A Broader Vision of Quality of Life as Economic Development Policy for Small Towns

34th Annual Statewide Community And Economic Development Conference

Dr. Amanda Weinstein
Department of Economics
THE IMPORTANCE OF QUALITY OF LIFE

“The success of cities hinges more and more on cities’ role as centers of consumption”

(Glaeser, Kolko, Saiz, 2001)
BUT WHAT DO PEOPLE WANT?
WE COULD ASK ...
ESTIMATING QUALITY OF LIFE IN CITIES

Households are willing to pay higher housing ($\theta_j^r$) prices and forego wages ($\theta_j^w$) to live in areas with a higher quality of life (Rosen, 1979; Roback, 1982; Albouy, 2011)

$$\log(r_{ij}) = \alpha^r + \beta^r X_i^r + \theta_j^r + \varepsilon_{ij}^r$$

$$\log(w_{ij}) = \alpha^w + \beta^w X_i^w + \theta_j^w + \varepsilon_{ij}^w$$

**Large sample of individuals** ($i$) to estimate the *premium* ($\theta$) people are willing to pay to live in a location ($j$) to estimate QOL:

$$\overline{QOL}_j = \theta_j^r - \theta_j^w$$
Use aggregate (2010 county level - \( j \)) measures of average wages and median home values (average characteristics of the housing stock & population – e.g. average education)

\[
\log(r_j) = \alpha^r + \beta^r X_j^r + \varepsilon_j^r \\
\log(w_j) = \alpha^w + \beta^w X_j^w + \varepsilon_j^w
\]

We use the residual as \( \theta_j^r \) and \( \theta_j^w \) (what we can’t explain about why housing prices and wages are higher or lower in \( j \))

\[
\widehat{QOL} = \widehat{\theta}_j^r - \widehat{\theta}_j^w \\
\widehat{QOBE} = \widehat{\theta}_j^r + \widehat{\theta}_j^w
\]
THE RESIDUALS

From great places to live to great places to work to both to ... neither

Kauai, HI
THE MIDWEST RESIDUALS

More focus on the quality of the business environment than quality of life
QUALITY OF LIFE

\[ QOL = \theta_j^r - \theta_j^w \]

Weinstein, Hicks, Wornell (2022)
POPULATION GROWTH & QUALITY OF LIFE

Small Towns in the Midwest

Population Growth vs. Quality of Life

Population Growth = 0.3312 + 0.6493 * QOL
P-value: 0.0014
R-Squared: 0.0015

Population Growth = -1.3345 + 1.1734 * QOL
P-value: 0.0001
R-Squared: 0.1212
JOB GROWTH & QUALITY OF LIFE

Small Towns in the Midwest

Employment Growth (2010-2018)

Quality of Life

Employment Growth = 6.2695 + 1.4001 * QOL
P-value: < 0.0001
R-Squared: 0.0253

Employment Growth = 4.9078 + 2.9327 * QOL
P-value: < 0.0001
R-Squared: 0.1333

Williams, ND
Wasatch, UT
Andrews, TX
Teton, WY
Mercer County, OH
Adams County, IN
Cass County, MN
Williamson County, IL
Jackson County, IL
JOBS ARE FOLLOWING PEOPLE
QUALITY OF BUSINESS ENVIRONMENT

\[ \text{QOBE} = \hat{\theta}_j^r + \hat{\theta}_j^w \]

Weinstein, Hicks, Wornell (2022)
POPULATION GROWTH & QUALITY OF BUSINESS ENVIRONMENT

Small Towns in the Midwest

Population Growth = 0.2863 + 0.2345*QOBE
P-value: 0.2157
R-Squared: 0.0023

Population Growth = -1.3634 - 0.4171*QOBE
P-value: 0.0937
R-Squared: 0.0161
JOB GROWTH & QUALITY OF BUSINESS ENVIRONMENT

Small Towns in the Midwest
High **quality of business** places do worse when high quality of business places are nearby - they *compete* for jobs (job piracy)

High **quality of life** places benefit from having higher quality of life places nearby – *shared prosperity*
WHAT REALLY MAKES A SMALL TOWN NICE?

Natural Amenities, Private Amenities, Public Amenities

But there are a lot of amenities to consider

We sort through a loooong list of amenities and select those with more predictive power (least angle regression similar to Reynolds and Weinstein, 2021)
NATURAL AMENITIES $\rightarrow$ HIGHER QOL

USDA Natural Amenity Index

Teton County, WY
NATURAL AMENITIES ➔ HIGHER LOWER QOL

Small Towns in the Midwest

- Stone County, MO
- Williamson County, IL
- Jackson County, IL

Quality of Life = -0.2563 - 0.0842 * Amenity Scale
P-value: 0.1101
R-Squared: 0.0146

Marion, IL
NATURAL AMENITIES

Natural amenities aren’t big drivers of quality of life and especially not for the Midwest

... ok, a bit of hilliness helps in the Midwest
PRIVATE GOODS & SERVICES

Businesses that provide goods and services for recreation are especially important for small towns in the Midwest such as
PRIVATE GOODS & SERVICES

Businesses that provide necessities such as *food stores*
BUSINESS HAS A PLACE IN QUALITY OF LIFE!

This is where businesses can have an outsized impact on the economy - by improving quality of life providing goods and services we need and want!
QUALITY OF LIFE AND BUSINESS DYNAMISM

High quality of life places provide an abundance of “3rd places” that foster networks and spur ideas.

Demand for local goods & services may spur start-ups.

High quality of life places may attract entrepreneurs.

Enlightenment & the London coffee house
THE AKRON SOUND & EARTHQUAKER DEVICES
BUSINESS GROWTH & QUALITY OF LIFE

Change in Establishments (%) 2010-2018

Establishment Growth = -0.1332 + 1.2185 * QOL
P-value: 0.0020
R-Squared: 0.0208

Change in Establishments (%) 2010-2018

Establishment Growth = -1.9748 + 1.5066 * QOL
P-value: 0.0083
R-Squared: 0.0391

Quality of Life
SOLID PUBLIC GOODS & SERVICES

Lower crime rates
Better health outcomes (access to healthcare)
School spending
Connectivity (proximity to a metro)
THE RISE OF REMOTE WORK …

… even before the pandemic

Share of Employees Working from Home

Source: Ruggles, et. al., 2022, IPUMS
IN THE WAKE OF COVID ...

The relationship between quality of life and population growth has strengthened ...

... especially for non-metropolitan areas (3x to 4x effect change)
THERE IS AN OPPORTUNITY IN THE WAKE OF COVID, BUT YOUR CURRENT CLIENTS COME FIRST!

Meet the needs of current residents (food stores, schools, ...)

And meet the wants of current residents (recreation, ...)
YOUR CLIENTS MIGHT BE WOMEN

Women exhibit stronger preferences for the Midwest

Women (even more than men) prefer places with lower crime, shorter commutes, better environmental quality, more parks, ... and egalitarian gender role attitudes

Reynolds & Weinstein (2021)
THANK YOU!

Amanda Weinstein
aweinstein@uakron.edu
@ProfWeinstein