

Better Amenities or Better Business Environment: Would Either Be Effective?

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Professor Stuart Rosenthal

Melvin A. Eggers Economics Faculty Scholar

Syracuse University

Maxwell School, Dept of Economics

Cleveland has been losing population, and especially among people under age 50

“Between **1980 and 2000**, Cleveland lost fully **one-sixth** of its population. Like other older cities in the nation's "Rust Belt," Cleveland's metropolitan area also lost residents over this period, although it managed to grow modestly in the 1990s”

Cleveland in Focus: A Profile from Census 2000, Brookings, November 2003.

“The population for the eight-county Greater Cleveland area dropped by an estimated **58,000 people from 2000 to 2008**, but the decline was even sharper among those age 50 and under.

The **under-50 population fell by an estimated 176,000** residents while the number of older people actually increased, the latest estimates from the Census Bureau show.”

Cleveland.com/datacentral, March 22, 2010

TABLE 1-1 Largest Metropolitan Areas in the United States, 2000

Metropolitan Area	Population 2000	Percent Change 1990–2000
New York-Northern New Jersey-Long Island, NY-NJ-PA	18,323,002	8.8
Los Angeles-Long Beach-Santa Ana, CA	12,365,627	9.7
Chicago-Naperville-Joliet, IL-IN-WI	9,098,316	11.2
Philadelphia-Camden-Wilmington, PA-NJ-DE	5,687,147	4.6
Dallas-Fort Worth-Arlington, TX	5,161,544	29.4
Miami-Fort Lauderdale-Miami Beach, FL	5,007,564	23.5
Washington-Arlington-Alexandria, DC-VA-MD	4,796,183	16.3
Houston-Baytown-Sugar Land, TX	4,715,407	25.2
Detroit-Warren-Livonia, MI	4,452,557	4.8
Boston-Cambridge-Quincy, MA-NH	4,391,344	6.2
Atlanta-Sandy Springs-Marietta, GA	4,247,981	38.4
San Francisco-Oakland-Fremont, CA	4,123,740	11.9
Riverside-San Bernardino-Ontario, CA	3,254,821	25.7
Phoenix-Mesa-Scottsdale, AZ	3,251,876	45.3
Seattle-Tacoma-Bellevue, WA	3,043,878	18.9
Minneapolis-St. Paul-Bloomington, MN-WI	2,968,806	16.9
San Diego-Carlsbad-San Marcos, CA	2,813,833	12.6
St. Louis, MO-IL	2,698,687	4.6
Baltimore-Towson, MD	2,552,994	7.2
Pittsburgh, PA	2,431,087	-1.5
Tampa-St. Petersburg-Clearwater, FL	2,395,997	15.9
Denver-Aurora, CO	2,179,240	30.7
Cleveland-Elyria-Mentor, OH	2,148,143	2.2
Cincinnati-Middletown, OH-KY-IN	2,009,632	8.9
Portland-Vancouver-Beaverton, OR-WA	1,927,881	26.5
Kansas City, MO-KS	1,836,038	12.2
Sacramento-Arden-Arcade-Roseville, CA	1,796,857	21.3
San Jose-Sunnyvale-Santa Clara, CA	1,735,819	13.1
San Antonio, TX	1,711,703	21.6
Orlando, FL	1,644,561	34.3

Source: U.S. Census Bureau, Census 2000 and 1990 Census. From O'Sullivan, *Urban Economics*

Two strategies to stabilize population

- Make Cleveland a more attractive place to live
- Make Cleveland a more attractive place to do business
- Quick bottom line ... I would advocate focusing on making Cleveland a more attractive place to do business.
- Here's why ...

Where do firms and households prefer to locate?

- In previous work, I have estimated indexes that highlight the degree to which households and firms prefer different locations throughout the U.S. (Journal of Urban Economics, 2008).
- KEY IDEA: Mobile households and firms are willing to pay a premium for the opportunity to locate in attractive, productive MSAs
- **Households**
 - How much real wage are you willing to give up to live in a particular MSA with its given set of natural and built amenities?
 - Areas with *higher* real wages have *less* attractive features.
- **Firms**
 - How much extra cost are you willing to incur to locate a worker in a particular MSA with its given mix of industries, regulations, and tax environment (as measured by the sum of wages and land costs)?
 - *Higher* cost locations have *more* attractive features.

How do different areas compare for 346 locations?

City	Year-2000 Quality of Local Amenities as a Place to Live (QH) ^a	Year-2000 Quality of Local Business Environment (QB) ^b
	Rank	Rank
Buffalo, NY	294	161
Cleveland, OH	288	91
Detroit, MI	342	46
Syracuse, NY	305	185
San Francisco-Oakland, CA	3	3
Youngstown-Warren, OH-PA	284	213

^aMeasured by the real wage differential across cities in 2000 dollars – lower real wage implies more attractive amenities to households.

^bMeasured by the input cost differential across cities in 2000 dollars – higher combined costs for land and labor (per worker) implies more attractive local attributes to business.

Source: “Local Amenities and Life Cycle Migration: Do People Move for Jobs or Fun?”
(Chen and Rosenthal; Journal of Urban Economics, 2008)

Most preferred locations?

Top 20 Q_H and Q_B Year 2000 Locations

Top 25 Q _H Locations			Top 25 Q _B Locations		
Location	Rank Q _H	Rank Q _B	Location	Rank Q _H	Rank Q _B
Santa Cruz, CA	1	5	San Jose, CA	6	1
Honolulu, HI	2	13	Stamford, CT	44	2
San Francisco-Oakland-Vallejo, CA	3	3	San Francisco-Oakland-Vallejo, CA	3	3
Salinas-Sea Side-Monterey, CA	4	19	Oakland, CA	45	4
Santa Barbara-Santa Maria-Lompoc, CA	5	18	Santa Cruz, CA	1	5
San Jose, CA	6	1	Nassau Co., NY	233	6
Hawaii Non-MSA	7	34	Danbury, CT	220	7
Santa Rosa-Petaluma, CA	8	11	Bergen-Passaic, NJ	122	8
Jacksonville, NC	9	335	Orange County, CA	13	9
San Luis Obispo-Atascad-P Robles, CA	10	31	Middlesex-Somerset -Hunterdon, NJ	333	10
Barnstable-Yarmouth, MA	11	42	Santa Rosa-Petaluma, CA	8	11
San Diego, CA	12	30	Ventura-Oxnard-Simi Valley, CA	16	12
Orange County, CA	13	9	Honolulu, HI	2	13
Montana Non-MSA	14	332	New York-Northeastern NJ	203	14
Fort Walton Beach, FL	15	253	Newark, NJ	331	15
Ventura-Oxnard-Simi Valley, CA	16	12	Boston, MA	91	16
Kileen-Temple, TX	17	311	Bridgeport	330	17
Colorado Non-MSA	18	107	Santa Barbara-Santa Maria, CA	5	18
Medford, OR	19	167	Salinas-Sea Side-Monterey, CA	4	19
Los Angeles- Long Beach, CA	20	20	Los Angeles- Long Beach, CA	20	20

Where do firms and households prefer to locate?

- Many of the locations most preferred by households are not attractive to business (e.g. Medford Oregon)
- Many of the locations most preferred by businesses are not attractive to households (e.g. Bridgeport Conn)
- Households tend to prefer cities of various sizes in warm coastal locations and some rural areas.
- Firms tend to prefer larger metropolitan areas but the story is more complicated than that.

Making Cleveland more attractive?

- The natural environment
 - The Lake – an obvious asset
 - Climate – a clear negative for most people
 - But affordable heating and good snow plow service can help
 - Location – in the mid-west
 - For some, the location is a plus, but for the typical person in the U.S. the coastal areas and sunbelt are a lure
 - Location can't be changed, but fast transportation can help, as with airline and train service.
- The “Built” environment
 - Schools
 - Low crime
 - Cultural amenities

Making Cleveland more attractive?

- Cleveland has many cultural amenities
 - The Cleveland symphony is world class
- Cleveland has done much to address past concerns about environmental quality
 - The Cuyahoga River now supports many species of fish, beaver, bald eagles and other wildlife
- Shaker Heights is known widely as an actively integrated community
- Certainly Cleveland should continue to strive to be an attractive place to live. But with respect to stabilizing the population, I expect diminishing returns have set in.

Improving the Business Environment?

Businesses care about ...

- Transportation costs that affect ...
 - Access to inputs (e.g. iron ore for steel)
 - Affect access to final goods markets (like NY, Chicago)
 - But transport costs are now far lower than when Cleveland first became a major Great Lakes city and are not likely to play a major role in securing new industries.
- Proximity to other companies, often in the same or complementary industry
- Local government business regulations and tax policies

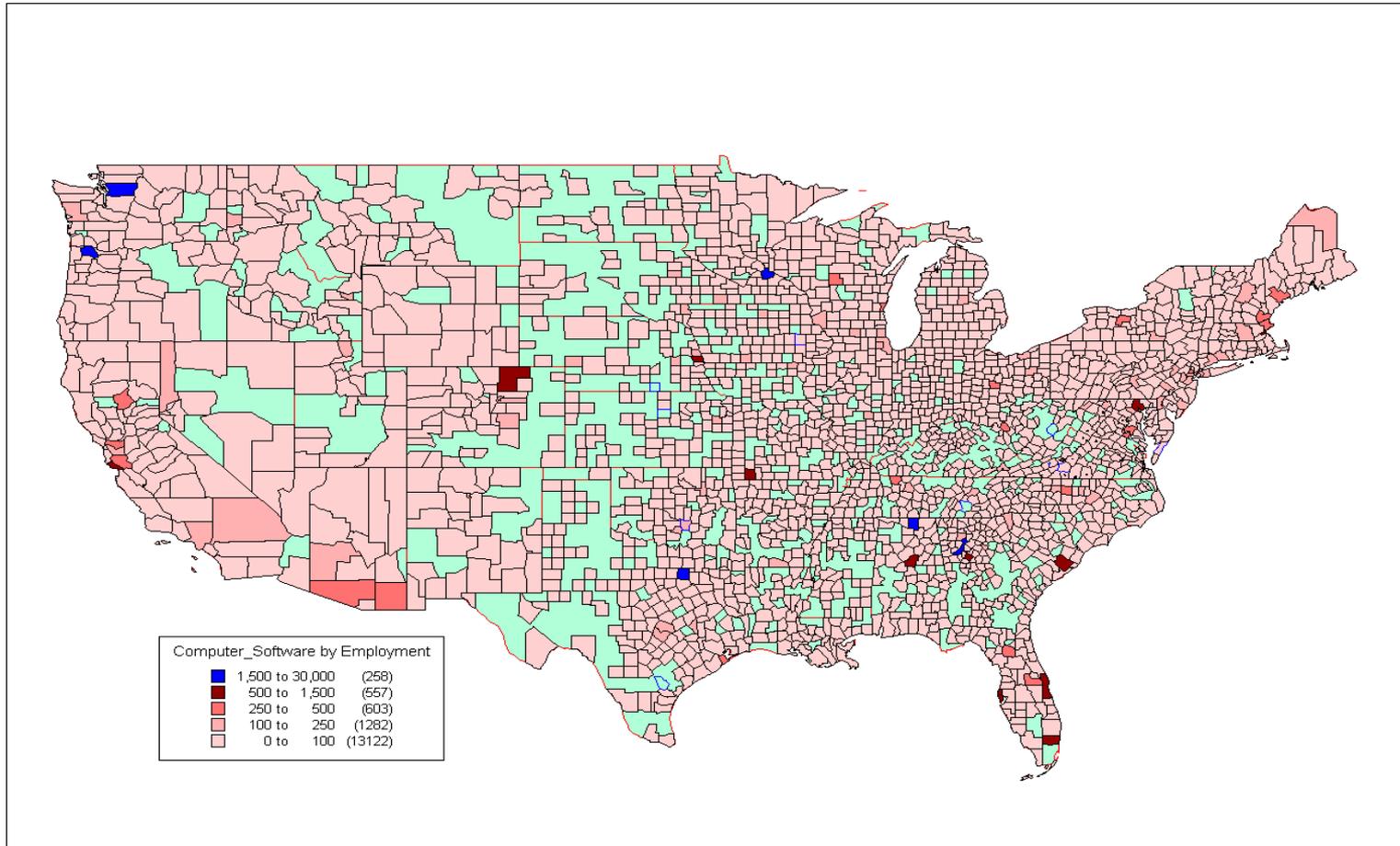
Improving the Business Environment?

- With transport costs playing a lesser role, the primary opportunities to enhance Cleveland's appeal to business are likely through ...
- ... Fostering more attractive/productive spatial patterns of industry clusters in the area
- ... Modifying local government policies to reduce business regulation and business taxes.

Many industries thrive in clusters

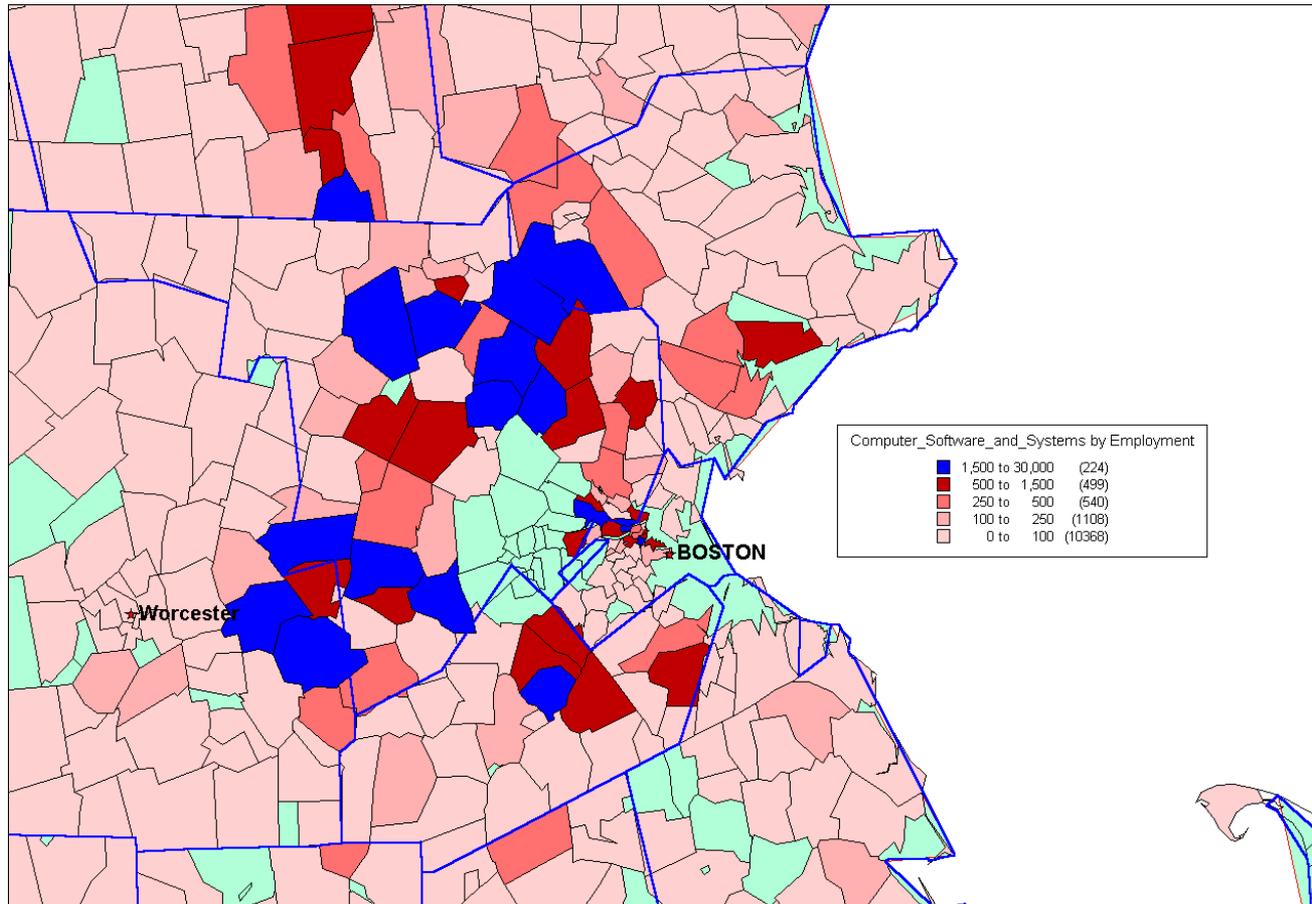
- Consider some pictures, which really are worth a thousand words
 - Software production
 - Furniture production
 - Carpet production

Employment in the Computer Software Industry



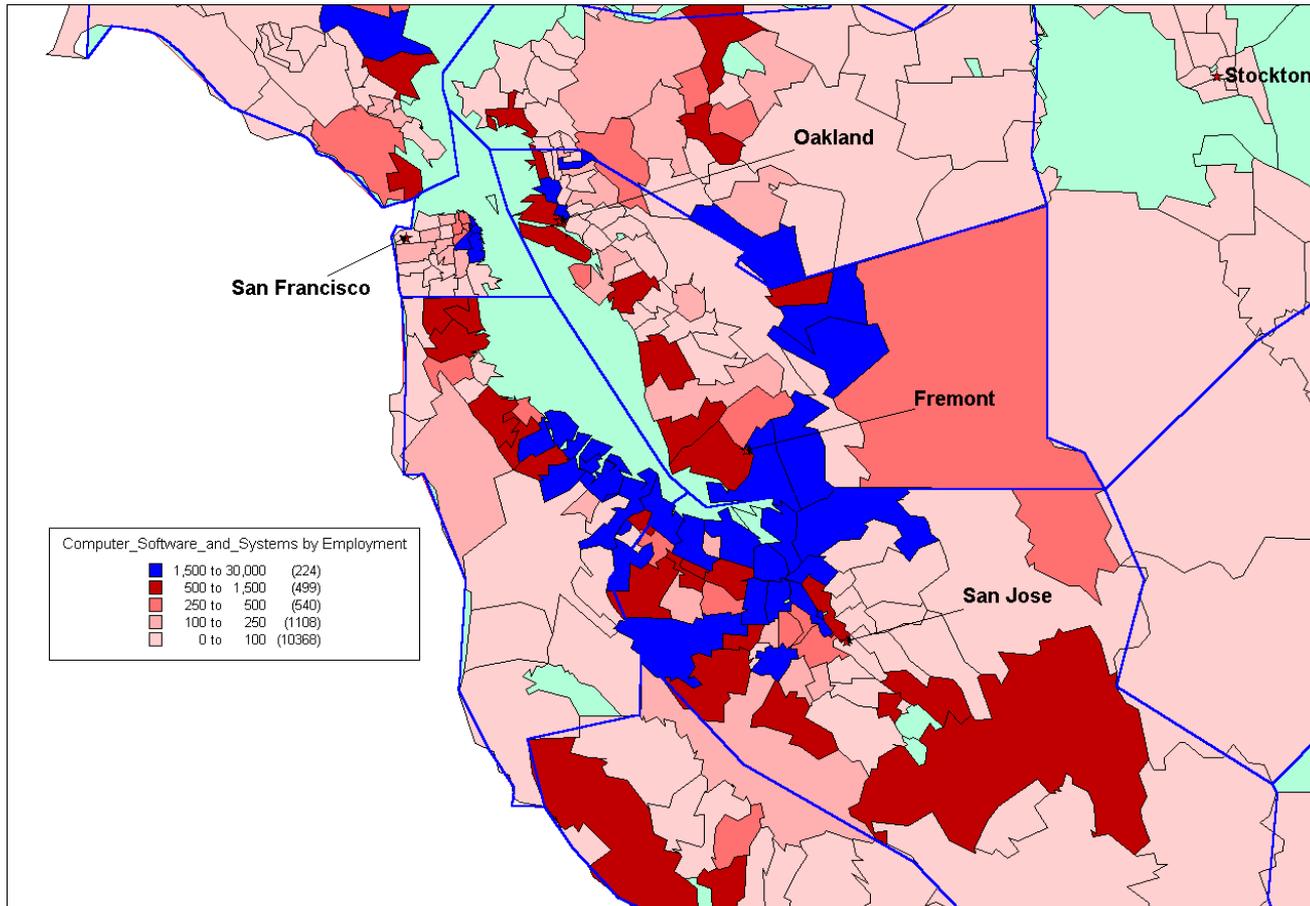
Source: "The Micro-Empirics of Agglomeration Economies" (Rosenthal and Strange)

Software Employment - Boston



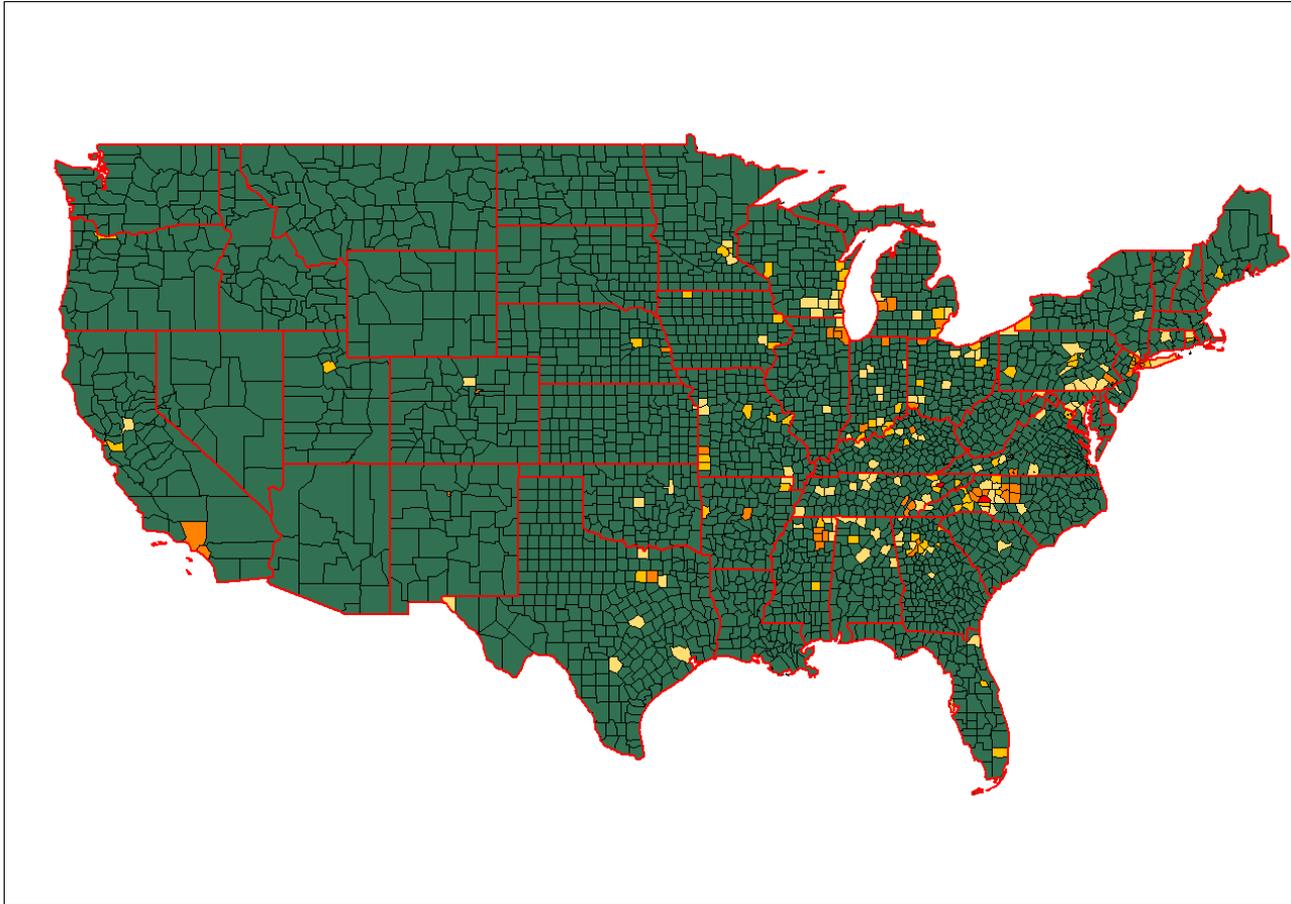
Source: "The Micro-Empirics of Agglomeration Economies" (Rosenthal and Strange)

Software Emp - San Francisco/San Jose



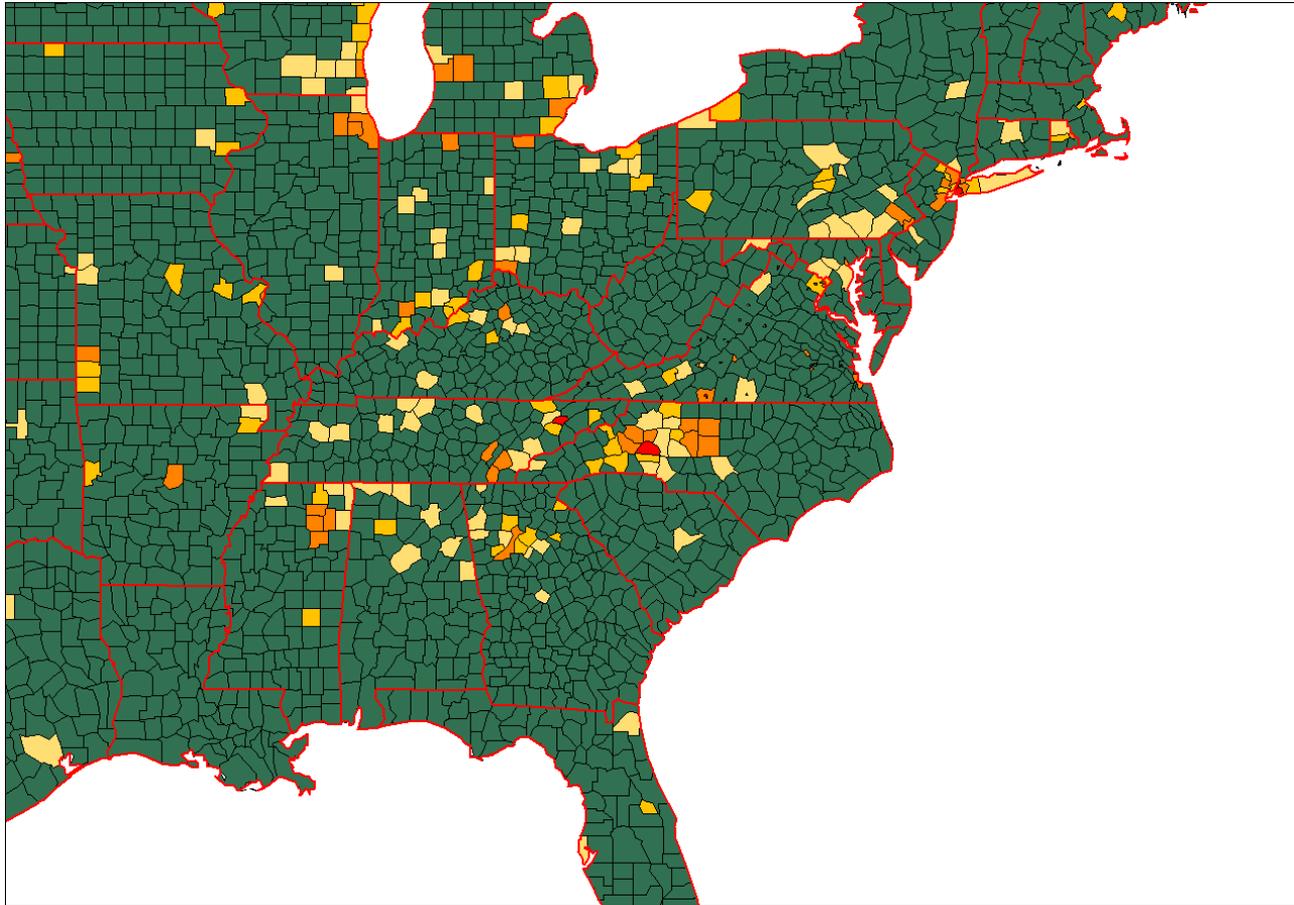
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Furniture Industry Employment



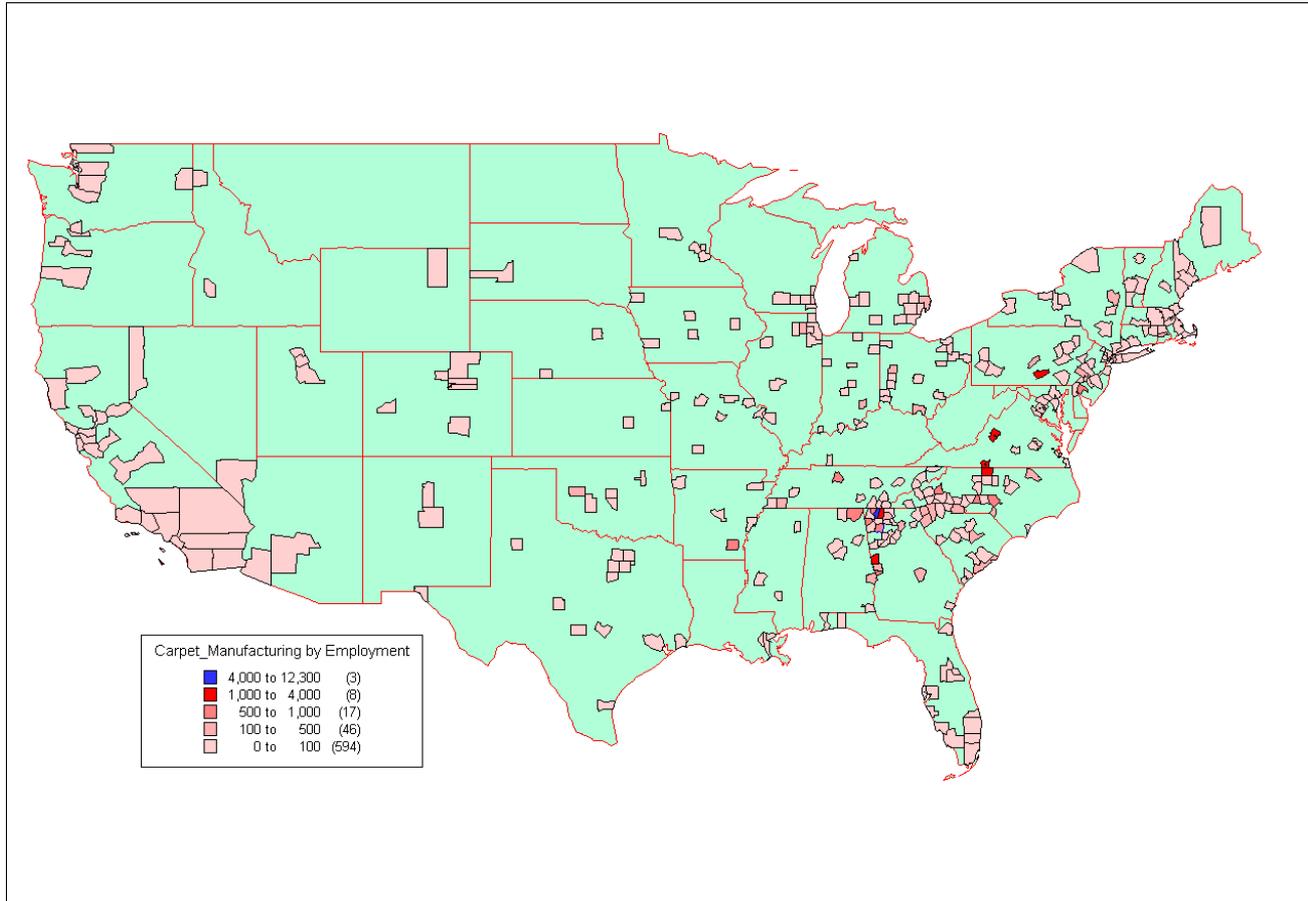
Source: "Evidence on the Nature and Sources of Agglomeration Economies" (Rosenthal and Strange)

Furniture Industry Employment



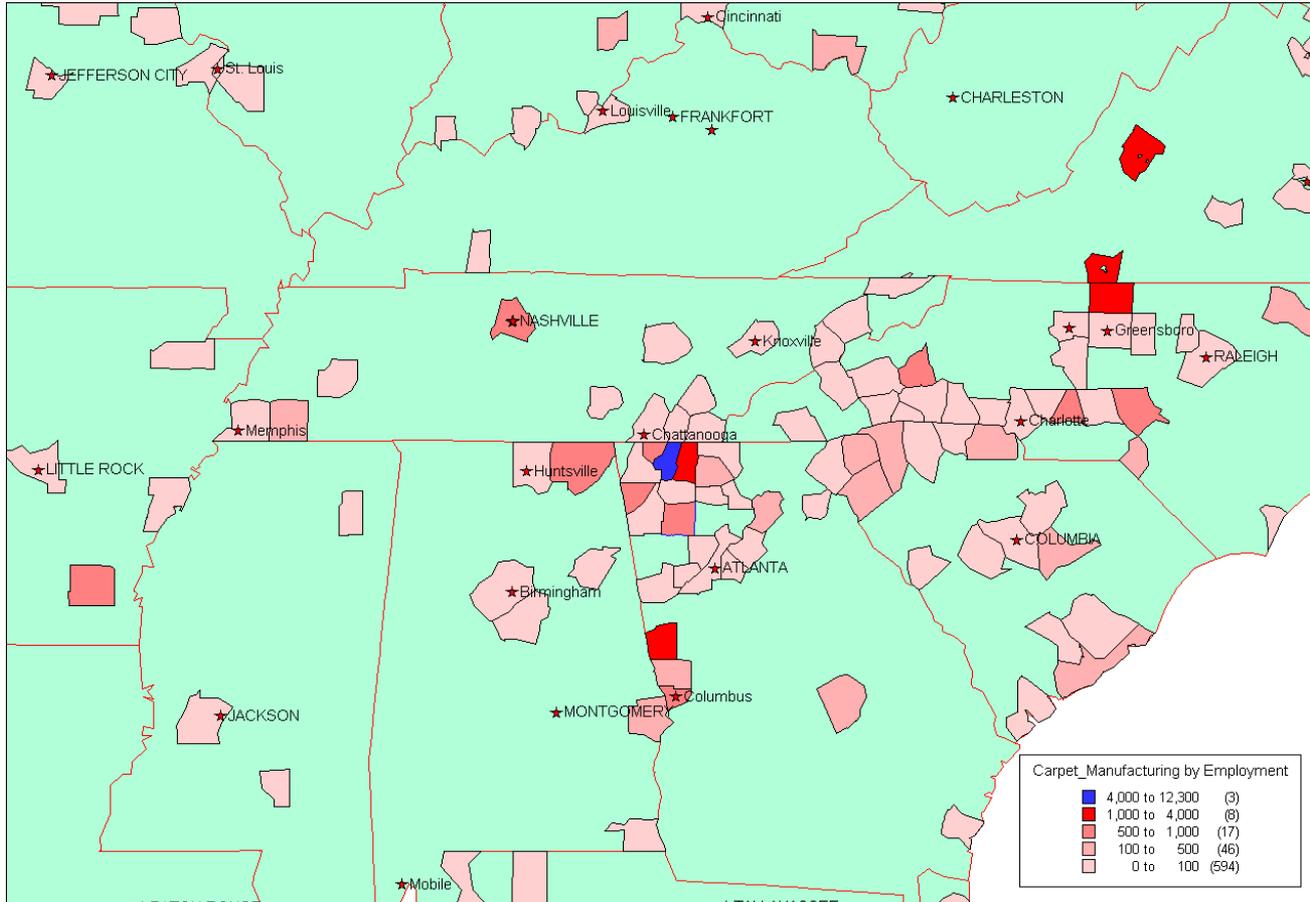
Source: "Evidence on the Nature and Sources of Agglomeration Economies" (Rosenthal and Strange)

Carpet Industry Employment



Source: "The Micro-Empirics of Agglomeration Economies" (Rosenthal and Strange)

Carpet Industry Employment



Source: "The Micro-Empirics of Agglomeration Economies" (Rosenthal and Strange)

Industry Clusters

- These industries are all concentrated in select cities and neighborhoods.
- Shipping costs could not account for these patterns.
- Instead, many companies benefit from very close proximity (**even within one mile**) to other companies in the same or closely related industries.
 - Easier to learn from your neighbors
 - Tap into a common local pool of skilled workers
 - Support local intermediate input providers
 - “A Button Collection” 575 Eight Ave., Suite 512 NY, NY, since 1937: <http://www.woodbuttons.com/p1.htm>

TABLE 3–1 Select Industrial Clusters in U.S. Metropolitan Areas, 2001

Product	Metropolitan Area	2001 Employment	National Share (%)
Information technology	San Jose, CA	92,453	10.15
	Boston, MA	54,811	6.02
	Dallas, TX	38,570	4.24
	Seattle, WA	37,469	4.12
Aerospace engines	Hartford, CT	14,207	15.81
	Cincinnati, OH	7,805	8.68
	Indianapolis, IN	7,745	8.62
	Phoenix, AZ	7,560	8.41
Financial services	New York, NY	316,922	9.36
	Boston, MA	158,727	4.69
Furniture	Hickory, NC	31,714	8.92
	Greensboro, NC	20,121	5.66
Biopharmaceuticals	Newark, NJ	21,619	8.23
	Middlesex, NJ	16,757	6.38
Jewelry and precious metals	New York, NY	29,807	24.55
	Providence, RI	11,850	9.76
Chemical products	Augusta, GA	20,053	4.77
	Chicago, IL	16,206	3.85
	Houston, TX	15,189	3.61
Analytical instruments	Boston, MA	77,637	10.38
	San Jose, CA	48,569	6.49
Hospitality and tourism	Las Vegas, NV	182,681	7.16
	Orlando, FL	93,850	3.68
	Atlantic City, NJ	43,002	1.68

Can Cleveland create it's own Silicon Valley?

- Can other cities become the next Silicon Valley??
 - Syracuse?
 - Southwest Virginia: <http://www.conway.com/va/9911/pg05.htm>
 - Cleveland
- It's not so easy ...
 - How much would it cost to convince a company to give up the opportunity to locate in a city with an existing high-tech cluster?
 - Highly educated workers tend to prefer urban amenities – this is good for Cleveland.
 - But married, highly educated workers often have difficult job market co-location problems that are most easily resolved in cities with large, highly diverse economies – this is probably not good for Cleveland.

Cleveland's mix of workers and population

- In work with Chen (JUE, 2008), I have also looked at the tendency of individuals to relocate between 1995 and 2000 towards cities that are ...
 - More attractive to households
 - More attractive to business
- Behavior differs depending on the age, education, and marital status of the individuals.
 - “Power” individuals have a college (or more) degree
 - “Non-Power” individuals do not have a college degree

Figure 1
Change in QH by Marital and Power Status
(Year 2000 Value Minus 1995 Value)

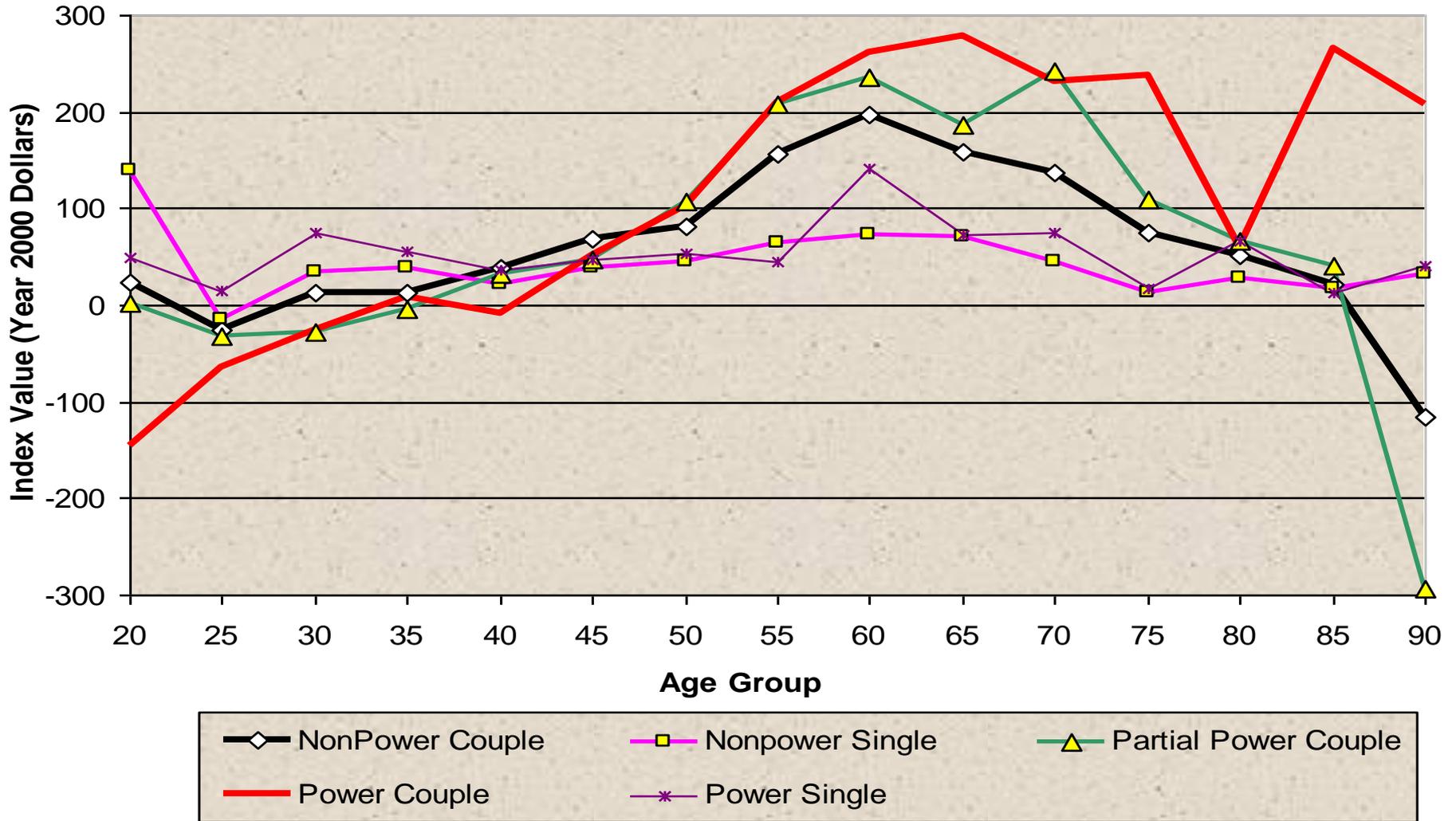
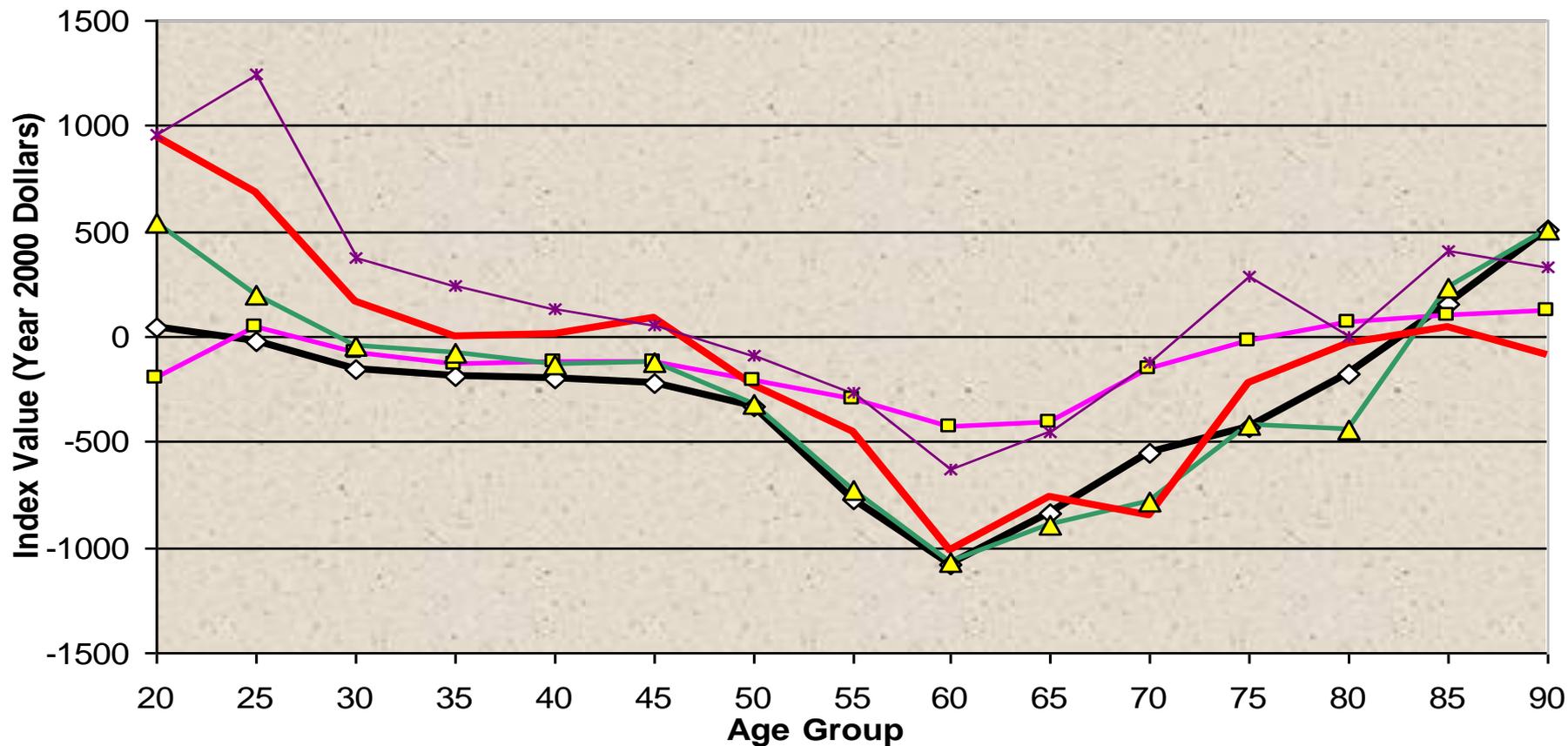


Figure 2
Change in QB by Marital and Power Status
(Year 2000 Value Minus 1995 Value)



Where do firms and households prefer to locate?

- Between ages 20 to 35, regardless of marital status, highly-educated households move to places with high quality business environments.
- All households are less mobile between ages 35 to 55.
- After age 55, regardless of education, married couples tend move away from places with favorable business environments and towards places with attractive consumer amenities.

Cleveland's affordable housing stock

- The business climate in Cleveland, while better than in many cities, is not as attractive as it once was given the diminished role of Great Lakes transportation.
- Cleveland has been losing population, but housing stocks are durable and live on.
- This produces very affordable housing.

Cleveland's affordable housing stock

- Low housing costs disproportionately attract and retain ...
 - Low skilled workers – Cleveland's share of population with a college education is very low relative to many other cities
 - Lower income retirees who seek low-cost areas in which to live – Cleveland has a very high population share of retirees
- This creates fiscal challenges as lower income families tend to be a net draw on local services.

Policy suggestions?

- Consider local government policies that can reduce the cost of regulation and taxation for local businesses.
- Look for opportunities to enhance and/or complement existing industry clusters (e.g. the medical complex built around the Cleveland Clinic).
- Consider cluster development both at the metro and within-MSA level of geography.
- It is difficult to convince companies to locate in places that do not already have clusters of activity in their industries.

Policy suggestions?

- Cleveland also has a challenging population mix, with a disproportionate share of low-skilled and retired individuals.
- A Brookings report, based on the 2000 Census, suggests that Cleveland also has an unusually small share of foreign born.
- Possibly Cleveland could market itself to skilled immigrant groups as a way of drawing additional skilled individuals to the city.
- While affordable housing is a boon to low-income families, Cleveland must also grapple with the long run implications for the skill mix in the city.

Thanks!