Resilient Cities

Edward Glaeser
Harvard University and NBER
<table>
<thead>
<tr>
<th>City</th>
<th>1950 Pop.</th>
<th>2010 Pop.</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>7,891,957</td>
<td>8,175,133</td>
<td>+4 %</td>
</tr>
<tr>
<td>Chicago</td>
<td>3,620,962</td>
<td>2,695,598</td>
<td>-26%</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>2,071,605</td>
<td>1,526,006</td>
<td>-26%</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>1,970,358</td>
<td>3,792,621</td>
<td>+92%</td>
</tr>
<tr>
<td>Detroit</td>
<td>1,849,568</td>
<td>713,777</td>
<td>-61%</td>
</tr>
<tr>
<td>Baltimore</td>
<td>949,708</td>
<td>620,961</td>
<td>-34%</td>
</tr>
<tr>
<td>Cleveland</td>
<td>914,808</td>
<td>396,815</td>
<td>-56%</td>
</tr>
<tr>
<td>St. Louis</td>
<td>856,796</td>
<td>319,294</td>
<td>-63%</td>
</tr>
<tr>
<td>Washington</td>
<td>802,178</td>
<td>601,723</td>
<td>-25%</td>
</tr>
<tr>
<td>Boston</td>
<td>801,444</td>
<td>617,594</td>
<td>-23%</td>
</tr>
</tbody>
</table>
Portrait of Decline

• 38 cities out of 235 with more than 100k population in 2000 have lost more than one percent of their population since then.
• Both income levels and income growth (2000-2008) are almost 20 percent below the urban average.
• They are unusual in January temperature (15 degrees less at the median), education, share using public transit and, of course, poverty.
FIGURE 1: Happiness and Urban Growth in the 1990s

Note: Happiness refers to the share of population reporting being somewhat or very happy in the General Social Survey between 1972 and 2002. Population growth is the change in the logarithm of area population from the U.S. Census.
Unemployment and MSA Growth
Figure 2
The Negative Correlation of Population Changes

Note: Figure shows the 54 counties that had more than 50,000 people in 1860.
Source: County-level U.S. Census data from ICPSR 2896 - Historical, Demographic, Economic, and Social Data: The United States, 1790-2000.
Ford’s Big Idea (River Rouge)
The Woodlands, outside Houston, shows how much more luxurious and sylvan large-scale suburban development has become since Levittown. Unfortunately, the expansion of the exurbs has lead to more carbon intensive lifestyles. All that greenery is really pretty brown.

© Ted Washington  [per permission grant]
Figure I: The Projected System of Interstate Highways in 1947
Urban Decline and Durable Housing
Fig. 2.—Median price regression and construction costs. The dashed horizontal line represents the $97,974 construction costs (in 2000 dollars) for a modest-quality, 1,200-square foot single-family home estimated by R. S. Means (2000a). The observation for Honolulu is not plotted for ease of presentation.
Detroit’s 1967 riot destroyed more than two thousand buildings and came to symbolize the decline of that once-great city.  \textit{Rolls Press/Popperfoto/Getty Images}
Cities are so monumental that we easily forget how fast they can fall—and rise. In the 1970s, New York verged on bankruptcy; President Ford refused to bail it out (left), and President Carter toured the grim ruins of the South Bronx (above). Three decades before these iconic images, Gotham had been an urban paragon, and three decades after them, it is again.

[Art 1:] New York Daily News Archive / Getty Images
[Art 2:] Teresa Zabala / The New York Times / Redux Pictures
Will the last person to leave Seattle please turn out the lights?

Photo by Postdl
Boston’s Reinvention

Author: TWP
Figure 7:
Change in Population, 1970-2000
by Quintile of Percent College Graduates, 1970

Source: U.S. Census Bureau
Figure 4:
Population Growth for MSAs in the Northeast and Midwest


Percent of Population with a BA (1970)

- 0 - 7.5%
- 7.5% - 9.5%
- 9.5% - 11%
- 11% - 15%
- 15%-31%
Average Population Growth by Share with BA in 2000 (Quintiles)
Per Capita GDP 2010

Share w. BAs 2000

20,000 40,000 60,000 80,000 100,000

DETROIT
ATLANTA
CHICAGO
BOSTON
DALLAS
NEW YORK
SAN JOSE
SAN FRAN
LOS ANGE
RIVERSID
Chinitz: Contrasts in Agglomeration: New York and Pittsburgh
Employment Growth 1977-2009
(by Quintiles of 1977 Firm Size)
Coal and Iron Deposits in the United States, 1910
Ralph S. Tarr, B.S., F.G.S.A. and Frank M. McMurry, Ph.D., New Geographies 2nd ed
Downloaded from Maps ETC, on the web at http://etc.usf.edu/maps  [map #02085]
Industrial Concentration and Growth

Employment Growth 1977-2009
(by Quintiles of Industry Concentration by 1977 Wages)
New York City’s Department of Health shows the timeline of the city’s mortality rate, which sharply dropped with the provision of clean water in the nineteenth century.

New York City Department of Health and Mental Hygiene
Author: Branille
Policy Approaches to Decline

• The Physical Capital Approach
  – Urban renewal, transportation aid

• The Tax Incentives Approach
  – Empowerment zones

• The Human Capital Approach
  – The Kalamazoo College Initiative
  – Attracting and training smart people and then get out of their way.

• Shrinking to Greatness
  – Dealing with local government
Infrastructure and Urban Decline

• Question # 1: Does it even make a difference?
• Question # 2: If it makes a difference to the city, does it meaningfully help local residents?
• Question # 3: If it helps local residents, does it meet cost-benefit analysis?
• Should the Federal government even play such an outsized role in transportation funding?
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In population</td>
<td>In income per capita</td>
</tr>
<tr>
<td>Urban renewal spending per capita</td>
<td>0.0022</td>
<td>0.0004</td>
</tr>
<tr>
<td>(dollars)</td>
<td>(0.0014)</td>
<td>(0.0006)</td>
</tr>
<tr>
<td>Dummy for Model Cities participant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log of initial population</td>
<td>-0.027</td>
<td>-0.053</td>
</tr>
<tr>
<td>(0.051)</td>
<td>(0.021)</td>
<td></td>
</tr>
<tr>
<td>Log of initial income per capita</td>
<td>-0.459</td>
<td>-0.177</td>
</tr>
<tr>
<td>(0.152)</td>
<td>(0.035)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.054</td>
<td>5.92</td>
</tr>
<tr>
<td>(0.768)</td>
<td>(1.17)</td>
<td>(0.26)</td>
</tr>
<tr>
<td>No. of observations</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.20</td>
<td>0.45</td>
</tr>
</tbody>
</table>

Source: Authors’ regressions.

a. Units of observation are metropolitan statistical areas under the 1999 definitions (primary rather than consolidated MSAs where applicable, New England county metropolitan areas where applicable). Income and population data are from the U.S. Census Bureau, as described in appendix A. Urban renewal spending per capita is from Staples (1970).
Detroit tried to reverse its decline with foolish investments like its People Mover, which here glides over essentially empty streets.

*Dennis MacDonald/ World of Stock*
Fig. 1. Treatment effect of the change in distance to rail transit on the change in all transit use.
Tax Incentives and Decline

• There is far better evidence to support the view that tax incentives can impact areas.
  – Busso and Kline find 2-4 percent increases in employment rates in empowerment zones.
  – Greenstone and Moretti find significant impacts of million dollar plants.

• There are questions on both (composition vs. treatment in one and the treated group in the other).

• Also one area’s benefit is the others loss.
Shrinking to Greatness

• Basic idea is to shrink the physical footprint of the area to reduce costs of city services and potentially produce more usable land.
• Accusations fly of Flint over-using eminent domain.
• Another strategy is the offer to move people but reduce the area covered by city services.
• Political down-sizing also seems possible.
Human Capital Approaches

• The correlations with land grant colleges supports Moynihan’s old line.
• Correlations with human capital suggest the value of the skill base.
• But is this a question for Federal or local policy?
• It is hard to argue with local investment in better schools (charters) but should we go beyond that to something else.
Attracting the Skilled

• Immutable forces—like proximity to success metro areas—can have a great deal of power.
• There has been a renewed interest in arts and entertainment, which is appropriate.
• Yet it should never take away from the core basics of good schooling, safe streets and quick commutes.
• Can this be done at a reasonable price tag???
<table>
<thead>
<tr>
<th></th>
<th>(1) Visited an art gallery or museum</th>
<th>(2) Went to a bar or tavern</th>
<th>(3) Went out to dinner at a restaurant</th>
<th>(4) Went to the movies</th>
<th>(5) Went to a pop or rock concert</th>
<th>(6) Went to a classical concert</th>
<th>(7) Entertained people in my home</th>
</tr>
</thead>
<tbody>
<tr>
<td>City resident</td>
<td>0.1891 [0.0112]**</td>
<td>0.051 [0.0125]**</td>
<td>0.1071 [0.0112]**</td>
<td>0.202 [0.0111]**</td>
<td>0.1379 [0.0113]**</td>
<td>0.1479 [0.0112]**</td>
<td>-0.0606 [0.0112]**</td>
</tr>
<tr>
<td>Suburb resident</td>
<td>0.0808 [0.0100]**</td>
<td>-0.0049 [0.0112]**</td>
<td>0.0636 [0.0112]**</td>
<td>0.1149 [0.0099]**</td>
<td>0.0749 [0.0101]**</td>
<td>0.0531 [0.0101]**</td>
<td>-0.0062 [0.0100]**</td>
</tr>
<tr>
<td>City x after 1990</td>
<td>-0.0064 [0.0164]</td>
<td>-0.0057 [0.0173]**</td>
<td>-0.0726 [0.0167]**</td>
<td>0.0497 [0.0163]**</td>
<td>-0.0008 [0.0166]**</td>
<td>0.0093 [0.0165]**</td>
<td>0.076 [0.0164]**</td>
</tr>
<tr>
<td>Suburb x after 1990</td>
<td>-0.0041 [0.0144]</td>
<td>0.0366 [0.0153]**</td>
<td>-0.0132 [0.0147]**</td>
<td>0.0577 [0.0143]**</td>
<td>0.0092 [0.0146]**</td>
<td>0.0136 [0.0145]**</td>
<td>0.0435 [0.0144]**</td>
</tr>
<tr>
<td>Survey year</td>
<td>-0.0055 [0.0008]**</td>
<td>0.0022 [0.0011]**</td>
<td>-0.0023 [0.0008]**</td>
<td>-0.0065 [0.0008]**</td>
<td>0.0023 [0.0008]**</td>
<td>-0.009 [0.0008]**</td>
<td>-0.0307 [0.0008]**</td>
</tr>
<tr>
<td>College Graduate</td>
<td>0.3581 [0.0086]**</td>
<td>-0.0589 [0.0091]**</td>
<td>0.1339 [0.0086]**</td>
<td>0.1579 [0.0085]**</td>
<td>0.0569 [0.0086]**</td>
<td>0.3434 [0.0085]**</td>
<td>0.0103 [0.0085]**</td>
</tr>
<tr>
<td>High School Dropout</td>
<td>-0.1658 [0.0114]**</td>
<td>0.0104 [0.0125]**</td>
<td>-0.1834 [0.0115]**</td>
<td>-0.1152 [0.0113]**</td>
<td>-0.0074 [0.0115]**</td>
<td>-0.1217 [0.0114]**</td>
<td>-0.1125 [0.0114]**</td>
</tr>
<tr>
<td>Age</td>
<td>0.0101 [0.0014]**</td>
<td>-0.018 [0.0016]**</td>
<td>0.008 [0.0015]**</td>
<td>-0.0288 [0.0014]**</td>
<td>-0.0285 [0.0015]**</td>
<td>0.0066 [0.0014]**</td>
<td>-0.0164 [0.0014]**</td>
</tr>
<tr>
<td>Age squared</td>
<td>-0.0001 [0.0000]**</td>
<td>0.0001 [0.0000]**</td>
<td>-0.0001 [0.0000]**</td>
<td>0.0002 [0.0000]**</td>
<td>0.0002 [0.0000]**</td>
<td>0</td>
<td>0.0002 [0.0000]**</td>
</tr>
<tr>
<td>Female</td>
<td>0.095 [0.0071]**</td>
<td>-0.3808 [0.0076]**</td>
<td>-0.0411 [0.0071]**</td>
<td>0.0119 [0.0070]**</td>
<td>-0.0329 [0.0071]**</td>
<td>0.068 [0.0071]**</td>
<td>0.1103 [0.0070]**</td>
</tr>
<tr>
<td>Log income</td>
<td>0.0747 [0.0050]**</td>
<td>0.0593 [0.0059]**</td>
<td>0.225 [0.0051]**</td>
<td>0.114 [0.0050]**</td>
<td>0.0564 [0.0051]**</td>
<td>0.046 [0.0051]**</td>
<td>0.0725 [0.0050]**</td>
</tr>
</tbody>
</table>
Price Growth by Distance to City Centers
2001-2008

Percent Growth, 2001-2008

Price Growth by Distance to City Centers
2001-2008

Percent Growth, 2001-2008

0-2 miles
2-5 miles
5-10 miles
over 10 miles
Saga of the Pink FlamInGo!