

Variable	Data Source	Mean	Median	S.D.	Max	Min	N
% Adults w/ Associate Degree, 1990	Census	0.059	0.056	0.017	0.125	0.025	248
% Adults w/ Some College, No Degree, 1990	Census	0.191	0.190	0.039	0.322	0.084	248
% Adults w/ BA or Higher	Census	21.262	19.6	8.82	64.2	7.2	248
% Adults w/ Bachelor's Degree, 1990	Census	0.135	0.128	0.049	0.328	0.046	248
% Adults w/ High School Degree, 1990	Census	0.280	0.275	0.061	0.481	0.098	248
% Adults with Graduate or Professional Degree, 1990	Census	0.07	0.068	0.044	0.360	0.024	248
% Employed in Manufacturing	Census	0.151	0.141	0.068	0.435	0.036	248
% General Expenditures for Education 1990-91	City/County Data Book	4.572	0	12.753	55.3	0	246
% General Expenditures for Health & Hospitals 1990-91	City/County Data Book	3.237	0.8	8.856	76.3	0	246
% General Expenditures for Highways 1990-91	City/County Data Book	9.761	8.65	5.778	34.1	0.7	246
% General Expenditures for Police 1990-91	City/County Data Book	13.529	13.25	4.803	28.5	3.8	246
% General Expenditures for Public Welfare 1990-91	City/County Data Book	1.026	0	2.583	19.4	0	246
% General Expenditures for Sewage & Waste 1990-91	City/County Data Book	14.139	13.5	7.715	45.8	0.1	246
% Unemployed	Census	7.769	7.3	2.685	19.7	3	248
Administrative Support including Clerical Occupations as % Employed Workers 1990	Census	0.165	0.162	0.023	0.237	0.117	250
Art Score, 1997	Places Rated Almanac	51.361	48.53	25.487	99.99	0.002	250
Average July Temperature, 1961-1990	City/County Data Book	76.086	75.7	5.599	93.5	59.1	246
Avg Annual Precipitation, 1961-1990	City/County Data Book	36.761	38.47	13.203	65.71	4.13	246
Black Segregation	Glaeser and Vigdor 2001	0.575	0.591	0.135	0.899	0.276	250
Log Change in Land Area 1990-2000		0.104	0.042	0.159	1.058	-0.065	248
Dummy = 1 for California		0.064	0	0.245	1	0	250
Dummy = 1 for Midwest Region		0.298	0	0.458	1	0	248
Dummy = 1 for South Region		0.383	0	0.487	1	0	248
Dummy = 1 for West Region		0.173	0	0.379	1	0	248
Education Score, 1997	Places Rated Almanac	54.839	58.04	27.032	99.75	0	249
Ethnic Fractionalization, 1990	Computed from Census data	0.381	0.416	0.177	0.717	0.033	248

Variable	Data Source	Mean	Median	S.D.	Max	Min	N
Executive, Managerial & Admin Occupations as % Employed Workers 1990	Census	0.110	0.110	0.021	0.172	0.061	250
Farming Occupations as % Employed Workers 1990	Census	0.012	0.009	0.013	0.159	0.002	250
General Expenditures per Capita 1990-91	City/County Data Book	1030.48	833	730.96	7154	297	246
Hi Tech Jobs as % of All Jobs, 1992	HUD, State of the Nation's Cities	0.077	0.076	0.010	0.12	0.052	95
Hispanic Segregation	Glaeser and Vigdor 2001	0.361	0.339	0.115	0.7	0.173	250
Index of Industry Fragmentation	Computed from REIS data	0.823	0.827	0.023	0.893	0.724	241
Log 1990 population		11.712	11.496	0.992	15.806	10.004	248
Log Change in Foreign Born Pop 1980-90		0.061	0.035	0.073	0.597	0.005	248
Log Change in Foreign Born Pop 1980-90		0.104	0.122	0.404	1.300	-1.181	248
Log Change in Native-Born Pop 1980-90		0.032	0.01	0.122	0.472	-0.242	248
Log Change in Per Capita Income 1990-2000		0.1	0.107	0.066	0.284	-0.123	248
Log Change in Population 1980-1990		0.046	0.022	0.131	0.504	-0.264	246
Log Change in Population 1990-2000		0.06	0.042	0.122	0.616	-0.163	248
Machine Operator Occupations as % Employed Workers 1990	Census	0.066	0.059	0.032	0.191	0.014	250
Material Handler & Laborer Occupations as % Employed Workers 1990	Census	0.041	0.040	0.011	0.079	0.014	250
Mean-Median Income Ratio 1990		1.334	1.325	0.103	1.777	1.138	248
Non-Household Service Occupations as % Employed Workers 1990	Census	0.158	0.154	0.03	0.43	0.109	250
Number of Specializations excluding Primary Production, 1992	Computed from State of the Nation's Cities	0.737	1	0.687	2	0	95
Per Capita Income 1990	Census	12657.47	12398.5	2111.55	19814	6284	248
Population % American Indian 1990	Census	0.006	0.003	0.007	0.046	0	248
Population % Asian/Pacific 1990	Census	0.023	0.011	0.035	0.287	0.001	248
Population % Black 1990	Census	0.191	0.136	0.175	0.801	0.000	248
Population % Hispanic 1990	Census	0.086	0.026	0.144	0.938	0.003	248
Population % Other Race 1990	Census	0.001	0.001	0.001	0.011	0	248
Population % White 1990	Census	0.693	0.722	0.205	0.983	0.057	248

Variable	Data Source	Mean	Median	S.D.	Max	Min	N
Population Aged 18-24, 1990 %	Census	0.133	0.114	0.054	0.452	0.081	248
Population Aged 25-34, 1990 %	Census	0.179	0.180	0.021	0.235	0.128	248
Population Aged 35-44, 1990 %	Census	0.140	0.140	0.015	0.183	0.05946	248
Population Aged 45-54, 1990 %	Census	0.089	0.089	0.010	0.109	0.045275	248
Population Aged 55-64, 1990 %	Census	0.080	0.080	0.013	0.114	0.038	248
Population Over 65, 1990 %	Census	0.134	0.132	0.033	0.252	0.065	248
Precision Production & Skilled Crafts Occupations as % Employed Workers 1990	Census	0.095	0.095	0.021	0.170	0.037	250
Production Jobs as % all Jobs 1990	Census	0.201	0.196	0.055	0.402	0.072	250
Professional Jobs as % all Jobs 1990	Census	0.301	0.293	0.060	0.553	0.167	250
Professional, Specialty and Technical Occupations as % Employed Workers, 1990	Census	0.190	0.180	0.045	0.414	0.083	250
Quadratic: 1990 Population Squared		3.86E+11	9.67E+09	3.52E+12	5.36E+13	4.90E+08	248
Quadratic: Per Capita Income 1990 Squared		1.65E+08	1.54E+08	5.64E+07	3.93E+08	3.95E+07	248
Ratio of % BA or Higher to % No High School Degree, 1990		1.105	0.757	1.289	11.6	0.175	248
Sales Occupations as % Employed Workers 1990	Census	0.121	0.122	0.018	0.188	0.067	250
Serious Crimes per 100,000 Pop	City/County Data Book	8661.398	8911	4287.612	37903	0	246
Transportation Equipment Operator Occupations as % Employed Workers 1990	Census	0.037	0.038	0.009	0.070	0.011	250

Table B51: Variables, Data Sources, and Summary Statistics (MSA)

Variable	Data source	Mean	Median	SD	Min	Max	N
% Adults w/ BA or higher 1990	Census	0.199	0.187	0.063	0.095	0.44	250
% Adults w/ Bachelor's Degree 1990	Census	0.130	0.125	0.038	0.06	0.257	250
% Adults w/ Graduate or Professional Degree 1990	Census	0.072	0.064	0.031	0.031	0.208	250
% Adults w/ High School Degree 1990	Census	0.308	0.305	0.058	0.165	0.488	250
% Employed in Manufacturing 1990	Census	0.143	0.138	0.066	0.024	0.441	248
1993 Export Sales as % 1990 total census income	Census, Census Bureau Exporter Series	0.132	0.068	0.337	0.004	4.502	206
Admin Support including Clerical Occupations as % Employed Workers 1990	Census	0.159	0.158	0.018	0.120	0.227	250
Advanced Consumer Services as % Total Earnings, 1990	Regional Economic Information System (REIS)	0.102	0.097	0.029	0.045	0.338	248
Avg Wage per Job 1990	REIS	21374.98	20867.5	2838.976	14981	33708	248
Black Segregation	Glaeser and Vigdor 2001	0.575	0.591	0.135	0.276	0.899	250
Civilian unemployment rate 1991	Census	6.523	6.199	2.111	1.8	17.6	248
Distribution as % Total Earnings, 1990	REIS	0.080	0.080	0.027	0.009	0.192	248
Dummy = 1 if MSA specialized in Advanced Consumer Services in 1990	REIS	0.149	0	0.357	0	1	248
Dummy = 1 if MSA specialized in Distribution in 1990	REIS	0.157	0	0.365	0	1	248
Dummy = 1 if MSA specialized in Financial Producer Services in 1990	REIS	0.153	0	0.361	0	1	248
Dummy = 1 if MSA specialized in Manufacturing in 1990	REIS	0.181	0	0.386	0	1	248
Dummy = 1 if MSA specialized in Other Producer Services in 1990	REIS	0.181	0	0.386	0	1	248
Ethnic Fractionalization, 1990	Computed from Census data	0.290	0.270	0.164	0.029	0.670	250
Exec Managerial & Admin Occupations as % Employed Workers 1990	Census	0.114	0.112	0.020	0.066	0.195	250
Farming Occupations as % Employed Workers 1990	Census	0.022	0.017	0.017	0.004	0.130	250
Financial Producer Services as % Total Earnings, 1990	REIS	0.053	0.046	0.027	0.022	0.245	248
Foreign Born as % Total Pop, 1990	Census	0.051	0.031	0.062	0.004	0.451	250
Gini Coefficient of Income Inequality, 1990	Saurav Dev Bhatta	0.413	0.411	0.023	0.361	0.488	248
Hispanic Segregation	Glaeser and Vigdor 2001	0.361	0.339	0.115	0.173	0.7	250

Variable	Data source	Mean	Median	SD	Min	Max	N
Log Change in Avg Wage per Job, 1990-2000		0.061	0.054	0.075	-0.119	0.541	248
Log Change in Foreign Born Pop 1980-90		0.144	0.144	0.352	-0.802	0.983	250
Log Change in Native-Born Pop 1980-90		0.080	0.068	0.111	-0.155	0.494	250
Log Change in Per Capita Income 1990-2000		0.123	0.127	0.052	-0.048	0.251	250
Log Change in Population 1980-1990		0.089	0.070	0.121	-0.160	0.508	249
Log of 1990 Population		12.754	12.554	1.057	10.946	15.997	250
Machine Operator Occupations as % Employed Workers 1990	Census	0.068	0.062	0.030	0.021	0.212	250
Manufacturing as % Total Earnings, 1990	REIS	0.204	0.193	0.104	0.022	0.572	248
Material Handler & Laborer Occupations as % Employed Workers 1990	Census	0.040	0.040	0.009	0.022	0.072	250
Non-Household Service Occupations as % Employed Workers 1990	Census	0.135	0.132	0.019	0.096	0.254	250
Number of Specializations (Excluding Government) 1990	REIS	0.915	1	0.833	0	3	248
Other Producer Services as % Total Earnings, 1990	REIS	0.089	0.081	0.035	0.032	0.234	248
Per Capita Income 1989	Census	13530.78	13267	2326.635	6630	22049	250
Population % American Indian 1990	Census	0.006	0.003	0.008	0	0.067	250
Population % Asian/Pacific 1990	Census	0.017	0.010	0.024	0.002	0.201	250
Population % Black 1990	Census	0.103	0.072	0.098	0.000	0.455	250
Population % Hispanic 1990	Census	0.073	0.019	0.138	0.002	0.939	250
Population % Other Race 1990	Census	0.001	0.001	0.001	1.88E-05	0.004	250
Population % White 1990	Census	0.800	0.844	0.158	0.057	0.985	250
Population Aged 18-24, 1990 %	Census	0.115	0.105	0.035	0.060	0.321	250
Population Aged 25-34, 1990 %	Census	0.172	0.172	0.016	0.122	0.215	250
Population Aged 35-44, 1990 %	Census	0.145	0.150	0.012	0.100	0.189	250
Population Aged 44-54, 1990 %	Census	0.100	0.101	0.009	0.064	0.126	250
Population Aged 55-64, 1990 %	Census	0.083	0.084	0.012	0.045	0.124	250
Population Over 65, 1990 %	Census	0.123	0.122	0.031	0.061	0.322	250
Precision Production & Skilled Crafts Occupations as % Employed Workers 1990	Census	0.115	0.112	0.019	0.063	0.171	250
Private Household Service Occupations as % Employed Workers 1990	Census	0.004	0.004	0.002	0.001	0.013	250
Production Jobs as % all Jobs 1990	Census	0.223	0.218	0.049	0.122	0.402	250
Professional Jobs as % all Jobs 1990	Census	0.293	0.289	0.046	0.185	0.450	250
Professional Specialty & Technical Occupations as % Employed Workers 1990	Census	0.179	0.174	0.033	0.114	0.308	250

Variable	Data source	Mean	Median	SD	Min	Max	N
Quadratic: Avg Wage per Job squared		4.65E+08	4.35E+08	1.31E+08	2.24E+08	1.14E+09	248
Quadratic: Per Capita Income 1989 Squared		1.88E+08	1.76E+08	6.69E+07	4.40E+07	4.86E+08	250
Sales Occupations as % Employed Workers 1990	Census	0.121	0.120	0.012	0.086	0.155	250
Sprawl: Centers Factor	Smart Growth America	99.722	100.9	23.874	40.9	148.6	77
Sprawl: Density Factor	Smart Growth America	99.525	93.6	25.528	71.2	242.5	77
Sprawl: Malpezzi Component 1 (pop adj.)	Malpezzi and Mayo	-62.350	-240.15	2035.071	-2567.3	22093.9	196
Sprawl: Malpezzi Component 3 (pop adj.)	Malpezzi and Mayo	-4.454	-1.54	132.199	-1207.65	311.76	196
Sprawl: Overall Index	Smart Growth America	100.025	99.1	24.770	14.7	177.3	77
Sprawl: Streets Factor	Smart Growth America	99.595	98	25.203	37.2	166.8	77
Total Goods Production and Distribution Sector as % Total Earnings, 1990	REIS	0.302	0.298	0.102	0.049	0.638	248
Total Information Sector as % Total Earnings, 1990	REIS	0.243	0.236	0.060	0.109	0.481	248
Transportation Equipment Operator Occupations as % Employed Workers 1990	Census	0.0417	0.041	0.009	0.020	0.070	250

APPENDIX C: POPULATION AND INCOME GROWTH (TOP 100 CITIES)

City Name	Per Capita Income Growth (1990-2000)		Population Growth (1990-2000)	
	Log Change	Rank	Log Change	Rank
Akron, OH	0.089	56	-0.027	83
Albuquerque, NM	0.106	47	0.154	26
Anaheim, CA	-0.144	100	0.208	11
Anchorage, AK	-0.039	93	0.140	32
Arlington, TX	0.031	80	0.241	9
Arlington, VA	0.093	53	0.103	39
Atlanta, GA	0.230	3	0.055	62
Aurora, CO	0.031	79	0.219	10
Austin, TX	0.232	2	0.344	3
Bakersfield, CA	-0.072	96	0.346	2
Baltimore, MD	0.055	71	-0.123	99
Baton Rouge, LA	0.108	43	0.037	72
Birmingham, AL	0.143	21	-0.091	93
Boston, MA	0.112	36	0.026	74
Buffalo, NY	0.069	66	-0.114	98
Charlotte, NC	0.176	7	0.312	5
Chicago, IL	0.155	12	0.040	69
Cincinnati, OH	0.172	8	-0.094	95
Cleveland, OH	0.141	25	-0.055	88
Colorado Springs, CO	0.164	9	0.250	8
Columbus, OH	0.149	19	0.117	37
Corpus Christi, TX	0.101	51	0.075	51
Dallas, TX	0.015	84	0.166	23
Dayton, OH	0.154	14	-0.091	94
Denver, CO	0.143	22	0.171	22
Des Moines, IA	0.058	70	0.028	73
Detroit, MI	0.151	18	-0.078	92
El Paso, TX	0.112	37	0.090	44
Fort Wayne, IN	0.082	61	0.173	21
Fort Worth, TX	0.064	67	0.178	19
Fremont, CA	0.154	15	0.160	25
Fresno, CA	-0.029	92	0.188	15
Garland, TX	-0.009	89	0.178	20
Glendale, CA	-0.080	97	0.080	49
Grand Rapids, MI	0.088	57	0.045	65
Greensboro, NC	0.092	54	0.199	13
Hialeah, FL	0.038	78	0.186	16
Honolulu, HI	-0.027	90	0.017	75
Houston, TX	0.051	73	0.181	18
Huntington Beach, CA	0.015	85	0.044	66
Indianapolis city, IN	0.109	41	0.067	58
Jackson, MS	0.045	76	-0.065	91
Jacksonville, FL	0.105	48	0.147	28

City Name	Per Capita Income Growth (1990-2000)		Population Growth (1990-2000)	
	Log Change	Rank	Log Change	Rank
Jersey City, NJ	0.104	50	0.049	64
Kansas City, MO	0.115	35	0.015	76
Las Vegas, NV	0.111	38	0.616	1
Lexington-Fayette, KY	0.142	23	0.145	29
Lincoln, NE	0.132	27	0.161	24
Little Rock, AR	0.124	34	0.041	68
Long Beach, CA	-0.096	98	0.072	53
Los Angeles, CA	-0.048	94	0.058	60
Louisville, KY	0.164	11	-0.049	85
Lubbock, TX	0.059	69	0.069	56
Madison, WI	0.147	20	0.084	47
Memphis, TN	0.131	28	0.063	59
Mesa, AZ	0.080	63	0.319	4
Miami, FL	0.142	24	0.011	78
Milwaukee, WI	0.084	60	-0.051	86
Minneapolis, MN	0.132	26	0.038	71
Mobile, AL	0.075	64	0.013	77
Montgomery, AL	0.126	30	0.074	52
Nashville-Davidson, TN	0.126	31	0.110	38
New Orleans, LA	0.124	33	-0.025	81
New York, NY	0.026	82	0.090	45
Newark, NJ	0.030	81	-0.006	80
Newport News, VA	0.046	75	0.058	61
Norfolk, VA	0.107	44	-0.108	97
Oakland, CA	0.109	40	0.071	54
Oklahoma City, OK	0.052	72	0.129	34
Omaha, NE	0.151	17	0.150	27
Philadelphia, PA	0.019	83	-0.044	84
Phoenix, AZ	0.049	74	0.295	6
Pittsburgh, PA	0.110	39	-0.100	96
Portland, OR	0.155	13	0.190	14
Raleigh, NC	0.104	49	0.283	7
Richmond, VA	0.081	62	-0.026	82
Riverside, CA	-0.065	95	0.119	36
Rochester, NY	-0.006	87	-0.053	87
Sacramento, CA	-0.008	88	0.097	41
San Antonio, TX	0.181	6	0.201	12
San Diego, CA	0.072	65	0.097	42
San Francisco, CA	0.270	1	0.070	55
San Jose, CA	0.164	10	0.135	33
Santa Ana, CA	-0.100	99	0.140	31
Seattle, WA	0.211	4	0.087	46
Shreveport, LA	0.128	29	0.008	79
Spokane, WA	0.107	46	0.099	40
St. Louis, MO	0.107	45	-0.130	100
St. Paul, MN	0.094	52	0.053	63
St. Petersburg, FL	0.108	42	0.039	70

City Name	Per Capita Income Growth (1990-2000)		Population Growth (1990-2000)	
	Log Change	Rank	Log Change	Rank
Stockton, CA	0.014	86	0.145	30
Tacoma, WA	0.151	16	0.091	43
Tampa, FL	0.210	5	0.080	48
Toledo, OH	0.087	58	-0.060	90
Tucson, AZ	0.085	59	0.183	17
Tulsa, OK	0.040	77	0.068	57
Virginia Beach, VA	0.091	55	0.079	50
Washington, DC	0.125	32	-0.059	89
Wichita, KS	0.060	68	0.124	35
Yonkers, NY	-0.028	91	0.042	67

NOTE: Log Change (used in the data and in the model for its technical properties; see Section I.C) roughly corresponds to percentage change. The ranks are the same for both measures.

APPENDIX D: TAXONOMY OF CITIES: MAPS AND DESCRIPTIONS OF EACH CLUSTER

Introduction

Following is a full description of the taxonomy output. Figure D.1 shows the complete heat map, with the 250 cities on top and the 47 variables used for the cluster analysis on the right hand side. The lines on the top and on the left indicate the clusters and sub clusters of cities and variables.

The appendix then presents the map of each cluster, along with a detailed description of its characteristics. The description is articulated in three parts: a brief paragraph with the "highlights" of the cluster; a more detailed summary description; and an abbreviated cell summary, which outlines the prevailing score for the cluster on each variable. In reading the descriptions, it is important to keep in mind that the clusters are never perfectly homogeneous. Therefore, it is possible that some cities will not be fairly portrayed by the overall description of the cluster.

With respect to the abbreviated cell summary, the score on each variable is coded as VH for very high (or bright red on the map), H for high, A for average, L for low, and VL for very low (or light green on the map). Since the taxonomy is based on ranks, terms like high and low should be interpreted as relative to the rest of the sample. Finally, some of the variable labels differ slightly from the ones used in the cluster maps. In particular, Other Producer Services refers to Business services, Industry Fragmentation refers to Business Diversity, Gini Coefficient refers to Income Inequality, and Pct Housing Units Built before 1939 refers to Age of Housing Stock. The omission of a variable from the summary indicates that the cluster did not exhibit a clear overall pattern with respect to that variable.

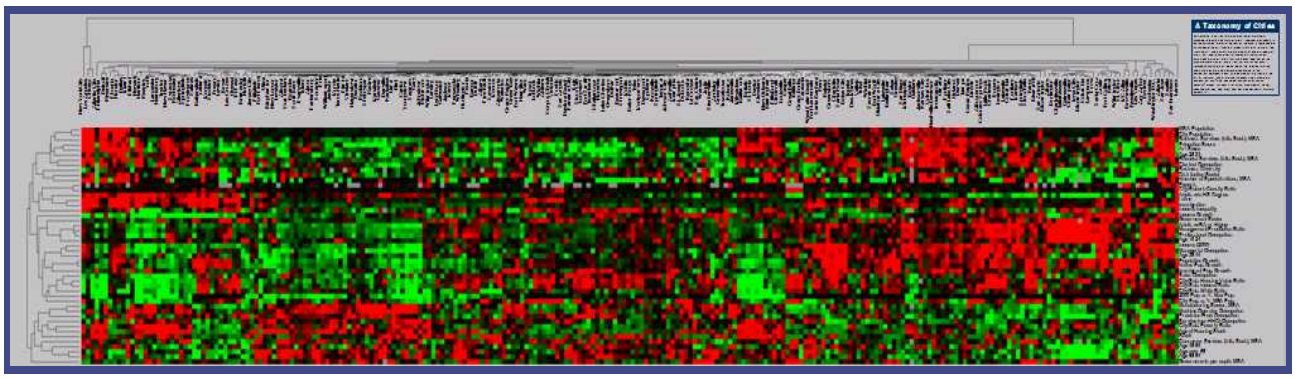
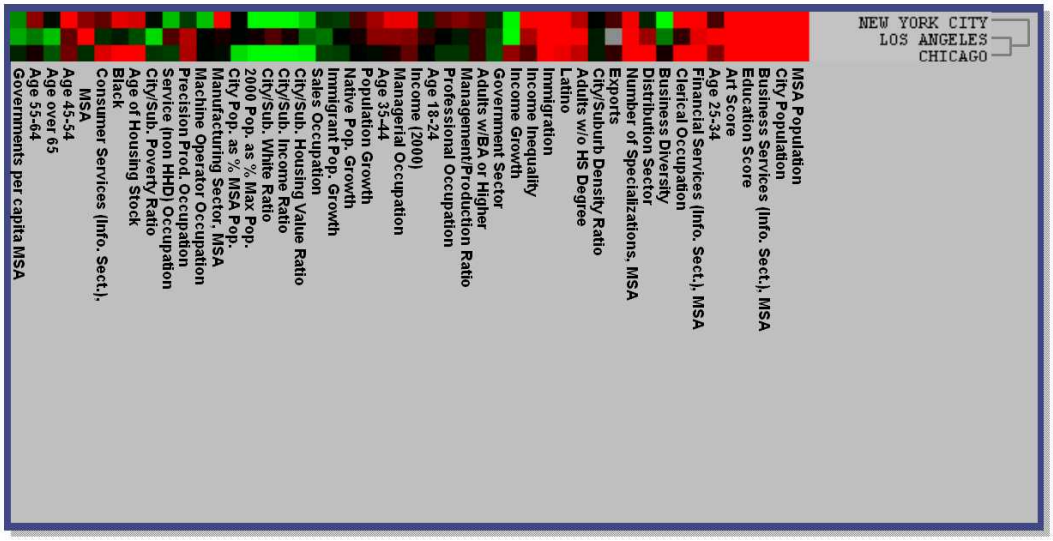


Figure D.1

Cluster 1: New York, Los Angeles, Chicago.

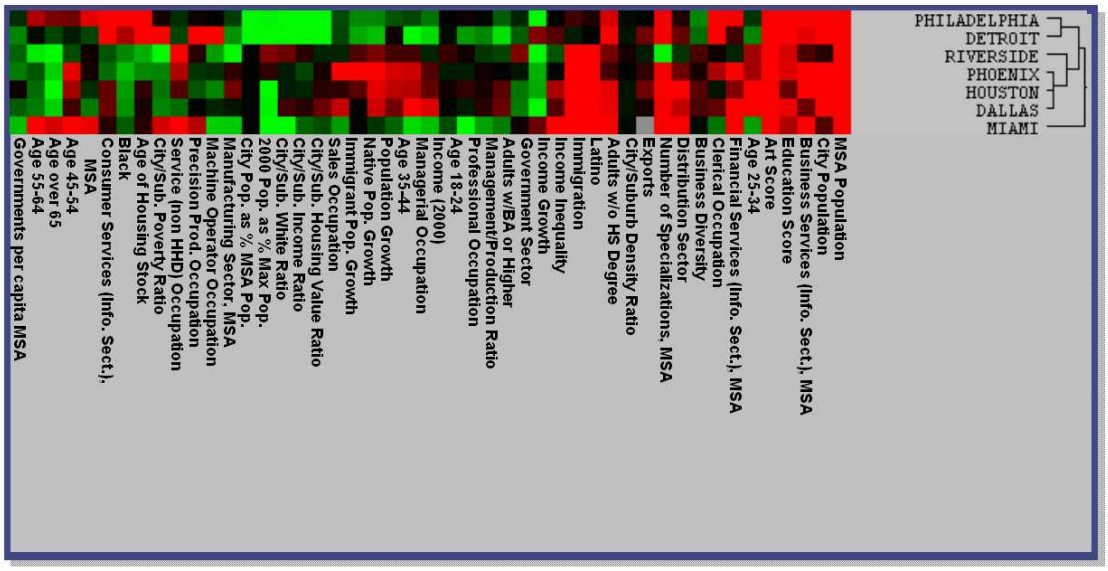


HIGHLIGHTS: These are the three largest cities in the country, and they are often referred to as "global cities," due to their ties to the global economy. All three cities are major cultural and financial centers, and preferred locations for corporate headquarters. They have a young and very diverse population, with many immigrants, Blacks and Latinos. A high percentage of people are employed in managerial and professional occupations. These cities are very wealthy, but also characterized by high levels of inequality: a high percentage of the population does not have a high school degree, and (with the exception of LA) there are stark differences in income level and housing values between the central city and the suburbs. All three cities had low population growth in the past decade. Chicago is the only city in this cluster that experienced high income growth in the 1990s.

SUMMARY DESCRIPTION: These are the three largest cities in the country, both in terms of city and MSA population. Most of the population is in the most productive age groups, from 25 to 55. There is a low percentage of people under 24 and over 55. These cities seem to be characterized by stark contrasts: very high in education and art score, but also very high in percentage of adults without high school degree, and low in percentage of adults with BAs or higher. Similarly, they have high per capita income in 2000 but also high levels of inequality. These inequalities are evident at the MSA level in the difference between city and suburbs income levels and housing values. All three cities have a very high percentage of foreign born population, and a high percentage of Latinos. These are highly specialized cities, with a very high percentage of management occupations, high concentration of financial services, advanced consumer services, and other producer services, very low in percentage sales occupation and low in precision production occupations and non HHD services. With the exception of Chicago, the cities in this cluster have experienced low population and very low income growth over the 1990s.

ABBREVIATED CELL SUMMARY: VH MSA population, VH City Population 2000, VH Other Producer Services, VH Education Score, VH Art Score, H Pct. Age 25-34, VH Financial Producer Services, H Clerical Occupations, L Industry Fragmentation, H Distribution Pct. Earnings, VH Number of Drennan Specializations, A Exports as pct income, L City suburb density ratio, VH Pct adults w/o HS degree, VH Pct Latino, VH Foreign born as pct total pop. H Gini coefficient, VL Log change in per capita income 1990-2000, L Govt pct earnings, L Pct adults with BA or higher, L Mgmt to production occ ratio, L Pct. professional occupation, L Pct age 18 to 24, H Per capita income 2000, H Pct managerial occupation, H Pct age 35 to 44, A Log change in pop 1990-2000, L Growth in native born pop 1990-2000, L Growth in foreign born pop 1990-2000, VL Pct sales occupations, VL City suburb house value ratio, VL City suburb income ratio, VL City suburb ratio pct white (except LA), A 2000 pop as pct max pop 1950-2000, H Pct machine operator occupation, L Pct precision production occupation, L Pct non HHD service occupation, H City suburb poverty ratio, H Pct housing units built before 1939, H Advanced consumer services, H Pct. age 45 to 54, L Pct age over 65, L Pct age 55 to 64, L Governments per capita (MSA).

CLUSTER 2: Philadelphia, Detroit, Riverside, Phoenix, Houston, Dallas, Miami.



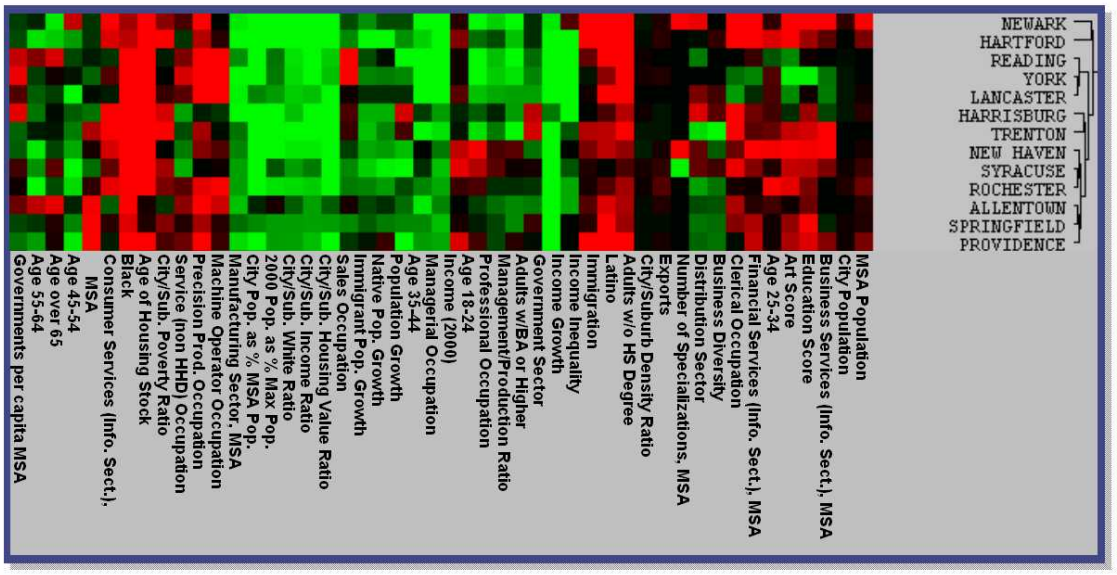
HIGHLIGHTS: This is a heterogeneous cluster, with no clear overarching theme, other than the fact that these are very large cities with high levels of immigration. These cities are thriving cultural centers, but their population is not highly educated. Still, a significant portion of their economy is composed of high-skill occupations such as financial and other producer services. With the exception of Miami and Detroit, these cities experienced very low income growth in the 1990s.

SUMMARY DESCRIPTION: These are very large cities, with high immigration and high percentage of Latinos. Cities in this cluster had low per capita income in 2000, and

high levels of inequality between suburbs and central city. Very high art and education score, but also high percentage of adults without high school degree and low percentage of adults with BA or higher. These cities generally have a high number of specializations, with a concentration of financial services and other producer services. In general, there are few managerial and professional occupations. On the other hand, there is a high percentage of distribution occupation, few sales, advanced consumer services, and manufacturing. Overall these cities experienced very low income growth over the 1990s.

ABBREVIATED CELL SUMMARY: VH MSA population, VH City population 2000, VH Other producer services, H Education score, H Art score, H Pct age 25-34, H Financial producer services, L Industry fragmentation, H Distribution pct earnings, VH Number of Drennan specializations, A Exports as pct income, A City suburb density ratio, H Pct adults w/o HS degree, VH Pct Latino, VH Foreign born as pct total pop, VL Log change in per capita income 1990-2000, L Govt pct earnings, L Pct adults with BA or higher, L Mgmt to production occ ratio, L Pct. professional occupation, A Pct age 18 to 24, L Per capita income 2000, L Pct sales occupations, L City suburb house value ratio , L City suburb income ratio , VL City suburb ratio pct white , A 2000 pop as pct mx pop 1950-2000, L City pop as pct MSA pop, L Manufacturing, L City suburb poverty ratio, L Pct housing units built before 1939, L Pct black, L Advanced consumer services, VL Pct age over 65, L Pct age 55 to 64, L Governments per capita (MSA).

CLUSTER 3: Newark, Hartford, Reading, York, Lancaster, Harrisburg, Trenton, New Haven, Syracuse, Rochester, Allentown, Springfield, Providence.

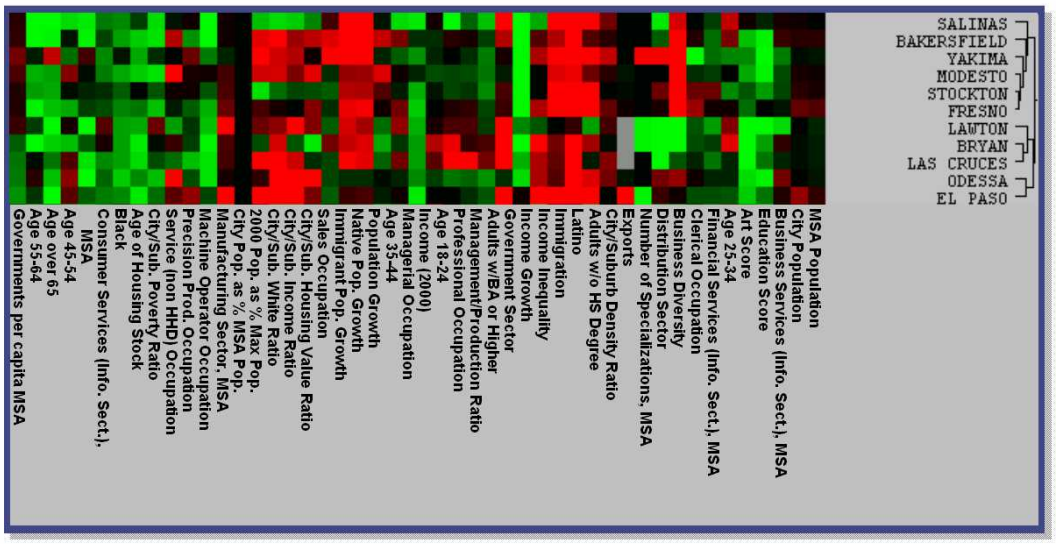


HIGHLIGHTS: These cities could be characterized as declining manufacturing centers. This cluster is composed of small cities with high levels of poverty, very low education, and high percentage of immigrants and minorities. The economy is centered on manufacturing and other low-skill jobs. At the MSA level, there are very big differences in income level and house values between the suburbs and the central city. These cities had extremely low income growth, and low population growth in the 1990s.

SUMMARY DESCRIPTION: Average-size, older cities, with very low per capita income in 2000. High art and education scores, but very high percentage of adults without high school degree and low percentage of adults with BAs. Many immigrants, Blacks and Latinos. Few managerial and professional occupations, lots of manufacturing, machine operator, clerical occupations, and non HHD services. Very few sales occupation. While the level of inequality is generally low, there are very big differences in income levels and house values between the suburbs and the central city. Vey high concentration of poverty in the inner city, and very high percentage of white population in the suburbs. These cities had extremely low income growth, and low population growth, between 1990 and 2000.

ABBREVIATED CELL SUMMARY: A MSA population, A City population 2000, H Education score, H Art score, H Pct. clerical occupation, L Industry fragmentation, L Distribution pct earnings, A Number of Drennan specializations, A Exports as pct income, A City suburb density ratio, VH Pct adults w/o HS degree, VH Pct Latino, H Foreign born as pct total pop, VL Gini coefficient, VL Log change in per capita income 1990-2000, L Govt pct earnings, L Pct adults with BA or higher, L Mgmt to production occ ratio, L Pct. professional occupation, A Pct age 18 to 24, VL Per capita income 2000, VL Pct managerial occupation, L Pct age 35 to 44, L Log change in pop 1990-2000, L Growth in native born pop 1990-2000, L Growth in foreign born pop 1990-2000, VL Pct sales occupations, VL City suburb house value ratio , VL City suburb income ratio , VL City suburb ratio pct white , VL 2000 pop as pct mx pop 1950-2000, VL City pop as pct MSA pop, H Manufacturing, H Pct machine operator occupation, H Pct non HHD service occupation, VH City suburb poverty ratio, VH Pct housing units built before 1939, H Pct black, L Pct. age 45 to 54, L Pct age over 65, L Pct age 55 to 64.

CLUSTER 4: Salinas, Bakersfield, Yakima, Modesto, Stockton, Fresno, Lawton, Bryan, Las Cruces, Odessa, El Paso.

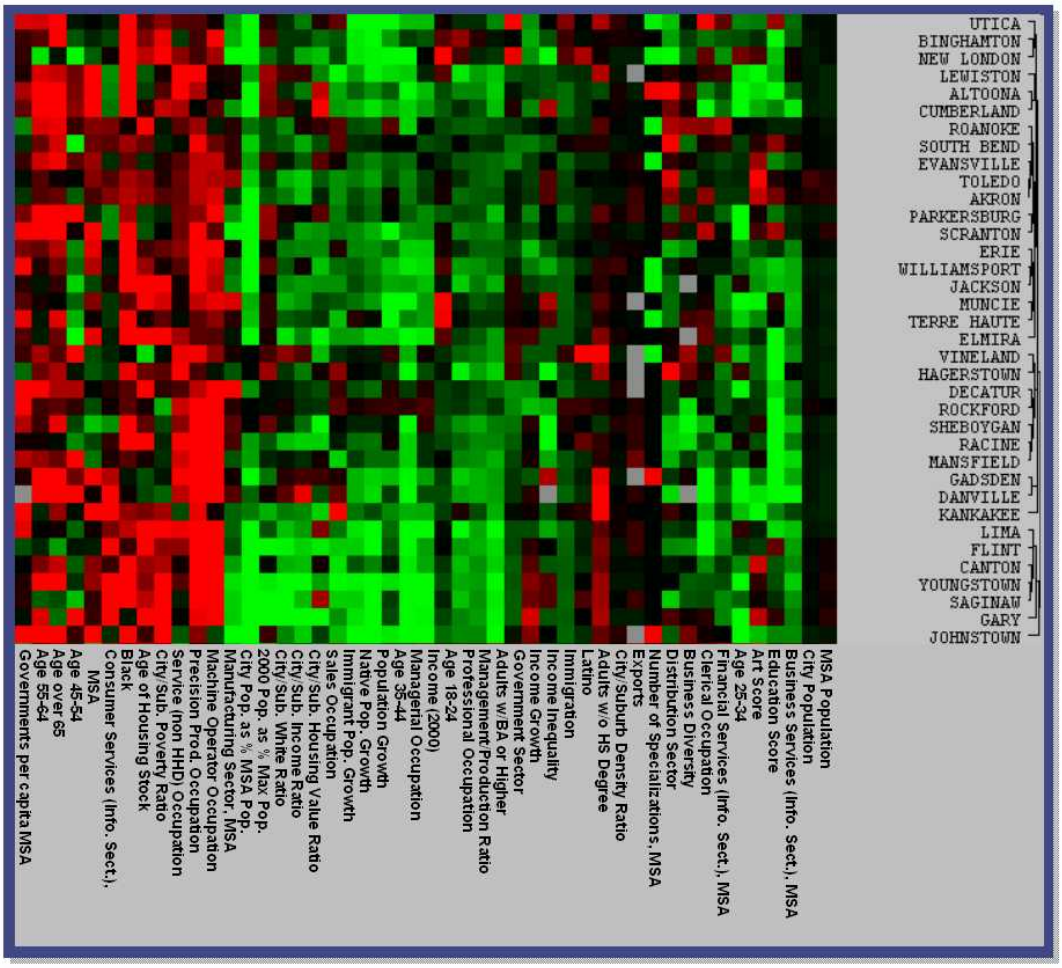


HIGHLIGHTS: Low-skill cities with high levels of immigration and booming population growth. Despite the low levels of education, very few people are employed in manufacturing or machine operator occupations, while many people are employed in the public sector. These cities had very low income growth in the 1990s.

SUMMARY DESCRIPTION: Average-size cities with very low per capita income levels in 2000. Very low education and art scores, low percentage of adults with BA or higher. Many immigrants and Latinos, very few Blacks. The economy is characterized by a high level of diversification, low management and professional occupations, very little manufacturing, machine operator occupation and non-HHD services, and a high percentage of earnings in government. These urban areas usually have high levels of income inequality, with a concentration of poverty in the inner city. This cluster experienced extremely low income growth in the 1990s, and very high levels of population growth (low foreign born and high native born).

ABBREVIATED CELL SUMMARY: A MSA population, A City population 2000, L Other producer services, L Education score, L Art score, L Pct age 25-34, L Financial producer services, L Pct. clerical occupation, H Industry fragmentation, A Number of Drennan specializations, A Exports as pct income, L City suburb density ratio, VH Pct Latino, VH Foreign born as pct total pop, H Gini coefficient, VL Log change in per capita income 1990-2000, H Govt pct earnings, L Pct adults with BA or higher, L Mgmt to production occ ratio, L Pct. professional occupation, VL Per capita income 2000, VH Log change in pop 1990-2000, VH Growth in native born pop 1990-2000, L Growth in foreign born pop 1990-2000, H City suburb income ratio , A 2000 pop as pct mx pop 1950-2000, L City pop as pct MSA pop, VL Manufacturing, L Pct machine operator occupation, L Pct non HHD service occupation, L City suburb poverty ratio, L Pct housing units built before 1939, L Pct black, L Advanced consumer services, L Pct. age 45 to 54, VL Pct age over 65, L Pct age 55 to 64, L Governments per capita (MSA).

CLUSTER 5: Utica, Binghamton, New London, Lewiston, Altoona, Cumberland, Roanoke, South Bend, Evansville, Toledo, Akron, Parkersburg, Scranton, Erie, Williamsport, Jackson, Muncie, Terre Haute, Elmira, Vineland, Hagerstown, Decatur, Rockford, Sheboygan, Racine, Mansfield, Gadsden, Danville, Kankakee, Lima, Flint, Canton, Youngstown, Saginaw, Gary, Johnstown.



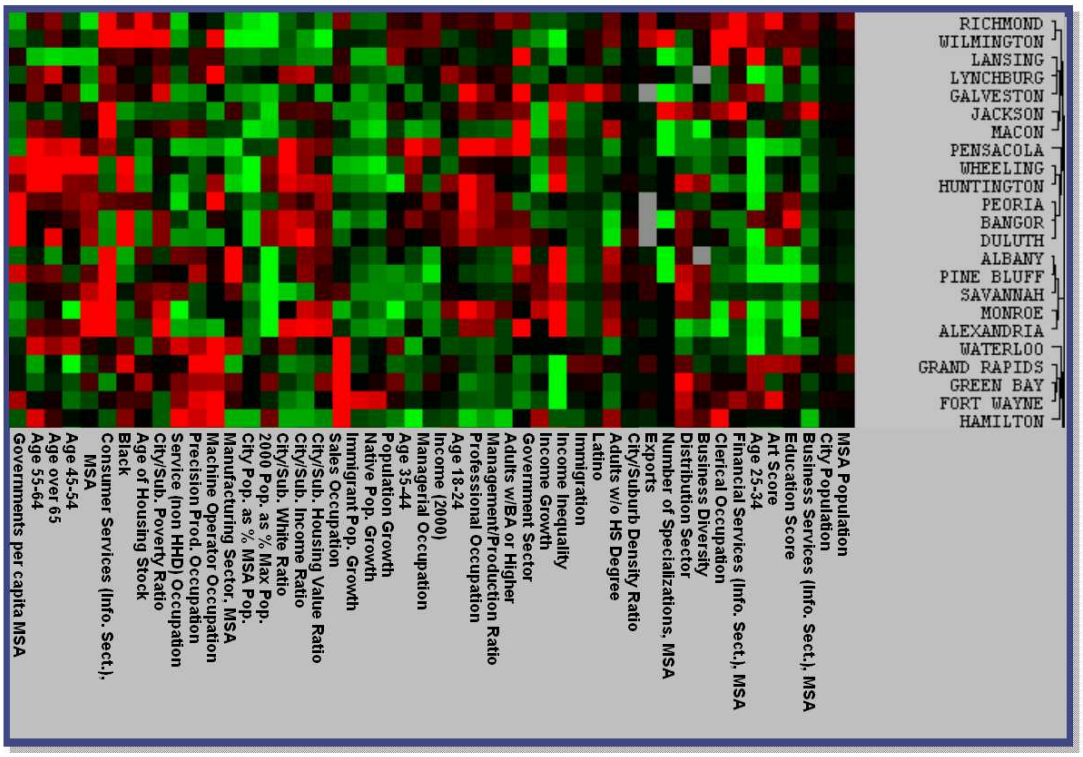
HIGHLIGHTS: These are generally smaller, older, and not very diverse cities, and seem to be culturally and economically stagnant. The economy is centered on low-skill occupations such as manufacturing, precision production, machine operator, and non-household services. These cities had very low income and population growth in the 1990s.

SUMMARY DESCRIPTION: Despite its size, this cluster is fairly homogeneous. These are smaller cities, with low per capita income in 2000. There are few immigrants, few Latinos, and many older residents (high percentage of people over 45, low percentage of people under 44). The housing stock is also old, with a high percentage of housing built before 1939. These cities rank very low on education, low on art score, very low in percentage of adults with BA or higher. Not surprisingly, they have very few managerial and professional occupations, few financial producer services and other

producer services. There is little business diversification, and most of the economic activity seems to be concentrated in manufacturing, precision production occupation, machine operator occupation, and other non HHD services. There are also a high percentage of advanced consumer services. These cities experienced extremely low income and population growth over the 1990s.

ABBREVIATED CELL SUMMARY: A/L MSA population, A/L City population 2000, VL Other producer services, VL Education score, L Art score, L Pct age 25-34, L Financial producer services, L Pct. clerical occupation, L Industry fragmentation, L Distribution pct earnings, A Number of Drennan specializations, A Exports as pct income, A City suburb density ratio, L Pct Latino, L Foreign born as pct total pop, L Gini coefficient, L Log change in per capita income 1990-2000, L Govt pct earnings, VL Pct adults with BA or higher, VL Mgmt to production occ ratio, VL Pct. professional occupation, L Pct age 18 to 24, L Per capita income 2000, VL Pct managerial occupation, L Pct age 35 to 44, VL Log change in pop 1990-2000, L Growth in native born pop 1990-2000, L Growth in foreign born pop 1990-2000, L City suburb house value ratio , L City suburb income ratio , VL 2000 pop as pct mx pop 1950-2000, L City pop as pct MSA pop, VH Manufacturing, VH Pct machine operator occupation, H Pct precision production occupation, H Pct non HHD service occupation, H City suburb poverty ratio, VH Pct housing units built before 1939, H Pct black, H Advanced consumer services, H Pct age over 65, H Pct age 55 to 64, H Governments per capita (MSA).

CLUSTER 6: Richmond, Wilmington, Lansing, Lynchburg, Galveston, Jackson, Macon, Pensacola, Wheeling, Huntington, Peoria, Bangor, Duluth, Albany, Pine Bluff, Savannah, Monroe, Alexandria, Waterloo, Grand Rapids, Green Bay, Fort Wayne, Hamilton.

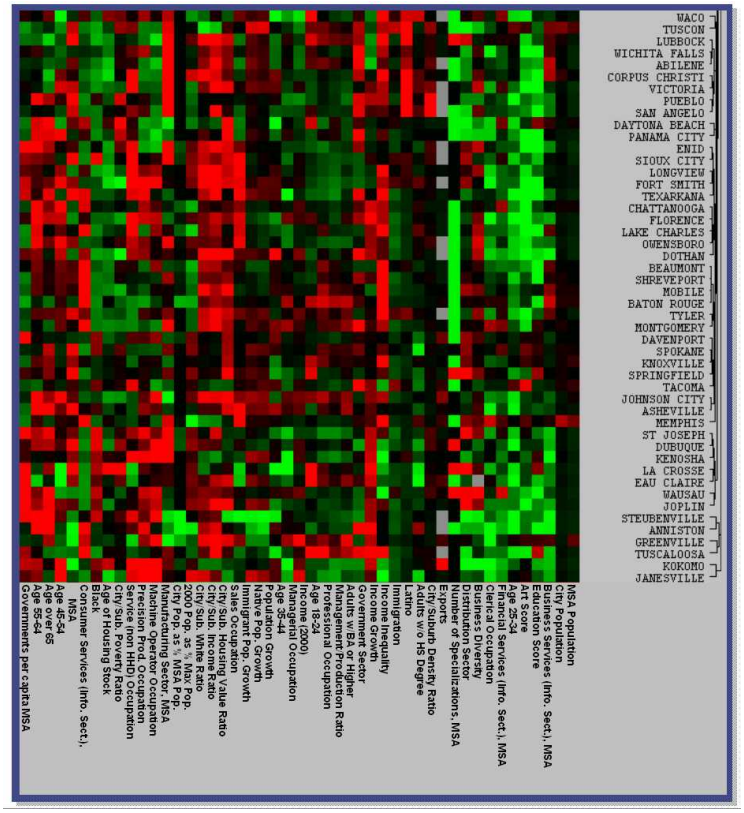


HIGHLIGHTS: This is a heterogeneous cluster, composed of average-size cities that share a lot of the characteristics of the cities in cluster 5, though to a lesser extent. Their demographic profile is similar to cluster 5, but cities in this cluster have a much higher percentage of blacks. The economies of these cities are also similar to those in cluster 5, with the exception of a group of six cities that have high employment in the public sector and low employment in manufacturing. Overall, the economic performance of these cities over the 1990s was poor, but slightly better than that of the cities in cluster 5.

SUMMARY DESCRIPTION: This is a fairly heterogeneous cluster, composed of average-size cities. In general, cities in this cluster seem to share a lot of the traits of the cities in cluster 5, but not to the same extent. Their demographic profile is similar to the cities in cluster 5: low per capita income in 2000, older population, few immigrants, few Latinos. These cities, however, have a higher percentage of Blacks. Low art and education scores, low percentage of adults with BA or higher, high percentage of adults without high school degree. Low managerial occupations and low other producer services. Interestingly, a significant subgroup of cities (almost half of the cluster) has very high manufacturing, while the cities that don't have high manufacturing have high government percentage earnings (and vice versa). The cities in this cluster had low population and income growth in the 1990s.

ABBREVIATED CELL SUMMARY: A MSA population, A City population 2000, L Other producer services, L Education score, L Art score, VL Pct age 25-34, L Pct. clerical occupation, A Number of Drennan specializations, A Exports as pct income, A City suburb density ratio, H Pct adults w/o HS degree, L Pct Latino, L Foreign born as pct total pop, H Gini coefficient, L Log change in per capita income 1990-2000, H Govt pct earnings, L Pct adults with BA or higher, L Pct age 18 to 24, L Per capita income 2000, L Pct managerial occupation, L Pct age 35 to 44, L Log change in pop 1990-2000, L Growth in native born pop 1990-2000, L City suburb ratio pct white , L 2000 pop as pct mx pop 1950-2000, L City pop as pct MSA pop, L Pct precision production occupation, A Pct non HHD service occupation, L City suburb poverty ratio, H Pct. age 45 to 54, H Pct age 55 to 64, L Governments per capita (MSA).

CLUSTER 7: Waco, Tucson, Lubbock, Wichita falls, Abilene, Corpus Christi, Victoria, Pueblo, San Angelo, Daytona Beach, Panama City, Enid, Sioux City, Longview, Fort Smith, Texarkana, Chattanooga, Florence, Lake Charles, Owensboro, Dothan, Beaumont, Shreveport, Mobile, Baton Rouge, Tyler, Montgomery, Davenport, Spokane, Knoxville, Springfield, Tacoma. Johnson city, Asheville, Memphis, St Joseph, Dubuque, Kenosha, La Crosse, Eau Claire, Wausau, Joplin, Steubenville, Anniston, Greenville, Tuscaloosa, Kokomo, Janesville.



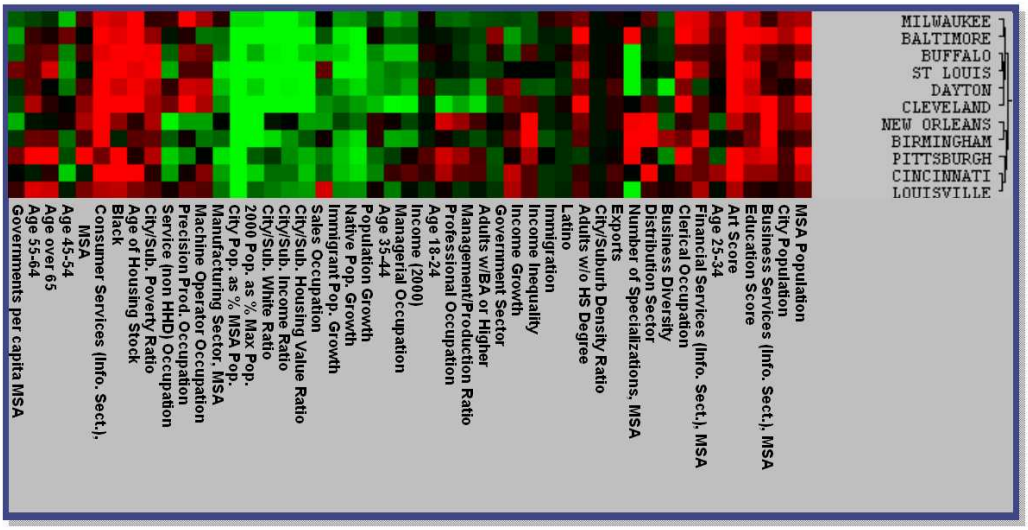
HIGHLIGHTS: These are small to average size cities with older populations. A distinctive feature of the cities in this cluster is that they have strong central cities, with relatively high income levels and house values. The economy is characterized by high levels of employment in the public sector and in sales occupations. Despite low education levels and few professional occupations, these cities experienced high income growth between 1990 and 2000.

SUMMARY DESCRIPTION: These are small to average size cities with older population but newer housing stock. There are few immigrants and Latinos, and the population had low per capita income in 2000. These cities have very low education and art scores, low percentages of managerial, professional, financial and other producer services, and clerical occupations. On the other hand, they have a high concentration of government and sales occupations. There are high levels of income inequality, but not between city and suburbs. In fact, cities in this cluster seem to have fairly strong central cities: these cities tend to have a high city/suburb income ratio, a high city/suburb house value ratio, and a high city population as percentage of MSA population. This cluster is

very heterogeneous in terms of population growth, but almost all of these cities had high income growth between 1990 and 2000.

ABBREVIATED CELL SUMMARY: A MSA population, A City population 2000, L Other producer services, VL Education score, VL Art score, L Pct age 25-34, L Financial producer services, L Pct. clerical occupation, L Number of Drennan specializations, A City suburb density ratio, A Pct adults w/o HS degree, L Pct Latino, L Foreign born as pct total pop, H Gini coefficient, H Log change in per capita income 1990-2000, H Govt pct earnings, L Pct adults with BA or higher, L Mgmt to production occ ratio, L Pct age 18 to 24, L Per capita income 2000, L Pct managerial occupation, L Pct age 35 to 44, H Pct sales occupations, H City suburb house value ratio , H City suburb income ratio , A 2000 pop as pct mx pop 1950-2000, H City pop as pct MSA pop, L Pct non HHD service occupation, L City suburb poverty ratio, L Pct housing units built before 1939, H Pct age over 65, H Pct age 55 to 64, L Governments per capita (MSA).

CLUSTER 8: Milwaukee, Baltimore, Buffalo, Saint Louis, Dayton, Cleveland, New Orleans, Birmingham, Pittsburgh, Cincinnati, Louisville.



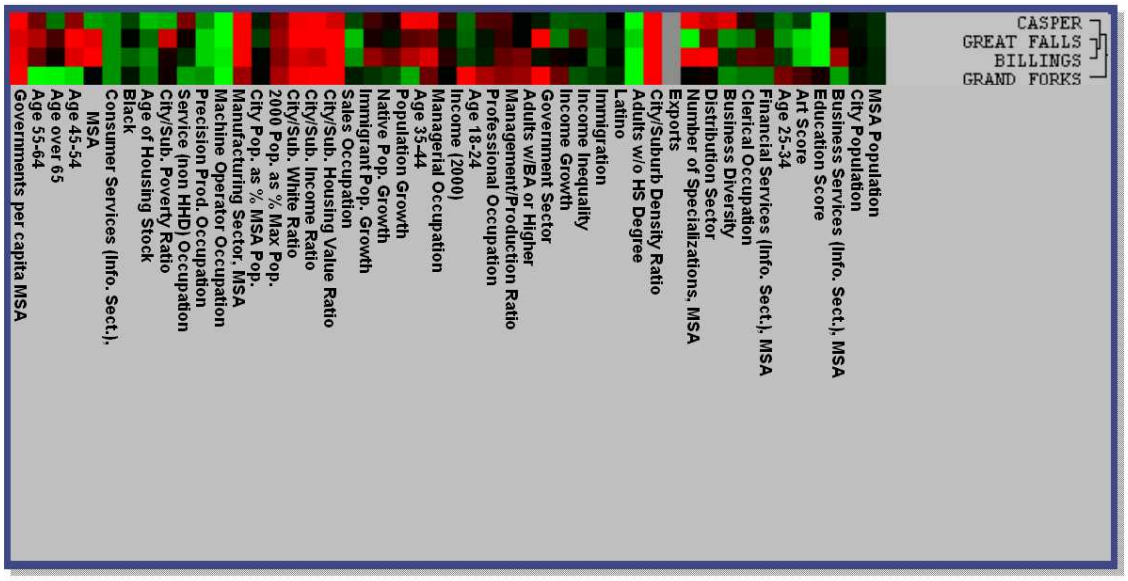
HIGHLIGHTS: These are successful "working class" cities. For the cities in this cluster, lower levels of income and education don't necessarily translate into economic recession. While few people have bachelor degrees, there are also very few high school dropouts, and these cities overall are thriving artistic and cultural centers. The economy revolves around manufacturing, machine operator occupations, non household services, and other producer services. Most of these cities experienced very low population growth, while about two thirds of them experienced high income growth over the 1990s.

SUMMARY DESCRIPTION: Large cities with older population and older housing stock. Few immigrants, few Latinos, lots of Blacks. There seems to be a big difference between central city and suburbs, both racially (very low city suburb percent white ratio) and economically (low city suburb income ratio, low city suburb house value ratio). Per

capita income was low in 2000. Interestingly, these are cities with very high art score and fairly high education score: there is a low percentage of adults with BA or higher, but there are also few adults without high school degree. These cities have low industry fragmentation, and they have high levels of manufacturing, machine operator occupations, non household services, and other producer services. Very low managerial occupation, sales occupation, and government earnings. Most of the cities experienced very low population growth, while about two thirds of them experienced high income growth in the 1990s.

ABBREVIATED CELL SUMMARY: H MSA population, H City population 2000, H Other producer services, H Education score, VH Art score, L Industry fragmentation, L Distribution pct earnings, A Exports as pct income, A City suburb density ratio, L Pct adults w/o HS degree, L Pct Latino, L Foreign born as pct total pop, L Gini coefficient, L Govt pct earnings, L Pct adults with BA or higher, L Pct age 18 to 24, L Per capita income 2000, VL Pct managerial occupation, VL Pct age 35 to 44, VL Log change in pop 1990-2000, VL Growth in native born pop 1990-2000, L Growth in foreign born pop 1990-2000, VL Pct sales occupations, L City suburb house value ratio , L City suburb income ratio , VL City suburb ratio pct white , VL 2000 pop as pct mx pop 1950-2000, L City pop as pct MSA pop, H Manufacturing, H Pct machine operator occupation, H Pct non HHD service occupation, VH City suburb poverty ratio, VH Pct housing units built before 1939, VH Pct black, H Advanced consumer services, L Pct. age 45 to 54, H Pct age over 65, H Pct age 55 to 64.

CLUSTER 9: Casper, Great Falls, Billings, Grand Forks.

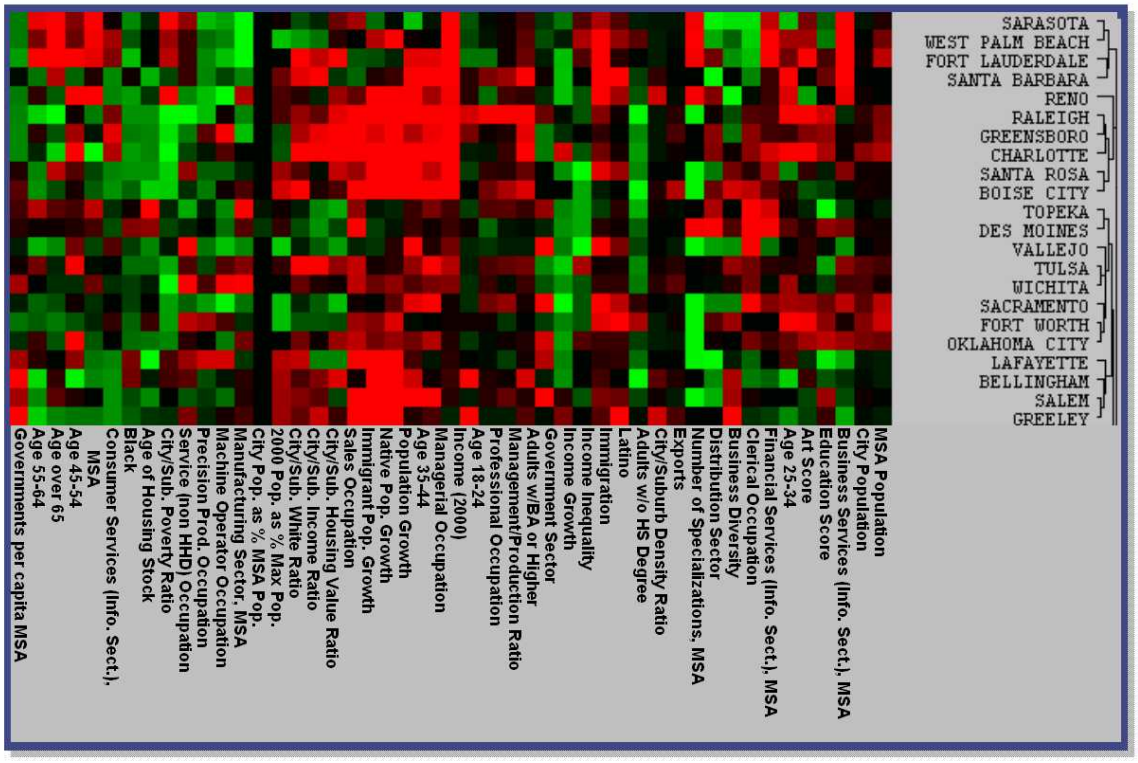


HIGHLIGHTS: These are small cities with fairly highly educated population. The economy revolves around distribution and sales, with a high percentage of managerial occupations. Like the metropolitan areas in cluster 7, these cities have very strong central cities. All of the cities in this cluster experienced high population growth (especially native born), while only two of them (Billings and Grand Forks) experienced high income growth.

SUMMARY DESCRIPTION: Small cities, with few immigrants, Latinos and Blacks. These cities have a low art score and a very low education score, but also very low percentage of adults without high school degree and an average to high number of adults with BA or higher. The economy is characterized by low industry fragmentation, very low manufacturing, low machine operator occupations, very high percentage sales occupations, high distribution, and high percentage of managerial occupation. Cities in this cluster have very strong central cities: they have very high city suburb income ratio, very high city suburb house value ratio, low city suburb poverty ratio, and very high city population as percentage of MSA population. All of these cities experienced high growth in native born population and low growth in foreign born population. Billings and Grand Forks experienced high income growth, while Casper and Great Falls experienced low income growth.

ABBREVIATED CELL SUMMARY: L MSA population, A City population 2000, VL Education score, L Art score, L Pct age 25-34, L Industry fragmentation, H Distribution pct earnings, VH City suburb density ratio, VL Pct adults w/o HS degree, L Pct Latino, L Foreign born as pct total pop, L Gini coefficient, H Mgmt to production occ ratio, L Pct age 18 to 24, H Pct managerial occupation, H Pct age 35 to 44, H Growth in native born pop 1990-2000, L Growth in foreign born pop 1990-2000, VH Pct sales occupations, VH City suburb house value ratio , VH City suburb income ratio , H City suburb ratio pct white , L 2000 pop as pct mx pop 1950-2000, VH City pop as pct MSA pop, VL Manufacturing, L Pct machine operator occupation, A Pct non HHD service occupation, L City suburb poverty ratio, L Pct housing units built before 1939, L Pct black, H Pct. age 45 to 54, H Pct age 55 to 64, VH Governments per capita MSA.

CLUSTER 10: Sarasota, West Palm Beach, Fort Lauderdale, Santa Barbara, Reno, Raleigh, Greensboro, Charlotte, Santa Rosa, Boise City, Topeka, Des Moines, Vallejo, Tulsa, Wichita, Sacramento, Fort Worth, Oklahoma city, Lafayette, Bellingham, Salem, Greeley.

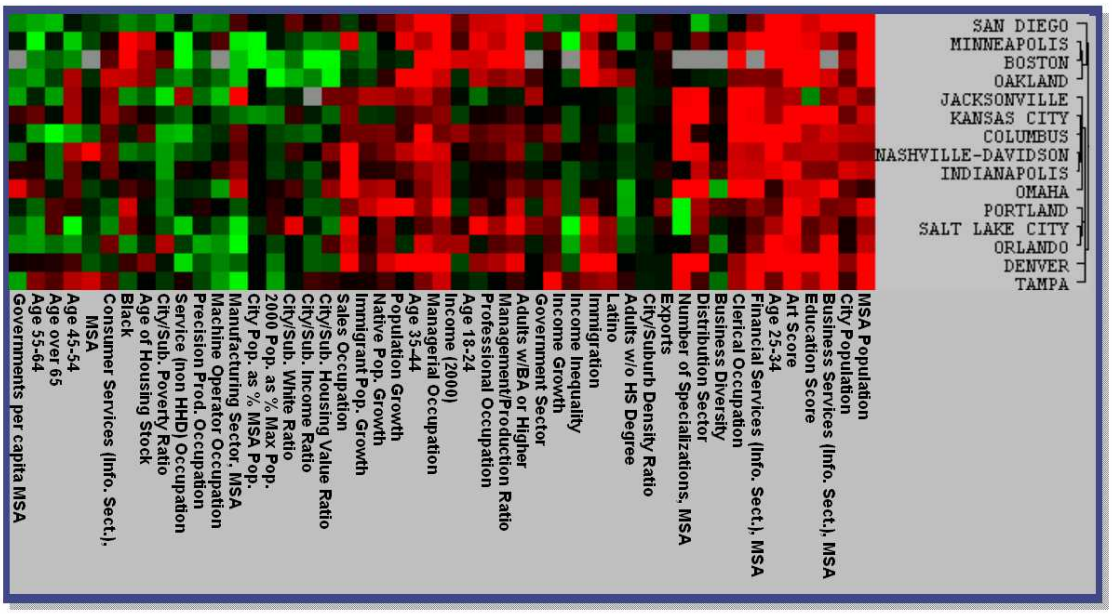


HIGHLIGHTS: These cities have a diverse, young, and highly educated population. Cities in this cluster are wealthy, with high percentages of managerial occupations and financial producer services. They also have low levels of income inequality, in general and between central city and suburbs. Despite a seemingly strong economy, these cities registered low income growth in the 1990s, while they experienced high population growth over the same period.

SUMMARY DESCRIPTION: Average to large sized cities, with a high percentage of foreign born, a high percentage of Latinos, and a low percentage of Blacks. High art score, high education score, low percentage of adults without high school degree, high percentage of adults with BA or higher. High population in the 25-55 range, high per capita income in 2000. There is a high percentage of managerial occupation, and lots of financial producer services. Low percentage of machine operator occupation, and low non household services occupation. Cities in this cluster have low levels of income inequality, and the income ratio between central city and suburbs is high. These cities grew a lot in population (both native and foreign born), but registered low income growth from 1990 to 2000.

ABBREVIATED CELL SUMMARY: A MSA population, A City population 2000, H Other producer services, H Art score, H Pct age 25-34, H Financial producer services, L Number of Drennan specializations, A Exports as pct income, A City suburb density ratio, L Pct adults w/o HS degree, H Pct Latino, H Foreign born as pct total pop, L Gini coefficient, L Log change in per capita income 1990-2000, H Pct adults with BA or higher, H Per capita income 2000, H Pct managerial occupation, H Pct age 35 to 44, VH Log change in pop 1990-2000, H Growth in native born pop 1990-2000, H Growth in foreign born pop 1990-2000, H City suburb income ratio , A 2000 pop as pct mx pop 1950-2000, L Pct machine operator occupation, L Pct non HHD service occupation, L City suburb poverty ratio, L Pct housing units built before 1939, L Pct black, H Pct. age 45 to 54, L Governments per capita (MSA).

CLUSTER 11: San Diego, Minneapolis, Boston, Oakland, Jacksonville, Kansas City, Columbus, Nashville-Davidson, Indianapolis, Omaha, Portland, Salt Lake City, Orlando, Denver, Tampa.



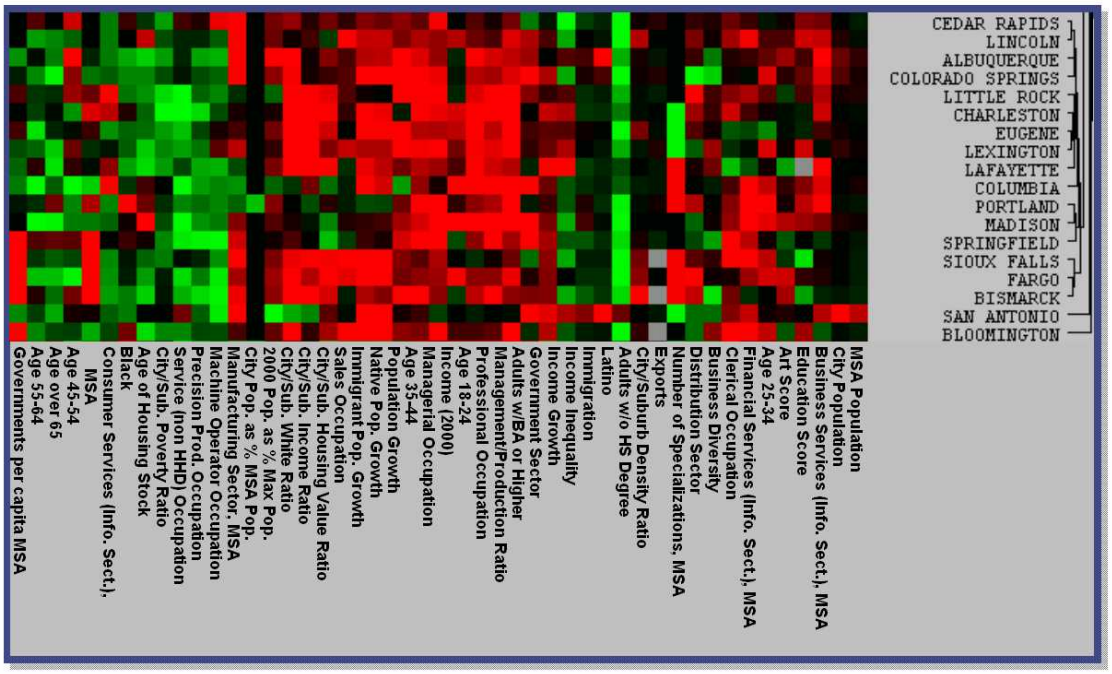
HIGHLIGHTS: These are very large and very wealthy cities, that seem to be thriving both culturally and economically. They have a young, diverse, and highly educated population, with a high percentage of employment in managerial and professional occupations. Financial and other producer services play an important role in these cities' economies. The 1990s were a decade of very high growth for the cities in this cluster, both in terms of income and population.

SUMMARY DESCRIPTION: Very large cities, very wealthy, with young population, lots of immigrants and Latinos. These cities have a generally low level of income inequality, and the city suburb income ratio is just below average. However, there are more Whites living in the suburbs and house values are higher in the suburbs than in the central city. Very high art and education scores, low percentage of adults without high

school degree and high percentage of adults with BA or higher. There's a very high percentage of managerial occupations, and lots of financial and other producer services. These cities are low on manufacturing, precision production, machine operator occupations, non-household services, and advanced consumer services. The cities in this cluster experienced high population growth (both foreign and native born) and high income growth in the 1990s.

ABBREVIATED CELL SUMMARY: VH MSA population, H City population 2000, VH Other producer services, VH Education score, VH Art score, VH Pct age 25-34, VH Financial producer services, H Pct. clerical occupation, L/A Industry fragmentation, H Distribution pct earnings, A Exports as pct income, A City suburb density ratio, L Pct adults w/o HS degree, H Foreign born as pct total pop, L Gini coefficient, H Log change in per capita income 1990-2000, H Pct adults with BA or higher, H/A Mgmt to production occ ratio, H/A Pct. professional occupation, VH Per capita income 2000, VH Pct managerial occupation, H Pct age 35 to 44, H Log change in pop 1990-2000, H Growth in foreign born pop 1990-2000, L City suburb house value ratio , L/A City suburb income ratio , L City suburb ratio pct white , A 2000 pop as pct mx pop 1950-2000, L Manufacturing, L Pct machine operator occupation, L Pct precision production occupation, L Pct non HHD service occupation, L/A Advanced consumer services, L Pct age over 65, L/A Pct age 55 to 64, L Governments per capita (MSA).

CLUSTER 12: Cedar Rapids, Lincoln, Albuquerque, Colorado Springs, Little Rock, Charleston, Eugene, Lexington, Lafayette, Columbia, Portland, Madison, Springfield, Sioux falls, Fargo, Bismarck, San Antonio, Bloomington.

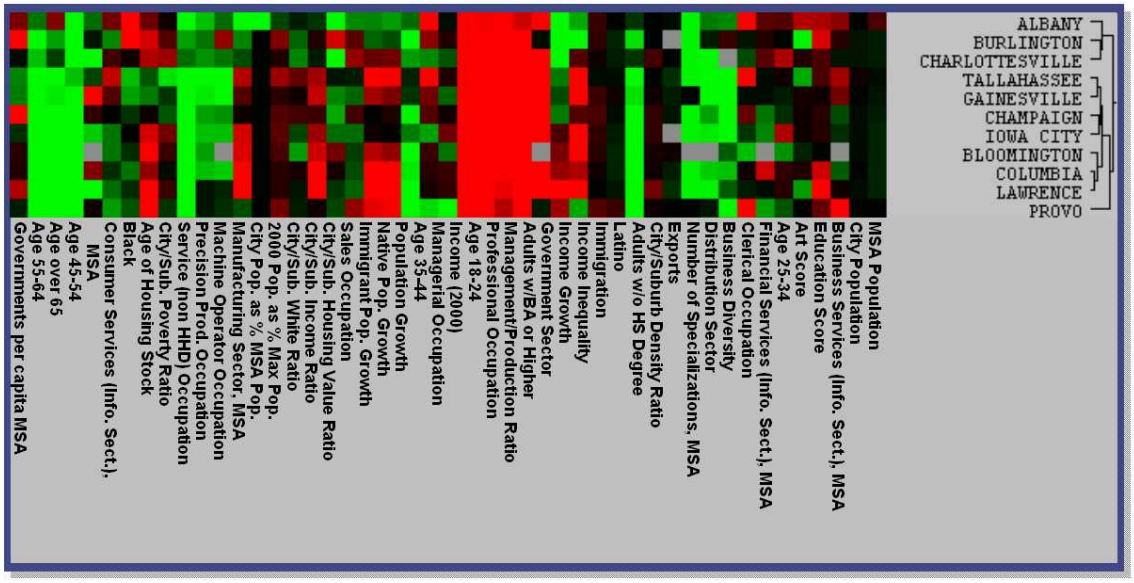


HIGHLIGHTS: These are average size cities, in many ways similar to the cities in cluster 11. The population in these cities is young and highly educated, but not very diverse, considering the low percentage of immigrants, Blacks and Latinos. A high percentage of the population is employed in managerial or professional occupations, with high levels of financial and other producer services and clerical occupation. The central cities in this cluster seem to be particularly wealthy compared to their suburbs. Almost all of the cities in this cluster had high population and income growth in the 1990s.

SUMMARY DESCRIPTION: Average size cities, with younger and highly educated population. Not many immigrants, not many Latinos, few Blacks. Very few adults don't have a high school degree, while a high percentage of adults has a BA or higher. These cities' economies have a high percentage of managerial and professional occupations, especially in financial and other producer services. There is a high percentage of clerical occupation as well, while manufacturing, machine operator and precision production occupation, and non household services occupation are low. MSAs in this cluster have strong central cities, with very high city suburb income ratio and high city suburb house value ratio. Almost all of the cities in this cluster had high population and income growth in the 1990s.

ABBREVIATED CELL SUMMARY: A MSA population, A City population 2000, H Other producer services, H Education score, H Pct age 25-34, H Financial producer services, H Pct. clerical occupation, A Exports as pct income, A City suburb density ratio, VL Pct adults w/o HS degree, A/L Pct Latino, A/L Foreign born as pct total pop, H Log change in per capita income 1990-2000, H Govt pct earnings, VH Pct adults with BA or higher, VH Mgmt to production occ ratio, H Pct. professional occupation, H Per capita income 2000, H Pct managerial occupation, H Pct age 35 to 44, H Log change in pop 1990-2000, H Growth in native born pop 1990-2000, H Pct sales occupations, H City suburb house value ratio , VH City suburb income ratio , H City suburb ratio pct white, A 2000 pop as pct mx pop 1950-2000, H City pop as pct MSA pop, L Manufacturing. L Pct machine operator occupation, L Pct precision production occupation, L Pct non HHD service occupation, L City suburb poverty ratio, L Pct black, L Pct age over 65, L Pct age 55 to 64.

CLUSTER 13: Albany, Burlington, Charlottesville, Tallahassee, Gainesville, Champaign, Iowa City, Bloomington, Columbia, Lawrence, Provo.



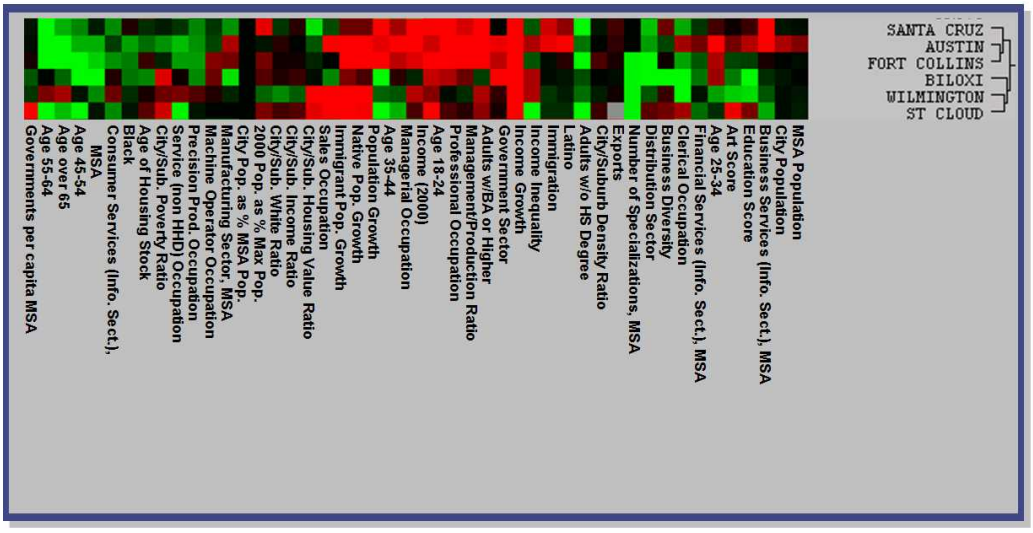
HIGHLIGHTS: These are smaller cities, with a very highly educated population. Not surprisingly, there is a high percentage of managerial and professional occupation, and the economy is characterized by a very large presence of the public sector. These cities had high population growth, but only four out of eleven experienced high income growth in the 1990s.

SUMMARY DESCRIPTION: Smaller cities, with very young population. Average percentage of immigrants and Latinos, low percentage of Blacks. The population of the cities in this cluster is highly educated, very few adults don't have a high school degree, and a very high percentage of adults has a BA or higher. The economy is characterized by very high levels of management and professional occupations, and very high levels of employment in the public sector, while there is a low percentage of sales, machine operator, and manufacturing occupations. There is also a very low percentage of precision production occupation. High levels of income inequality, but not between city and suburbs. These cities had high population growth, but only four out of eleven experienced high income growth.

ABBREVIATED CELL SUMMARY: L/A MSA population, A City population 2000, H/A Education score, L/A Art score, L Industry fragmentation, VL Distribution pct earnings, VL Number of Drennan specializations, A Exports as pct income, A City suburb density ratio, VL Pct adults w/o HS degree, A Pct Latino, A Foreign born as pct total pop, H Gini coefficient, VH Govt pct earnings, VH Pct adults with BA or higher, VH Mgmt to production occ ratio, VH Pct. professional occupation, VH Pct age 18 to 24, H Pct managerial occupation, L Pct age 35 to 44, H Log change in pop 1990-2000, H Growth in native born pop 1990-2000, L Pct sales occupations, H City suburb house value ratio , H/A City suburb ratio pct white , A 2000 pop as pct mx pop 1950-2000, H

City pop as pct MSA pop, L Manufacturing, L Pct machine operator occupation, VL Pct precision production occupation, H City suburb poverty ratio, L Pct housing units built before 1939, L Pct black, VL Pct. age 45 to 54, VL Pct age over 65, VL Pct age 55 to 64. 4 out of 11 cities had high income growth, 6 out of 11 had low income growth.

CLUSTER 14: Santa Cruz, Austin, Fort Collins, Biloxi, Wilmington, St Cloud.



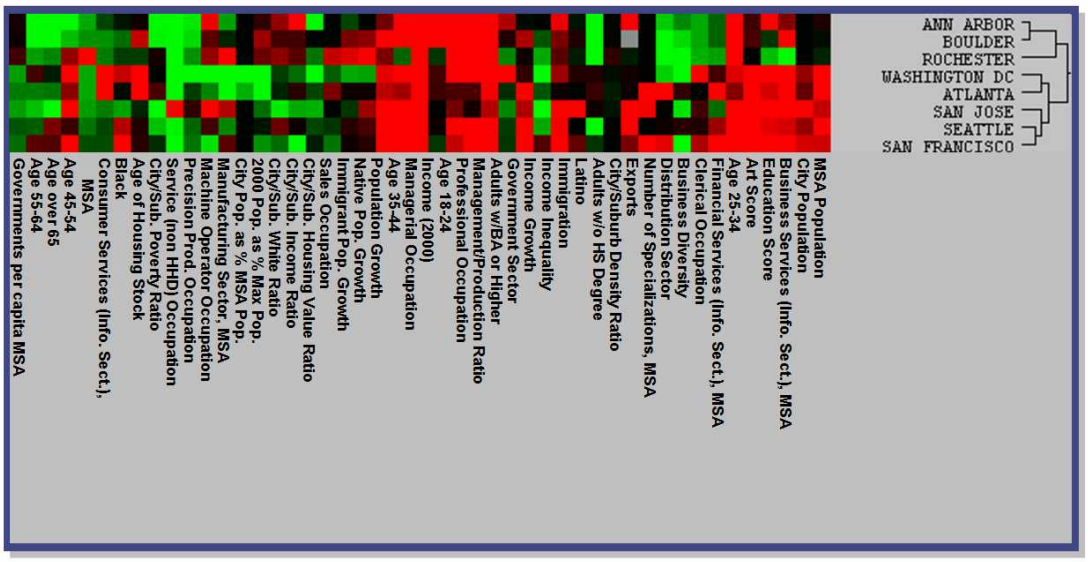
HIGHLIGHTS: In many ways, this cluster is the opposite of cluster 8: cities in this cluster have a young, wealthy, and very highly educated population, usually employed in managerial and professional occupations, and with high levels of employment in the public sector. The 1990s were a period of booming growth for these cities, in terms of both population and income.

SUMMARY DESCRIPTION: These are small to average size cities. The population is young and educated, there is a low percentage of adults without high school degree, and a high percentage of adults with BA or higher. There is an average percentage of immigrants and Latinos, and a low percentage of Blacks. There is a very low number of specializations, but a high percentage of professional and managerial occupation, and high percentage of earnings in government. The economy is also characterized by low financial producer services, clerical occupation, distribution, advanced consumer services, and machine operator occupation. The disparities between central cities and suburbs are at average or below-average levels. The cities in this cluster experienced very high population and income growth between 1990 and 2000.

ABBREVIATED CELL SUMMARY: A MSA population, A City population 2000, H Pct age 25-34, L Financial producer services, L Pct. clerical occupation, L Distribution pct earnings, VL Number of Drennan specializations, A Exports as pct income, A City suburb density ratio, L Pct adults w/o HS degree, A Pct Latino, A Foreign born as pct total pop, VH Log change in per capita income 1990-2000, H Govt pct earnings, H Pct

adults with BA or higher, H Mgmt to production occ ratio, H Pct. professional occupation, VH Pct age 18 to 24, H Per capita income 2000, H Pct managerial occupation, VH Log change in pop 1990-2000, VH Growth in native born pop 1990-2000, L Pct sales occupations, H/A City suburb house value ratio , H/A City suburb income ratio , H City suburb ratio pct white , A 2000 pop as pct mx pop 1950-2000, L City pop as pct MSA pop, L Pct machine operator occupation, L Pct precision production occupation, L Pct housing units built before 1939, L Pct black, L Advanced consumer services, L/VL Pct. age 45 to 54, L Pct age over 65, L/VL Pct age 55 to 64.

CLUSTER 15: Ann Arbor, Boulder, Rochester, Washington DC, Atlanta, San Jose, Seattle, San Francisco.



HIGHLIGHTS: This cluster is composed of cities of different size: some relatively small like Boulder or Rochester, and some very large like Atlanta and Washington DC. These cities are thriving cultural centers, and have a very young and highly educated population. Employment is mostly managerial and professional in nature, and exports constitute an important component of these cities' economies. Washington DC is the only city in this cluster that has a high percentage of employment in the public sector. These cities also share high levels of immigration, but overall low levels of income inequality. Almost all of these cities (with the notable exception of Washington DC) experienced very high income growth and high population growth in the 1990s.

SUMMARY DESCRIPTION: With respect to size, this cluster is composed of two distinct subgroups of cities: Ann Arbor, Boulder, and Rochester are small or average, while the remaining five cities in the cluster are very large. There's a very high percentage of people in the 25-45 age range, and a high percentage of people in the 45-55 range. There are also lots of immigrants, and few Blacks. The level of income inequality is generally low. Cities in this cluster have very high education scores, and high art scores. A very high percentage of adults has a BA or higher. There is a fairly high

number of specializations, and a very high percentage of professional and managerial occupation. The economy is also characterized by high levels of exports as percentage of income, and low percentage of earnings in government (with the exception of Washington DC). Very low precision production, low machine operator, sales, non household services occupation. These cities experienced high income and population growth in the 1990s.

ABBREVIATED CELL SUMMARY: H MSA population, H/A City population 2000, VH 3, VH Education score, H Art score, VH Pct age 25-34, L Industry fragmentation, H/A Number of Drennan specializations, H/A Exports as pct income, A City suburb density ratio, H Foreign born as pct total pop, L Gini coefficient, H Log change in per capita income 1990-2000, L Govt pct earnings, VH Pct adults with BA or higher, VH Mgmt to production occ ratio, VH Pct. professional occupation, A Pct age 18 to 24, VH Per capita income 2000, VH Pct managerial occupation, VH Pct age 35 to 44, H Log change in pop 1990-2000, H/A Growth in native born pop 1990-2000, L/A Growth in foreign born pop 1990-2000, L Pct sales occupations, A/L 2000 pop as pct mx pop 1950-2000, L Pct machine operator occupation, VL Pct precision production occupation, L Pct non HHD service occupation, H/A City suburb poverty ratio, L Pct black, L Advanced consumer services, H Pct. age 45 to 54, L Pct age over 65, L Pct age 55 to 64, L Governments per capita (MSA).