Urban/Regional Economics and Rural Development

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RURAL = low density, remote, natural-resource abundant

- 20-25% OECD country populations are rural
- Low “LQ”: only 25 articles in the JRS 1988-2008
- Rural development research = public good
- Many unresolved rural issues
- Rural communities - too small to survive mistakes and too small to afford analytical capacity to avoid them.
- Urban economies cannot achieve their full potential where rural areas lack vitality
Why is the non-farm rural share so stable? (also stable in France, Great Britain…)
What rural development researchers actually do:

**Input-output “impact” analyses**
- No prices, wages, rents: no relative abundance
- Marginal = average: no scale economies
- Perfectly elastic supplies: no t-costs

**fiscal impact analyses**

- Rarely appears in refereed journals

*Insatiable demand from cities and counties for these…*
Refereed research: rural labor supply, demand, and income determination…

<table>
<thead>
<tr>
<th>title</th>
<th>journal</th>
<th>year</th>
<th>authors</th>
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</thead>
<tbody>
<tr>
<td>What Causes Spatial Variations in Economic Development in the US?</td>
<td>AJAE</td>
<td>2008</td>
<td>Wu &amp; Gopinath</td>
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<td>A Geographically Weighted Regression Approach</td>
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<td>Distance from Urban Agglomeration Economies and Rural Poverty</td>
<td>JRS</td>
<td>2008</td>
<td>Partridge &amp; Rickman</td>
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<td>Local Amenities and Life-Cycle Migration: Do People Move for Jobs or</td>
<td>JUE</td>
<td>2008</td>
<td>Chen &amp; Rosenthal</td>
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<td>Fun?</td>
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<td>Nonmetropolitan Counties: A Difference-in-Differences Approach</td>
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<td>Why Is U.S. Poverty Higher in Nonmetropolitan than in Metropolitan</td>
<td>G&amp;C</td>
<td>2007</td>
<td>Fisher</td>
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<td>Areas?</td>
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<td>Proprietorship Formations and U.S. Job Growth</td>
<td>RRS</td>
<td>2007</td>
<td>Shrestha, Goetz &amp; Rupasingha</td>
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<td>Regional Innovation Systems: Implications for Nonmetropolitan Areas</td>
<td>G&amp;C</td>
<td>2006</td>
<td>Barkley, Henry, &amp; Nair</td>
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<td>and Workers in the South</td>
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<td>Employment Growth and the Allocation of New Jobs: Evidence from the</td>
<td>RRS</td>
<td>2006</td>
<td>Renkow</td>
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<td>Food Industry Investment Flows: Implications for Rural Development</td>
<td>RRS</td>
<td>2006</td>
<td>Lambert, McNamara, &amp; Garrett</td>
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<td>A Time Series Analysis of U.S. Metropolitan and Non-metropolitan</td>
<td>ARS</td>
<td>2006</td>
<td>Hammond</td>
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<td>Income Divergence</td>
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<td>Industry Agglomeration and Investment in Rural Businesses</td>
<td>RAgEc</td>
<td>2005</td>
<td>Gabe</td>
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<td>The Returns to Education in Rural Areas</td>
<td>RRS</td>
<td>2004</td>
<td>Goetz &amp; Rupasingha</td>
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<td>RRS</td>
<td>2004</td>
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<td>Deller, Gould &amp; Jones</td>
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<td>Renkow</td>
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Consensus:

1) Firms choose the rural locations that are accessible to their input or output markets and offer the space and workforce they desire at competitive costs (Blackley, 1986; Johnson, 1991; Henderson, 1994).

2) There are different scales or critical mass, in terms of both population and business counts and interdependencies, below which different types of establishments are not sustainable (Shonkwiler and Harris, 1996; Barkley, et al, 2000).

3) People migrate into rural areas proximate to metro areas to enjoy rural amenities (Deller, et al, 2001; Chen and Rosenthal, 2008).

4) People migrate out of remote rural areas to capture higher returns on their human capital (Mills and Hazarika, 2001; Goetz and Rupasingha, 2004).

Huang, Orazem and Wohlgemuth (2002) have shown that although higher rural human capital is associated with higher rural incomes, the effect is “swamped” by the rural brain-drain to urban areas.

5) Rural labor demand growth is met by reduced rural out-commuting rather than in-migration (Renkow, 2003), while excess rural labor supplies are resolved by reductions in the rural labor force.

Khan, Orazem and Otto (2001) emphasize that commuting is an alternative to rural out-migration.

But So, Orazem and Otto (2001) note that rural commuting costs can be prohibitively high.
### Average Net Domestic Migration Rate

**CO-EST2005 estimates, Bureau of Census, 2000-2005 averages**

<table>
<thead>
<tr>
<th>% of county population in 2000</th>
<th>% of US population in county by type:</th>
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<tr>
<td>&gt;1 mil</td>
<td>5%</td>
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<tr>
<td>250K-1mil</td>
<td>5%</td>
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<tr>
<td>50-250K</td>
<td>1%</td>
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<tr>
<td>20-50K adj</td>
<td>2%</td>
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<tr>
<td>2.5-20K adj</td>
<td>3%</td>
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<tr>
<td>&lt;2.5K adj</td>
<td>1%</td>
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<tr>
<td>20-50K nonadj</td>
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**Note:** the horizontal line at 0.1% indicates the nationwide average net in-migration rate.
Piecemeal mobility of rural people **dampens economic opportunity**, reduces rural property values, and worsens the dependence of rural communities on intergovernmental funds.

Median Household Income, by County Population size and Proximity to Urban Areas

Note: $35,370 was the nationwide median household income in 2000.
Piecemeal mobility of rural people dampens economic opportunity reduces rural property values, and worsens the dependence of rural communities on intergovernmental funds.

Median Home Value
(2000 Census SF3)

Median Home Value, by County Population Size and Proximity to Urban Areas

Note:: $81,352 was the nationwide median home value in 2000.
Piecemeal mobility of rural people reduces rural property values, dampens economic opportunity, and worsens the dependence of rural communities on intergovernmental funds.

**Housing Vacancy Rate**

(2000 Census SF3)

Housing Vacancy Rate, by County Population Size and Proximity to Urban Areas

*Note: the line at 24% indicates the nationwide average housing vacancy rate in 2000.*
Piecemeal mobility of rural people reduces rural property values, dampens economic opportunity, and worsens the dependence of rural communities on intergovernmental funds.

Median property taxes paid per owner-occupied home, by county Beale Code

Note: $844 was the nationwide median property taxes paid per home in 2000.
Deleterious market forces; some market failures:

1) Negative feedback
2) Lack of agglomeration economies
3) Prohibitively high cost of remoteness
4) Endogenous sorting of low human capital persons into rural communities
5) Low cost of rural living undermines migration incentives
6) Illiquidity of rural housing = ‘spatial’ financial lock-in
Market failures $\rightarrow$ need for rural policy?

1) Rural fixed assets often not liquidatable at opportunity values (price $\neq$ value)

2) Simply replacing one rural family or business with another does not accomplish *spatial rationalization*

3) Rural business can’t unilaterally expand; there are no alternative upstream and downstream-linked businesses; all must expand simultaneously; high risk; (price fails to signal or coordinate rural adjustments)

$\rightarrow$ Achieving rural economic efficiency is a coordination / planning challenge
A few research challenges:

1) location choice (entry and exit) affect other rural people and businesses: inframarginality assumptions are inappropriate

2) cannot ignore short vs. long run: operating below minimum efficient scale

3) cannot ignore that space imparts market power

4) cannot ignore small market size as a barrier to entry

5) cannot ignore that rural firms compete with urban firms who enjoy the benefits of agglomeration
rural policy?

Not to provide incentives for spatial rationalization, but to

• mitigate the negative externalities and negative feedback,

• address market failures,

• correct inefficiencies,

• compensate the immobile-- inadvertent losers in a world of increasing returns to scale
nationwide policies?
e.g., sector policies, income safety net policies, education...

4 shortcomings:
1) spatial heterogeneity $\rightarrow$ different outcomes (Hurter & Martinich ’89; Kilkenny and Huffman ‘03; Blank ‘05).
2) cost heterogeneity $\rightarrow$ expensive to provide every person everywhere with the same level of public goods
3) scale economies, tastes differ $\rightarrow$ equal spending per capita $\neq$ equal marginal social benefits
4) negative dynamic feedback: the smaller a community gets, the faster it shrinks and the higher the cost of public good provision per capita
people-based policies?

such as “every child everywhere should have a good school within 30 minutes by bus”

may help mobilize people out of low-income, low vitality rural areas;
but in doing so,
they push those rural communities further below critical mass.

Negative feedback
place-based policies?
in which the location or spatial category of the beneficiary is a key criterion for eligibility

shortcomings

1) may generate nothing but rents for the owners (potentially absentee) of property in targeted places;

2) attract, retain, or trap poor people in poor areas;

3) distort business as well as human migration decisions;

4) enable the postponement of necessary adjustments;

5) create dependencies;

6) are subject to abuse by place-based elected officials.

Moral hazard
Moral hazard: As long as you make sure your community doesn’t grow too big, and make sure you don’t tax yourselves enough – you can depend on Uncle Sam…
### Rural policies – counterproductive?

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<table>
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<tbody>
<tr>
<td>1)</td>
<td>farm subsidy – Farmer out-migration</td>
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<td>2)</td>
<td>rural schools – rural brain-drain</td>
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<td>3)</td>
<td>welfare – moral hazard</td>
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<td>4)</td>
<td>rural housing – delayed adjustment</td>
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<td>5)</td>
<td>rural water &amp; waste subsidy – moral hazard</td>
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<td>6)</td>
<td>rural direct loans &amp; re-lending – undermines rural commercial banking sector</td>
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In sum:

- There are significant spatial gradients in the returns to labor and property.
- Stagflation is a spatial phenomenon.
- Unfair? Rural people do vote with their feet.
- BUT piecemeal *spatial rationalization* is costly.
- Rural communities can’t afford planning or policy mistakes or the research to avoid them.
- Rural policy inconsistent, counter productive. *Where are the scientists? Where is the research?*
- Fewer, larger rural communities?
A feast of rural issues require & should inspire innovations in urban/regional/spatial economics:

- Critical mass
- Minimum efficient scale
- Endogenous fiscal capacity and effort
- Moral hazard
- Endogenous sorting
- Spatial monopoly and monopsony
- Spatial gradients/stagflation
- Financial lock-in
- Spatial heterogeneity
And when we have completed all this “structural” research, can we package it all into user-friendly decision-support tools to serve the public good?

That’s the challenge.