

**Does a Rising Tide Lift All Boats?  
Assessing Employment-Poverty Dynamics  
by Metropolitan Size and County Type**

by

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This is based on a paper that we did subsequent to our book: ***The Geography of American Poverty: Is there a Role for Place Based Policy?*** Just published by Upjohn Institute.

# Introduction

- U.S. poverty-employment growth link was re-established in the 1990s
  - Strong link in 1960s and early 1970s
  - Weak between 1973-1993 (high poverty in 1993)
- Is it true for metropolitan areas (MAs)?
- Such a link suggests the need for place-based economic development policies

## Motivation at MA level

- Examine the job growth-poverty rate link
  - 1990s data and 1999 MA definition
  - Split MAs by size:
    - Big > 1.5 million population
    - Medium 350,000-1.5 million population
    - Small < 350,000 population
  - Split MAs by type:
    - Central Counties (include named city)
    - Suburbs
    - Single county MAs (more like central counties)
  - We discover a surprising pattern!

County Type	N	1989 Poverty Rate	1999 Poverty Rate	1995-2000 Job Growth
<i>Panel A. All U.S. Counties and all MA Counties</i>				
<b>All U.S. Counties (incl. MAs)</b>	<b>307</b>	<b>13.0</b>	<b>12.4</b>	<b>12.6</b>
	<b>2</b>	<b>(6.3)</b>	<b>(5.6)</b>	<b>(8.8)</b>
<b>All MA Counties</b>	<b>824</b>	<b>12.0</b>	<b>11.9</b>	<b>13.7</b>
		<b>(5.5)</b>	<b>(5.2)</b>	<b>(8.5)</b>
<b>Central County<sup>b</sup></b>	<b>252</b>	<b>13.1</b>	<b>13.2</b>	<b>12.4</b>
		<b>(4.8)</b>	<b>(4.8)</b>	<b>(7.8)</b>
<b>Suburb<sup>b</sup></b>	<b>433</b>	<b>8.4</b>	<b>7.8</b>	<b>16.5</b>
		<b>(4.7)</b>	<b>(3.5)</b>	<b>(10.8)</b>
<b>Single County MA<sup>b</sup></b>	<b>139</b>	<b>13.7</b>	<b>13.3</b>	<b>13.7</b>
		<b>(6.5)</b>	<b>(5.6)</b>	<b>(6.2)</b>
<i>Panel B. MAs by Size<sup>c</sup></i>				
<b>Large MA Counties<sup>c</sup></b>	<b>251</b>	<b>11.3</b>	<b>11.6</b>	<b>15.0</b>
		<b>(5.3)</b>	<b>(5.4)</b>	<b>(9.0)</b>
<b>Medium MA Counties<sup>c</sup></b>	<b>304</b>	<b>12.4</b>	<b>11.8</b>	<b>12.3</b>
		<b>(5.7)</b>	<b>(4.9)</b>	<b>(7.7)</b>
<b>Small MA Counties<sup>c</sup></b>	<b>269</b>	<b>14.5</b>	<b>13.2</b>	<b>11.0</b>
		<b>(5.5)</b>	<b>(4.8)</b>	<b>(6.8)</b>

1999 Metropolitan Area Definitions, see the paper for more details

- 1990s economy was red hot
- Note that MA poverty barely budged in the 1990s even with faster job growth (rural counties benefited more from nonmetro job growth)
- Central counties avg poverty went up even with rapid national job growth
- Suburban counties had a stronger linkage with job growth
- By size, job growth was strongest in the largest MAs and weakest in small MAs
- Yet poverty rates declined the least in large MAs and fell the most in small MAs

<i>Panel C. Central County<sup>b</sup></i>		<b>1989 Poverty Rate</b>	<b>1999 Poverty Rate</b>	<b>1995-2000 Job Growth</b>
<b>Large MA Counties<sup>c</sup></b>	<b>66</b>	<b>13.3 (4.9)</b>	<b>13.8 (5.1)</b>	<b>13.8 (8.2)</b>
<b>Medium MA Counties<sup>c</sup></b>	<b>109</b>	<b>12.3 (4.8)</b>	<b>11.8 (4.1)</b>	<b>10.4 (6.5)</b>
<b>Small MA Counties<sup>c</sup></b>	<b>77</b>	<b>14.4 (3.9)</b>	<b>13.4 (3.6)</b>	<b>9.1 (5.3)</b>
<i>Panel D. Suburban Cty<sup>b</sup></i>				
<b>Large MA Counties<sup>c</sup></b>	<b>181</b>	<b>7.0 (3.4)</b>	<b>6.8 (2.6)</b>	<b>17.2 (10.9)</b>
<b>Medium MA Counties<sup>c</sup></b>	<b>169</b>	<b>11.1 (5.4)</b>	<b>9.5 (4.2)</b>	<b>15.6 (10.2)</b>
<b>Small MA Counties<sup>c</sup></b>	<b>83</b>	<b>14.0 (5.2)</b>	<b>12.0 (4.1)</b>	<b>12.1 (10.1)</b>
<i>Panel E. Sing Cty MAs</i>				
<b>Large MA Counties<sup>c</sup></b>	<b>4</b>	<b>11.1 (4.2)</b>	<b>12.0 (3.8)</b>	<b>16.6 (3.3)</b>
<b>Medium MA Counties<sup>c</sup></b>	<b>26</b>	<b>14.0 (7.6)</b>	<b>13.8 (6.5)</b>	<b>14.4 (6.4)</b>
<b>Small MA Counties<sup>c</sup></b>	<b>109</b>	<b>14.6 (6.3)</b>	<b>13.4 (5.5)</b>	<b>11.8 (6.4)</b>

A consistent story is that whether considering central counties, suburbs, or single county MAs, the fastest job growth occurred in largest MAs, but they experienced the smallest poverty reduction.

The moral is that when considering MAs, the link between job growth and poverty reduction is weak

Why? Demographics, spatial location?

One likely pattern is the lack of job accessibility in large MAs

## Questions

- Accessibility versus Job Growth
  - Do the poor need to be near jobs (Weinberg et al., 2004, Weinberg, 2004)?
  - Relates to the spatial-skills mismatch hypothesis
- Or, is it better with job growth, especially faster job growth—regardless of access
  - Faster job growth particularly forces employers to reach down and hire the disadvantaged.
- In reality, it is a combination of the two, and it likely varies across MA type.

## What we do?

- Examine place (county) data using 1990-2000 period. We don't use individual data.
  - How policy is designed for econ. development
  - Capture spatial differences in responses to access and job growth
  - Indiv. analysis can be misleading at the aggregate level
    - Person with more training rises in job queue, but may displace another person—no net employment  $\Delta$
    - Does not reflect migration and commuting responses

Aggregate data has the advantage when assessing policies that will be conducted at the aggregate level.

Indiv data cannot capture aggregation issues related to individuals and offsetting labor supply responses such as migration and commuting.

Thus, both individual and aggregate studies have their use and can be complementary.

- Using counties reflects a compromise
  - It captures the geographic scale to assess many place-based policies.
  - They are closer to depicting a labor market, especially if transportation is constrained
  - Critical place of work data is available—not just place of residence as in the Census
  - Can do the *Intra-* and *Inter-*MA analysis as shown by the differing job-growth/poverty rates described above
    - Akin to Weinberg (2004) Dworak-Fisher (2004)

Below the county level, the quality of place of work data (where the firms are located) is very marginal and does not exist in lengthy time series.



- Examine county level data for MAs
  - Differentiate by MA size (job access, agglomeration economies)
  - Differentiate across county type (central, suburb)
  - There is *inter and intra* MA variation
    - We take advantage of different *a priori* notions of work access across MA size and county type.

We use the MA size and county-type categories described above.

## MA Job Growth and Poverty

- Job growth reduces poverty to the extent new jobs and increased wages push original residents above the poverty line.
- The response depends on:
  - Demographics of MA labor force
  - Workforce attachment of original MA residents
  - Spatial-skills distribution of jobs and residents

## Access to Employment

- [Relates to SMH, described below.]
- Job growth is effective when there is access
- Bartik (2001) contends MA population of 800,000 is a tipping point between gains from agglomeration and employment access.
- Weinberg finds 500,000-1m. is tipping point.
- In rural areas, Partridge and Rickman (2006) find that proximity to urban jobs trumps whether nearest MA has job growth



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Partridge and Rickman (2006) is online under Swank Research papers.

## Spatial Mismatch Hypothesis

- SMH offers many reasons for disparate outcomes (Raphael, 1998; Weinberg, et al, 2004; Martin, 2004).
  - Not a test of SMH (use neighborhood or indiv data)
  - SMH studies usually consider employment/wages
- Decentralizing employment and population
- Suburban job centers and new edge cities
- Reasons include transportation, higher inner-city crime and taxes, land-price differences, zoning, and minority avoidance

SMH helps inform how proximity and access interacts in affecting how job growth affects MA poverty rates (and *intra* MA distribution of those effects)

Weinberg et al (2004) is a wonderful test of SMH in terms of neighborhood quality and job access.

Raphael (1998) provides a strong case that it is not so much access, but job growth that matters (using a case study).

Martin (2004) provides historic 1970-2000 overview of how employment/population changes have driven job accessibility.

SMH boils down to the point that jobs tend to be in the suburbs and the low-skilled tend to be in central city and there are housing and transport barriers that make the new jobs inaccessible to the poor.

- Incomplete adjustment from household migration and commuting lead to greater distance between jobs and people, particularly for the low-skilled segments
- Shift in jobs also has especially been away from blacks (Raphael and Stoll, 2002)
- In-migrants to the MA and commuters are then more likely to take the newly created suburban jobs than central city residents

- Why do incomplete adjustments occur:
  - Lack of auto ownership
  - Inaccessible public transportation
  - Costly commuting relative to low-skilled wage rates in suburbs and low rents in central cities
  - Job information decays with distance
  - Housing and job discrimination
  - Less search effort by minorities in hostile locales

Holzer (1991) provides a nice survey of the SMH.

## Non-spatial race and occup. barriers

- Minorities lack skills and education, which are increasingly demanded by employers
- General discrimination across the MA
- Social isolation and racial segregation leading to neighborhood and peer effects—lack of role models, personal connections to job opportunities
  - The influence of neighborhood effects is controversial (Page and Solon, 2003)



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To the extent these factors are in play, the link between job growth and lower poverty is weakened



# Empirical Model

Partial Adjustment model:

- (1)  $POV_{it}^* = \beta X_{it}$
- (2)  $POV_t - POV_{t-1} = \alpha(POV_t^* - POV_{t-1})$
- (3)  $POV_t = (1-\alpha)POV_{t-1} + \alpha\beta X_t$
- short-run poverty response to a change in the X variables is  $\alpha\beta$  (long-run won't be stressed here)

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1. Equil poverty rate is a function of past and current X's
2. Current poverty rate only partially adjusts to long-run equilibrium. It could also capture reversion to the mean effects.

### Estimated Model for Each MA Size Category

$$POV_{is1999} = \alpha 1 POV_{is1989} + \theta 1 AVGNEIGBORPOV_{is1989} + \boldsymbol{\varphi 1} \\ \mathbf{ECON}_{is} + \boldsymbol{\beta 1} \mathbf{CTY\_TYPE}_{is} + \boldsymbol{\gamma 1} \mathbf{DEMOG}_{is} + \sigma_s + \varepsilon_{is}$$

- AVGNEIGHBOR is the average 1989 poverty rate in contiguous counties (cluster/spillover effects)
- **ECON** vector contains county economic measures
- **CTY\_TYPE** has county-type and pop measures
- **DEMOG** vector includes demographic traits
- $\sigma_s$  denotes the state-fixed effect (state policies)
- $\varepsilon$  is the error term

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The lagged poverty rate also accounts for fixed effects of a county.

State fixed effects mean that we are talking about changes within a given state. We control for unmeasured attributes of each state.

We tried spatial error models, but we find little impact on the results. (see Partridge and Rickman, 2006, *Geography of American Poverty*.)

Group	(1) Large MAs	(2) Medium MAs	(3) Small MAs	
<b>1999 Poverty Rate</b>	<b>8.7</b> <b>(4.5)</b>	<b>11.1</b> <b>(4.6)</b>	<b>12.9</b> <b>(4.6)</b>	
<b>Lagged 1989 Poverty Rate</b>	<b>9.6</b> <b>(4.8)</b>	<b>12.5</b> <b>(5.7)</b>	<b>14.5</b> <b>(5.2)</b>	
Weighted Surrounding Cty 1989 Poverty	10.9 (3.5)	14.1 (5.6)	16.0 (5.3)	
Single-County MAs <sup>b</sup>	0.02 (0.13)	0.09 (0.28)	0.41 (0.49)	
Central County <sup>c</sup>	0.26 (0.44)	0.36 (0.48)	0.29 (0.45)	
Suburban County <sup>c</sup>	0.72 (0.45)	0.56 (0.50)	0.31 (0.46)	
Outlying County <sup>c</sup>	0.45 (0.50)	0.47 (0.50)	0.26 (0.44)	
Population	506,479 (877,456)	218,242 (217,895)	116,978 (74,926)	
MA Population	3,355,401 (2,003,982)	776,086 (330,264)	192,997 (77,813)	
<b>1995-2000 Emp Growth</b>	<b>18.0</b> <b>(13.6)</b>	<b>12.9</b> <b>(9.3)</b>	<b>10.8</b> <b>(7.8)</b>	
<b>1995-00 MA Emp Grth (#MA counties ≥ 2)</b>	<b>13.9</b> <b>(6.1)</b>	<b>10.0</b> <b>(5.8)</b>	<b>5.3</b> <b>(5.9)</b>	
SMI Spatial Mismatch <sup>d</sup>	0.11 (0.06)	0.08 (0.05)	0.05 (0.05)	
1990-2000ΔSMI <sup>d</sup>	-0.0009 (0.014)	-0.002 (0.014)	0.002 (0.013)	
%of workers employed in county of residence	54.5 (16.5)	62.2 (19.6)	72.5 (21.0)	19
% of workers employed in MA central city	28.3 (22.2)	37.4 (21.5)	49.5 (22.4)	

## Descriptive Statistics for the 824 MA counties in the sample by large, medium, and small population MAs

Average county poverty rate inversely associated with the size of the MA.

Average county and MA job growth are also inversely related to the size of the MA.

In a level sense, county and MA wide employment growth is associated with less large MA poverty rates in 1989 and 1999.

	Large MAs	Medium MAs	Small MAs	
1995-2000 Structural Change <sup>e</sup>	0.047 (0.027)	0.049 (0.023)	0.047 (0.021)	
%Male Emp./Population	70.6 (7.1)	67.8 (5.8)	65.8 (6.0)	
%Female Emp./Population	57.4 (6.1)	55.0 (5.5)	54.1 (6.2)	
%Civilian Male Unemployment Rate	4.6 (2.0)	5.2 (1.8)	5.8 (1.9)	
%Civilian Female Unemployment Rate	4.8 (2.1)	5.4 (2.0)	5.8 (2.2)	
%Male workers employed fulltime	87.2 (2.1)	86.4 (2.6)	85.1 (3.7)	
%Female workers employed fulltime	71.5 (4.6)	71.1 (5.0)	69.3 (5.5)	
<b>%Educ &lt; High School Grad. (age ≥ 25yrs)</b>	<b>16.9 (6.2)</b>	<b>19.6 (6.7)</b>	<b>19.2 (6.8)</b>	
%High School Graduate (age ≥ 25)	30.0 (7.4)	32.1 (6.6)	32.2 (6.9)	
%Some College, no degree (age ≥ 25)	21.7 (3.8)	21.0 (3.6)	21.5 (3.8)	
%Associate College Degree (age ≥ 25)	6.3 (1.4)	6.4 (1.7)	6.5 (1.7)	
<b>%Bachelors Degree or more (age ≥ 25)</b>	<b>25.1 (10.4)</b>	<b>21.0 (8.2)</b>	<b>20.7 (8.4)</b>	
% of HHs female-headed with children	6.3 (2.1)	6.7 (1.8)	6.8 (1.7)	20
% of HHs male-headed with children	2.1 (0.5)	2.1 (0.5)	2.1 (0.5)	

However, note that education favors large MAs—consistent with the notion that **only regression analysis will be able to tease out the long-run effects.**

%Pop Foreign Immigrants between 1995-2000	2.0 (2.1)	1.3 (1.4)	1.2 (1.2)
%Pop Foreign Immigrants between 1990-1994	1.4 (1.7)	0.8 (1.0)	0.7 (0.9)
%Pop White <sup>f</sup>	81.5 (15.7)	82.3 (13.8)	83.6 (12.9)
%Pop African American <sup>f</sup>	9.9 (12.1)	10.9 (12.6)	9.6 (12.2)
%Pop Other Race <sup>f</sup>	8.6 (8.3)	6.9 (7.5)	6.8 (6.9)
%Pop Hispanic <sup>f</sup>	7.8 (9.9)	6.7 (11.6)	6.5 (12.0)
%Pop Children <7 yrs old	9.8 (1.2)	9.5 (1.2)	9.3 (1.3)
%Pop Children 7-17 yrs old	16.5 (1.8)	16.3 (1.8)	16.0 (1.8)
%Pop Adults 18-24 yrs old	8.5 (2.0)	9.4 (2.5)	10.9 (4.5)
%Pop Adults 25-59 yrs old	50.0 (2.9)	48.5 (2.6)	46.9 (2.7)
%Pop Adults 60-64 yrs old	3.8 (0.8)	4.0 (0.7)	4.0 (0.8)
%Pop over 65 yrs old	11.4 (3.4)	12.4 (3.3)	12.9 (3.4)
%Lived in same house 5yrs before	53.9 (6.9)	56.0 (6.3)	54.0 (7.9)
%Lived in same county but diff. house 5yrs before	20.9 (5.2)	22.4 (5.2)	23.3 (4.9)
%Lived in same MA but different house 5yrs before if current resident of MA	30.7 (4.1)	28.2 (3.6)	26.0 (3.9)
N	251	304	269

Group	(1) Large MAs Base	(2) Large MAs	(3) Large MAs	(4) Med MAs Base	(5) Medium MAs	(6) Sm MAs Base	(7) Small MAs	(8) Small MAs
<b>Lagged Poverty Rate</b>	<b>0.52</b> <b>(10.9)</b>	<b>0.53</b> <b>(11.0)</b>	<b>0.42</b> <b>(8.5)</b>	<b>0.44</b> <b>(7.2)</b>	<b>0.34</b> <b>(5.9)</b>	<b>0.59</b> <b>(17.0)</b>	<b>0.57</b> <b>(15.7)</b>	<b>0.54</b> <b>(14.5)</b>
Weighted Surrounding Cty Poverty	0.04 (1.03)	0.02 (0.71)	0.02 (0.46)	-0.005 (0.16)	3.4e-04 (0.01)	0.02 (0.67)	0.03 (1.16)	0.02 (0.82)
Single-County MAs <sup>b</sup>	0.47 (0.58)	-0.63 (0.66)	0.42 (0.56)	-1.61 (2.71)	-0.97 (1.98)	0.76 (1.35)	0.49 (0.81)	0.71 (1.20)
<b>Central County<sup>c</sup></b>	<b>0.87</b> <b>(2.33)</b>	<b>0.76</b> <b>(1.88)</b>	<b>0.66</b> <b>(1.94)</b>	<b>0.26</b> <b>(0.74)</b>	<b>0.14</b> <b>(0.40)</b>	<b>0.43</b> <b>(0.93)</b>	<b>0.04</b> <b>(0.07)</b>	<b>0.34</b> <b>(0.71)</b>
Suburban County <sup>c</sup>								
Outlying County <sup>c</sup>	0.29 (1.48)	0.16 (0.79)	0.15 (0.74)	0.02 (0.06)	-0.04 (0.18)	0.11 (0.29)	-0.23 (0.48)	0.17 (0.41)
Population	-2.3e-7 (1.45)	1.5e-7 (0.85)	2.5e-7 (1.62)	6.7e-8 (0.08)	7.3e-7 (0.86)	-5.2e-7 (0.16)	2.3e-7 (0.77)	-1.6e-7 (0.05)
<b>MA Population</b>	<b>1.4e-7</b> <b>(2.29)</b>	<b>1.5e-7</b> <b>(2.61)</b>	<b>1.2e-7</b> <b>(1.93)</b>	<b>-7.8e-7</b> <b>(2.10)</b>	<b>-6.5e-7</b> <b>(1.82)</b>	<b>6.8e-7</b> <b>(0.38)</b>	<b>-1.1e-6</b> <b>(0.70)</b>	<b>-1.6e-7</b> <b>(0.10)</b>
<b>1995-2000 Emp Growth</b>	<b>-0.007</b> <b>(0.74)</b>	<b>0.002</b> <b>(0.16)</b>	<b>-0.012</b> <b>(1.40)</b>	<b>-0.005</b> <b>(0.36)</b>	<b>-0.002</b> <b>(0.16)</b>	<b>-0.034</b> <b>(2.11)</b>	<b>0.009</b> <b>(0.43)</b>	<b>-0.045</b> <b>(2.55)</b>
<b>Emp Grth x (Cen. Cnty or 1 cnty MA)</b>	<b>-0.030</b> <b>(1.61)</b>	<b>-0.079</b> <b>(3.50)</b>	<b>-0.023</b> <b>(1.59)</b>	<b>-0.020</b> <b>(1.07)</b>	<b>-0.007</b> <b>(0.43)</b>	<b>-0.027</b> <b>(1.37)</b>	<b>-0.076</b> <b>(2.87)</b>	<b>-0.016</b> <b>(0.87)</b>
<b>1995-00 MA Emp Grth (#MA cnties ≥ 2)</b>	<b>0.036</b> <b>(1.02)</b>	<b>0.009</b> <b>(0.29)</b>	<b>0.027</b> <b>(0.96)</b>	<b>-0.058</b> <b>(2.15)</b>	<b>-0.013</b> <b>(0.54)</b>	<b>0.004</b> <b>(0.17)</b>	<b>0.020</b> <b>(0.84)</b>	<b>0.014</b> <b>(0.60)</b>

**Regression results by MA size category. Columns 1, 4, and 6 are the base models in red font for the key results.**

- Note the persistence of the poverty rates as reflected by the lagged 1989 poverty rate coef (especially in large and small MAs).
- MA population is positively related to poverty rates in large and medium sized MAs (accessibility).

Large central ctys *ceteris paribus* had about 0.9 percentage point higher poverty rates, consistent with access.

- Job Growth Results (multicollinearity reduces the significance of the coefficients, so joint F-tests are used).
  - Own county job growth only sign in the small MA model.
  - Interact central county with job growth produces JOINTLY significant employment growth results in large MAs and small MAs.
    - Central county job growth reduces poverty in large MAs (access issue)—1% annual greater job growth→0.2 lower poverty rate in central counties
    - Own county job growth lowers poverty across small MAs (or access allows job growth to work everywhere)—1% annual greater job growth→0.2 lower poverty rate in small MA central counties
    - Own county job growth insign in medium MAs
  - Overall MA job growth (less important in theory in small MAs with few counties)
    - is insignificant in the large MA and small MA models (in large MA case, overall job growth is not helpful when there is access issues, need to have more local intra-MA growth to reduce poverty).
    - Is negative and significant in medium MA model, suggesting access matters or medium MAs are small enough so that overall MA job growth matters.
- Concerns about multicollinearity of own-county MA growth and MA growth lead to analysis of dropping one or the other, but the results were robust.
- Concerns about endogeneity with the poverty rate with the explanatory variables led to:
  - Hausman test where industry mix from shift share was used as an instrument for job growth—Hausman did not reject null hypothesis of no endogeneity bias.
  - Lagged the other explanatory variables 10yrs, but the employment results were fairly robust.

SMI Spatial Mismatch <sup>d</sup>	-2.6 (1.53)	-3.3 (2.01)	-1.4 (0.81)	-2.3 (0.92)	-0.6 (0.24)	2.7 (1.26)	2.0 (0.95)	2.0 (0.94)
1990-2000ΔSMI. <sup>d</sup>	17.6 (1.76)	15.5 (1.58)	15.4 (1.73)	-12.4 (1.85)	-17.2 (2.82)	4.4 (0.59)	3.9 (0.55)	4.2 (0.61)
%of workers empl in county of residence	0.012 (1.85)	0.014 (2.30)	0.018 (1.90)	0.017 (2.04)	-0.004 (0.37)	0.009 (1.26)	0.012 (1.86)	0.006 (0.68)
% of workers empl in MA central city	0.005 (0.95)	0.005 (0.77)	0.006 (1.11)	0.004 (0.80)	0.004 (0.81)	-2.2e-4 (0.04)	-4.4e-5 (0.01)	-1.9e-4 (0.03)
1995-2000 Structural Change <sup>e</sup>	2.9 (0.69)	1.74 (0.39)	3.2 (0.82)	-1.9 (0.42)	0.4 (0.10)	-5.8 (0.93)	-6.7 (0.98)	-5.4 (0.80)
Pop. x Structural Change <sup>e</sup>	-8.0e-6 (1.68)	-9.2e-6 (1.77)	-7.2e-6 (1.42)	1.7e-05 (0.78)	-1.4e-6 (0.07)	7.4e-5 (1.16)	7.3e-5 (1.11)	6.4e-5 (1.02)
Afr Amer X Emp Grth		-0.002 (2.39)					-0.004 (3.04)	
Non AA Minority X Emp Grth		-0.001 (0.39)					0.006 (1.39)	
Hispanic X Emp Grth		-5.9e-04 (0.33)					-0.011 (2.51)	
Cen Cnty X Afr Amer X Emp Grth <sup>f</sup>		3.6e-04 (0.35)					0.003 (2.15)	
Cen Cnty X Non AA Minority X Emp Grth <sup>f</sup>		4.5e-04 (0.27)					-0.002 (0.78)	
Cen Cnty X Hispanic X Emp Grth <sup>f</sup>		0.004 (2.71)					0.008 (2.48)	
%Male Emp./Population			0.04 (1.30)		-0.08 (2.64)			-0.04 (0.83)
%Female Emp./Population			-0.17 (3.11)		-0.09 (2.31)			-0.007 (0.13)

#### Now turn to some of the other indicators for job accessibility

1. SMI is the percent of population that would need to move such that population/employment would have the same distribution within the MA (Martin, 2004).

The level of SMI tends to be insignificant.

The 1990-2000 ΔSMI tends to be positively related to large MA poverty, but is inversely related to poverty in medium-sized MAs—or other issues of access are more important.

2. %of workers employed in their county of residence is an *inverse* measure of accessibility in other counties.

It is positively related to poverty rates—suggesting access matters.

3. %of employment in central ctys is a traditional access measure, but it is uniformly insignificant.

#### Then columns 2 and 7 report when we add interactions of race × employment growth and × county type

1. Medium MA race interaction coefs are jointly insignificant and are not reported.
2. The key result is that in large and small MAs, greater employment growth in counties with a higher Black pop. shares have lower poverty rates
  1. This result is uniform across large MAs—i.e., not concentrated in central cities. We take this to mean that after controlling for employment conditions and access, there are special barriers for blacks in large MAs (or counties with more blacks). Of course, one possible cause is discrimination.
  2. This result is concentrated in outer suburbs in small MAs—or it is not very consequential in their case.
  3. One other result is that job growth has less of a poverty reducing impact in central counties with more Hispanics.

--Does Job Growth reduce poverty through increasing labor force participation/reducing unemployment, or does it work through increasing worker experience and raising wages.

--We indirectly test this through adding measures of labor-force tightness—emp/pop ratios, unemployment rates, %fulltime employment.

--See columns (3), (5), and (8)

1. Note the own-county job growth employment results in large and small MAs and the overall MA job growth results in medium MAs are roughly unchanged.  
Job growth matters even accounting for labor supply, or job growth matters more through increasing wages/experience than through tighter labor supply
2. General labor supply pattern is greater fem/emp→lower poverty across all size categories. We argue that this suggests that removing barriers for female employment is beneficial. Especially regarding single mothers in large MAs.
3. Lower male unemployment rates →lower poverty rates, or helping men find work quicker. (reform UI, training)

<b>%Civilian Male Unemployment Rate</b>	<b>0.23 (1.65)</b>	<b>0.21 (1.91)</b>	<b>0.20 (2.33)</b>					
<b>%Civilian Female Unemployment Rate</b>	<b>-0.10 (0.80)</b>	<b>0.08 (0.86)</b>	<b>-0.02 (0.19)</b>					
<b>%Male workers employed fulltime</b>	<b>0.06 (0.85)</b>	<b>-0.10 (1.29)</b>	<b>-0.10 (1.39)</b>					
<b>%Female workers employed fulltime</b>	<b>0.03 (0.54)</b>	<b>-0.04 (0.85)</b>	<b>-0.03 (0.68)</b>					
%High School Graduate (age≥ 25)	-0.23 (4.38)	-0.18 (3.79)	-0.24 (4.44)	-0.20 (3.13)	-0.17 (2.80)	-0.09 (2.14)	-0.09 (2.25)	-0.09 (2.09)
%Some College, no degree (age≥ 25)	-0.12 (2.31)	-0.11 (2.22)	-0.15 (2.50)	-0.22 (3.25)	-0.20 (3.19)	-0.18 (3.35)	-0.15 (2.93)	-0.20 (3.20)
%Associate College Degree (age≥ 25)	-0.26 (2.57)	-0.23 (2.33)	-0.16 (1.62)	-0.21 (2.20)	-0.08 (0.92)	0.05 (0.69)	0.04 (0.54)	0.03 (0.45)
%Bachelors Degree or more (age≥ 25)	-0.18 (4.91)	-0.14 (4.08)	-0.21 (5.00)	-0.22 (4.53)	-0.13 (2.75)	-0.08 (2.15)	-0.08 (2.52)	-0.08 (2.01)
% of HHs female-headed with children	0.48 (5.01)	0.50 (5.06)	0.50 (4.79)	0.44 (3.39)	0.43 (3.41)	0.51 (4.02)	0.57 (4.96)	0.36 (2.67)
% of HHs male-headed with children	-0.03 (0.11)	0.13 (0.54)	-0.07 (0.27)	0.07 (0.24)	0.23 (0.86)	-0.17 (0.69)	-0.10 (0.44)	-0.25 (0.99)
%Pop Foreign Immigrants between 1995-2000	0.28 (1.94)	0.25 (1.75)	0.27 (1.74)	0.43 (2.09)	0.56 (2.88)	0.19 (1.15)	0.18 (1.20)	0.11 (0.69)
%Pop Foreign Immigrants between 1990-1994	0.12 (0.62)	0.24 (1.16)	-0.04 (0.19)	-0.05 (0.18)	-0.25 (1.00)	0.35 (1.29)	0.70 (2.41)	0.32 ( <del>2.4</del> )



Industry Structure <sup>g</sup>	Y	Y	Y	Y	Y	Y	Y	Y
Residential Mobility <sup>h</sup>			Y		Y			Y
<b>F-stat: <math>\beta_{emp\ grth+}</math> <math>\beta_{cencty} \times emp\ grth=0</math></b>	<b>3.39</b> p=.07	<b>8.81</b> p=.003	<b>5.06</b> p=0.026	<b>2.64</b> p=.11	<b>0.45</b> p=0.504	<b>13.07</b> p=.000	<b>6.58</b> p=.011	<b>12.60</b> p=.001
<b>F-stat: <math>\beta_{spatial\ mis=}</math> <math>\beta_{\Delta Spatial\ mis=0}</math></b>	<b>2.39</b> p=.09	<b>2.89</b> p=0.06	<b>1.72</b> p=0.18	<b>2.63</b> p=.07	<b>4.30</b> p=0.02	<b>1.11</b> p=0.33	<b>0.77</b> p=0.46	<b>0.68</b> p=0.51
<b>F-stat: Race X emp grth<sup>i</sup></b>		<b>2.41</b> p=.069				<b>5.52</b> p=.001		
<b>F-stat: Cen Cnty × Race X emp grth</b>		<b>8.16</b> p=.000				<b>3.57</b> p=.015		
<b>F-stat: all 6 race × job growth inter</b>		<b>4.67</b> p=.000				<b>2.96</b> p=.009		
R <sup>2</sup>	0.974	0.977	0.979	0.963	0.971	0.972	0.975	0.975
N	251	251	251	304	304	269	269	269
								<b>25</b>

## Conclusions

- Many things influence differential MA poverty rates (each a little). “No big smoking gun.”
- job growth-poverty link was found to vary both across MA size and county type; consistent with job access being critical
  - Policy needs to focus more on access in conjunction with economic development.
- poverty rate  $\uparrow$  as MA pop  $\uparrow$  among large MAs
- for med.-sized MAs, pop decrease poverty
- for small MAs, pop. had no statistical effect

For medium MAs, agglomeration gains (wages, thick labor markets) overwhelm access issues of greater population

For large MAs, access and congestion effects overwhelm the agglomeration effects.

- *ceteris paribus*, poverty rates were significantly higher in large MA central ctys
- for large MAs, county job growth reduced poverty more in central ctys than suburban ctys
- county job growth only significantly reduced suburban poverty in small MAs, while the central-cty effect was only sign. in large MAs

- typical spatial mismatch measures (broadly defined) produced mixed results (need multiple econ and accessibility measures!)
  - The SMI employment/population mismatch measure was only positive and significant in differences, not levels
  - share of MA employment located in central-ctys was insign
  - Job growth reduced poverty more in counties with larger shares of Blacks—even when accounting for the poverty rate in the prior decade—for both small and large MAs.



- an inverse measure of employ. availability and accessibility in nearby counties, was only positive and sign. for large and medium MAs
- Job growth's effect more likely occurred through wage effects in small and large MAs

# Policy Implications

- Potential for place-based economic development policies to reduce poverty in large MA central-city counties and all counties with larger shares of Blacks
- Improved anti-discrimination policies may be warranted across MA size and county type
- Because of likely interaction between traditional spatial-skills mismatch, neighborhood effects, and racial discrimination in hiring, effective antipoverty solutions likely require a combination of place/person policies
- Policy likely varies by place—i.e. one size does not fit all.

# Thank you!

Presentation will be posted at The Ohio State University, AED Economics, Swank Program website:

<http://aede.osu.edu/programs/Swank/>

*(under presentations)*