BOSTON COLLEGE
SCHOOL OF SOCIAL WORK

Communities Moving Ahead, Falling Behind: Evidence from the Index of Deep Disadvantage

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Uneven Recession Impacts & Recovery

- The impact of the Great Recession was demographically uneven
  - Proportional wealth losses larger for people of color, those with lower levels of education, and those with lesser pre-existing wealth (Weller & Hanks, 2018; Pfeffer, Danziger, & Schoeni, 2013)
  - Unemployment increases largest among people of color and men (Couch, Fairlie, & Xu, 2016; Cunningham, 2018)
  - Poverty rate rose more sharply for Blacks and Hispanics than for Whites (Danziger, Chavez, & Cumberworth, 2012)

- The gains of the recovery were also demographically uneven
  - E.g., unemployment for some demographic groups returned to pre-recession levels more slowly than others (Cunningham, 2018)

Uneven Recession Impacts & Recovery

- The shocks of the recession and gains of the recovery were *geographically* uneven
  - Some states (e.g., California) saw large surges in unemployment and poverty while others (e.g., New Hampshire) had modest increases
  - At the county level, larger populations of color and lower prevailing levels of education associated with larger employment losses (Thiede & Monnat, 2016)
  - Industrial composition related to geographic effects of recession (manufacturing and construction associated with larger losses) (Walden, 2012; Thiede & Monnat, 2016)

- Differences observed at fine levels of geography
  - E.g., high-poverty neighborhoods affected by wealth losses and housing challenges to greater degree than low-poverty neighborhoods (Lerman & Zhang, 2012)

Research Questions

- Existing studies of geography, the recession, and recovery tend to:
    - 1) examine only one or a small number of indicators and
    - 2) have study periods ending very early in the recovery

- Across multiple indicators:
    - Were some disadvantaged communities more likely to improve than others? Did some communities grow worse off?
    - What factors were associated with improvement or decline from prior to the recession through the recovery?

The Index of Deep Disadvantage

- The original IDD is a composite index combining measures of economic well-being, community health, and social mobility
  - Estimated using principal component analysis (first principal component)

- Component variables include:
  - Poverty rate
  - Deep poverty (<50% poverty) rate
  - Life expectancy
  - Incidence of low weight births
  - Causal mobility effects (Chetty & Hendren, 2017)

- Estimates available for all U.S. counties and the 500 largest cities

Methods: A Multi-Period IDD

- Create two new versions of the IDD

Measure	Pre-recession source	Post-recession source
Poverty	ACS 3-year poverty (2005-2007)	ACS 5-year poverty (2009—2013)
Deep poverty	ACS 3-year deep poverty (2005-2007)	ACS 5-year deep poverty (2009—2013)
Low birthweight rate	Share of live births less than 2500 grams (2003-2006)	Share of live births less than 2500 grams (2011-2017)
Life expectancy	2005 Institute for Health Metrics and Evaluation	RWJF county health rankings
Mobility	Causal mobility effects (note: constant across periods) (Chetty & Hendren, 2017)	

Methods: Sample

- Operationalize "community" using the county
  - Balances small unit size with data availability

- Full sample includes 1817 counties with data available at both time points (58% of all U.S. counties)
  - Note: using ACS five-year poverty estimates at Time 1 increases coverage but overlaps with the recession and early recovery

- Analytical sample restricted to disadvantaged counties (n=908)
  - Below the median score at Time 1

Methods: Analysis

- Stage 1: identify county trajectories ("rising," "declining," "stable")
  - Assign full sample of counties to IDD ventiles pre- and post-recession
  - Categorized as:
    - "Rising" if it improved in rankings more than the adjacent ventile
    - "Declining" if it fell more than the adjacent ventile
    - "Stable" if remained in the same or an adjacent ventile
    - Note: this procedure captures *relative* change on the IDD

- Stage 2: describe pre-recession characteristics of each category of county

- Stage 3: examine absolute change for each group of counties

Methods: Other Indicators

Pre-recession only
- Percentage working-age population w/ a bachelor's degree
- Racial and ethnic demographics (note: limited sample size at time 1)
- Urbanicity
- Presence of tribal land
- Industry mix (% jobs in each industry, 2006 County Business Patterns)

Both time periods
- Unemployment rate
- Median income
- Population change
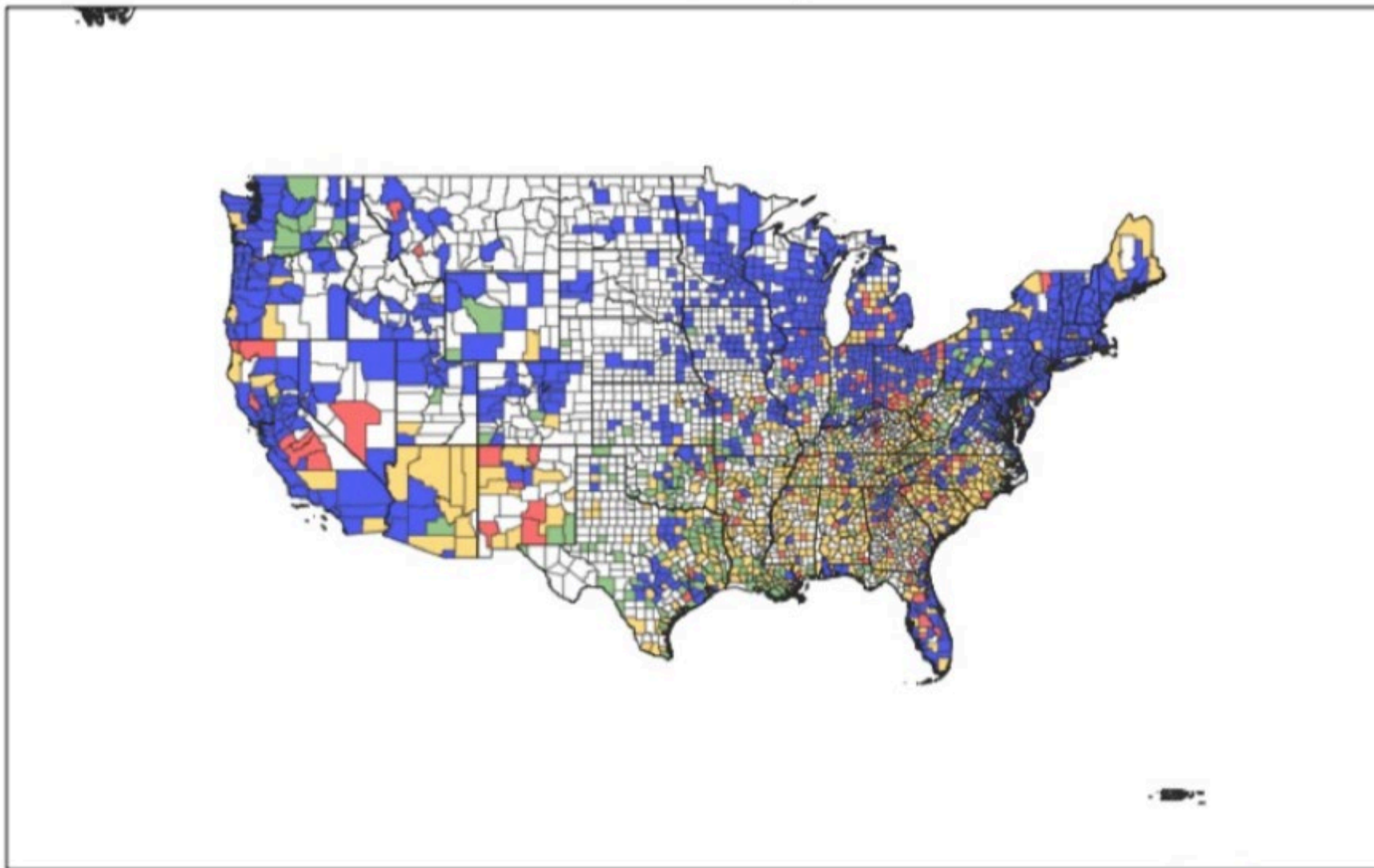
Results: Pre-recession Characteristics (IDD)

	Decliners	Risers	Stable	F
	Mean	*Mean*	*Mean*	
IDD	-0.52	-0.96	-1.70	33.98***
Poverty	15.64	18.10	19.74	3.36***
Deep poverty	6.23	7.66	8.39	38.83***
Low birthweight	8.53	8.44	9.43	11.33***
Life expectancy	75.85	75.89	75.05	10.97***
	16%	**24%**	**60%**	

Results: Pre-recession Characteristics

	Decliners	Risers	Stable	F
	Mean	*Mean*	*Mean*	
Unemployment	7.58	7.11	8.22	10.26***
Median income (1000)	47.99	46.50	43.53	20.26***
% bachelor's	17.32	16.61	17.18	0.50
% Black (n=296)	14.08	11.01	17.77	4.83*
% Hispanic (n=296)	12.32	20.35	12.45	4.01*
Urban	0.53	0.42	0.46	2.74#
Tribal land	0.16	0.18	0.16	0.12
Manufacturing	18.89	16.01	18.76	3.87*
Construction	5.91	6.10	5.60	1.78
Agriculture	0.24	0.24	0.42	6.28**
Mining	0.60	1.82	0.98	2.63#

9/25/2020

1:36,978,595

US State Boundaries

USA County Boundary

T1 to T2 Change

Decliner

Riser

Stable

Advantaged pre-recession
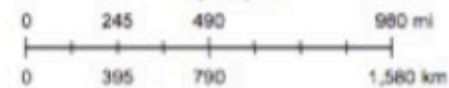
Results: Pre- to post-recession change

	Decliners	Risers	Stable	F
	Mean	*Mean*	*Mean*	
Poverty	3.83	-1.66	1.38	178.98***
Deep poverty	2.59	-0.38	1.04	144.13
Low birthweight	0.60	-0.27	0.17	29.03***
Life expectancy	0.16	0.75	0.52	8.62***
Unemployment	0.13	-0.46	-0.02	2.75#
Median income (10,000)	-0.35	0.16	-0.14	55.77***
Population (10,000)	0.50	0.97	0.77	0.76
Note: values are pre-recession to post-recession differences				

Conclusions

- Improvement, decline, or stability tended to happen across multiple indicators of well-being

- Overall pattern is a reshuffling in the upper tiers
  - Largest group of counties (60%) relatively stable in rank from pre-recession to recovery, but grew worse in absolute terms on some measures

  - The next largest group (24%) improved
    - Tended to have been slightly worse off pre-recession

  - Decliners were the smallest group (16%)
    - Tended to be slightly better off pre-recession
    - Experienced the largest absolute changes (declines were consequential)

Conclusions

- Relative stability masks absolute decline among the most disadvantaged counties—the deepest disadvantage persists
  - Tended to have larger Black populations and greater reliance on manufacturing

- But, improvement did occur in many counties
  - Less reliant on manufacturing
  - Smaller Black but larger Hispanic populations

- Counties experiencing the largest declines were also the smallest group
  - Again, greater reliance on manufacturing

Limitations

- Descriptive and correlational analysis

- Sample size limited by data availability (especially for analyses of racial and ethnic demographics)

- County is large enough to mask meaningful within-unit differences (e.g., an impoverished city with wealthy suburbs in the same county)

- Counties with insufficient data largely rural, low-population counties in the Great Plains