What affects rural wealth creation? An empirical analysis of changes in population and wealth in Oregon’s rural communities

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The Story

- How do federal policies affect wealth creation in Oregon?
  - Federal government owns 53% of the land in Oregon.
  - Major shifts in the forest management policy in 1990s.
  - Increased spending for USDA rural development programs since 1990s.
- Community wealth is measured using aggregate assessed value of real property.
Context points

- Many Oregon rural communities were historically timber-dependent.
- Northwest Forest Plan in 1990s shifted federal forest management from timber production to ecosystem management.
- USDA Rural Development Programs provided grants and loans to rural communities.
Northwest Forest Plan

Shifted 11 million acres of federal forest land in WA, OR and CA from timber production to ecosystem management
Oregon Timber Harvests 1965-2010

[Graph showing Oregon timber harvest by ownership class from 1962 to 2010.]
## Mill Closures

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<tbody>
<tr>
<td>Number of mills closed</td>
<td>92</td>
<td>136</td>
<td>54</td>
</tr>
<tr>
<td>Number of mill jobs lost</td>
<td>9085</td>
<td>12,978</td>
<td>5,545</td>
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<tr>
<td>Average jobs lost per mill closed</td>
<td>99</td>
<td>95</td>
<td>102</td>
</tr>
<tr>
<td>Number of communities with mills at the begin</td>
<td>113</td>
<td>98</td>
<td>76</td>
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<td>ning of the period</td>
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Federal Policy: USDA Rural Development Spending
Modeling Population Change and Change in Real Wealth

- Use community level data to assess the impact of federal policy on the change in population and assessed value of real property.

\[ \Delta \text{POP}_{j,t} = \text{natural growth (pop, demog)} \]

\[ + \text{ household migration(wage, amenities, tax)} \]

\[ + \text{ policy} \]

\[ \Delta \text{Asset}_{j,t} = \Delta \text{value of industrial asset (labor market,tax)} \]

\[ + \Delta \text{value of residential asset (housing char, amenities,tax)} \]

\[ + \text{ policy} \]
Major Results

- Impact of NWFP
- Impact of USDA rural development programs
- Community characteristics
Impact of Forest Policy

- NWFP has boosted amenity migration to nearby communities and those that experienced mill closures.
- NWFP may have dampened wealth accumulation in communities with mill closures but it had no statistically significant impact on wealth in nearby communities.
Impact of USDA RD Investments

- During the 1990s, USDA RD community facilities (CF) grants and loans had a positive impact on community population growth.
- No significant impact observed on real property value.
Community characteristics and population growth

- Changes in community population and community wealth are jointly determined

- Population grew faster where
  - property values were lower,
  - education levels were lower initially, and
  - temperature variation was greater

- Proximity to Portland and city size have become increasingly important to growth
  - since 2000, population grew faster the closer a city was to Portland and the larger the initial population
Communities characteristics and wealth creation

- Real property wealth grew faster where
  - Initial property values were higher,
  - Education levels were higher (pre-2000), and
  - Temperature variation was smaller (1990s)

- Proximity to Portland and population size have become increasingly less important in wealth creation
  - Pre-2000, proximity didn’t matter; since 2000, wealth grew faster in cities farther from Portland
  - Pre-1990, wealth grew faster the smaller the population; since 1990, size doesn’t matter
• Thank You!
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