

County Level Unemployment and Child Welfare System Involvement

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Extensive research ties poverty (and low family income) to child maltreatment

In a number of ways...

Families in poverty are more likely to experience abuse and neglect

- National Incidence Study 4, 2010: Children in “low socioeconomic status” families were 5 times more likely to experience harm standard maltreatment than those not in low SES
- Rates of maltreatment are higher in US counties where income inequality is higher

Families receiving benefits are more likely to be involved with the child welfare system

- Families receiving welfare benefits (Aid to Families with Dependent Children, and then Temporary Aid to Needy Families) more likely to experience Child Protective Services (CPS) reports after exiting

Families with low incomes are more likely to have repeat contact with the child welfare system

- Family poverty a common predictor of re-report to the child welfare system after initial involvement
- Families at more than 200% federal poverty line re-reported at lower rates
- Families with lowest median incomes most likely to have re-substantiations

Some evidence suggests income plays a causal role in preventing maltreatment

- RCT: Transition from AFDC to TANF: beneficiaries on more generous AFDC plan had lower incidence of neglect
- RCT: Child support pass-through: Families receiving additional child support dollars and enrolled in TANF had lower incidence of CPS reports

Child welfare involvement, work, and income

- Risk for child maltreatment may be higher in households a single mother is working
- But: Children whose mothers are working are less likely to experience out-of-home placements
- For reunification from OHC, work income decreased speed of reunification, but non-work income increased it.



Aggregate studies of maltreatment and economic indicators

The Great Recession

- Wood et al.: Associations between rate of home loan foreclosures and hospital admissions for child abuse, but no association for the unemployment rate
- Berger et al.: Increase in abusive head trauma with increase in unemployment rate
- Eckenrode et al.: Nationwide, counties with higher rates of inequality have higher CPS involvement

Two studies
that examine
county-level
unemployment,
maltreatment
within one state

- Frioux et al., Pennsylvania: Over 20 year period, 1 percentage point increase in unemployment was associated with 2.4% increase in substantiations
- Raissian, New York State: 1 percentage point increase in unemployment associated with 4.25% reduction in report rates.

How might
unemployment and child
welfare involvement be
associated?

What *is* unemployment?

- Unemployment: “People are classified as unemployed if they do not have a job, have actively looked for work in the prior 4 weeks, and are currently available for work.”
- The “denominator” includes only people who are in the labor force

Mechanisms behind unemployment and child maltreatment

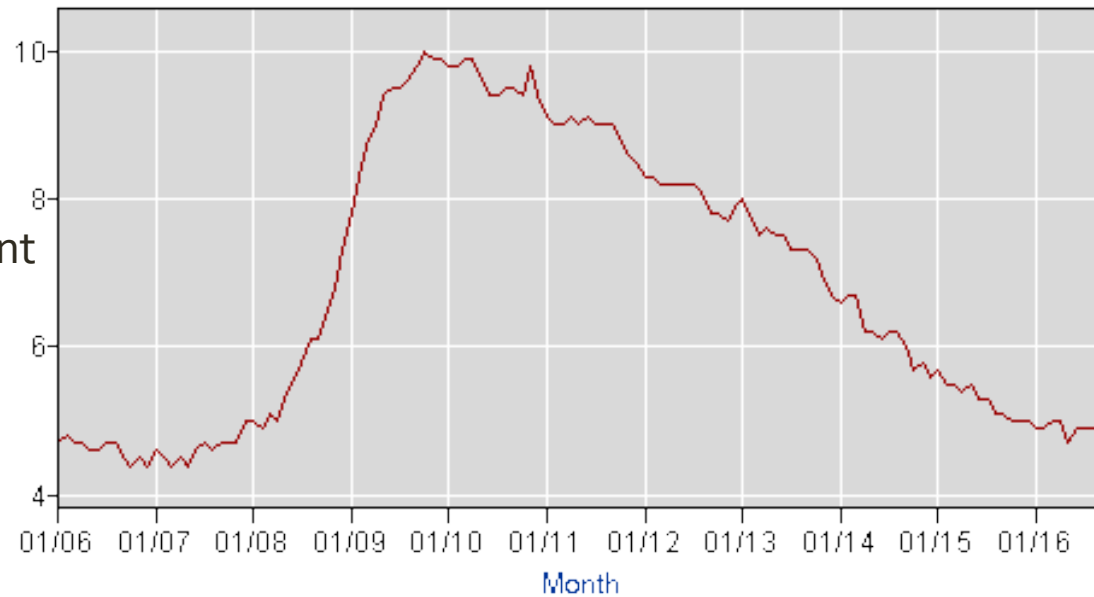
- Less income
- More discretionary time
- Less need for child care
- Increased stress
- Resource shortcomings – need for public assistance

Labor force participation

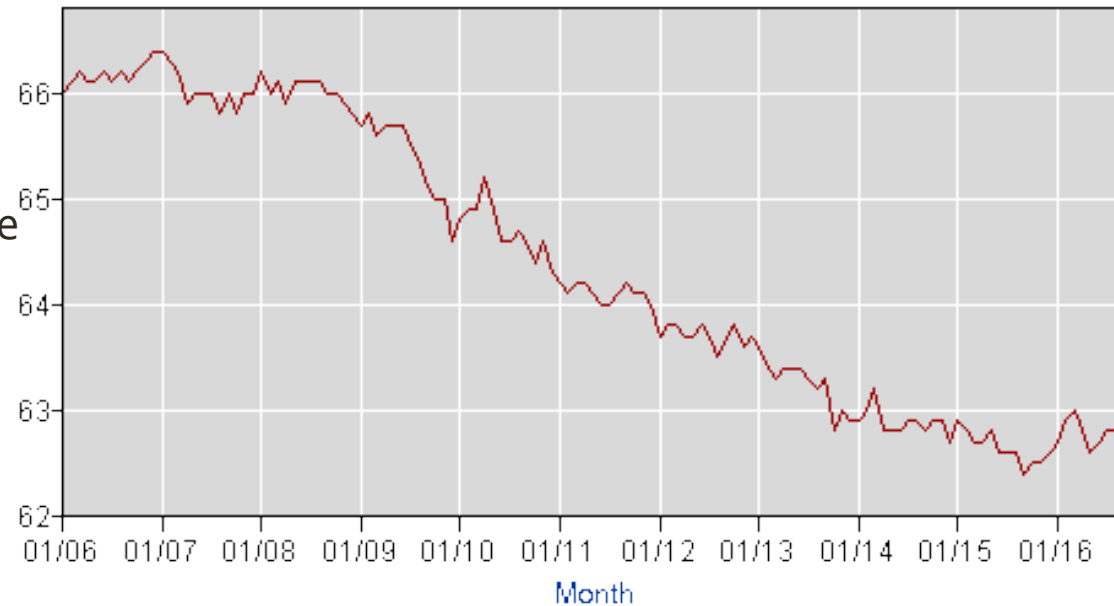
- Labor force: number of people working or unemployed
- People transition from unemployment to leaving labor force after long period of joblessness

Unemployment and Labor force participation

US
Unemployment
rate



US Labor force
participation
rate



Current research questions

- Is the unemployment rate associated with differing rates of child protective services involvement?
- Does the labor force participation rate share a similar pattern with the unemployment rate in regard to CPS involvement?
- Are either of these measures associated with repeat involvement with CPS?

Methods: data sources

- Wisconsin's State Automated Child Welfare Information System: SACWIS
- Bureau of Labor Statistics unemployment rate and labor force size
- KIDS COUNT Data center from Annie E. Casey Foundation
- State of Wisconsin publicly available data on benefit use
- US Census Bureau

Data scope

- Data from 2004-2012 for each of Wisconsin's 72 counties
- This data set was originally extracted for a project on CPS recurrence

Data: outcome variables

- Unit of observation is the *reference person*, usually the mother (aggregated at the county level)
- Aggregates are compiled from an *unduplicated count* of families involved with child welfare system in each county
- Major difference from previous work in this area, which typically includes a duplicated count of children

Data: outcome variables

- Substantiation rate: number of substantiated cases per 100,000 residents
- Screen-in rate: number of investigated cases per 100,000 residents
- Repeat substantiation and screen in rate: Percentage of cases that have repeat contact within 365 days of initial contact with CPS
- All aggregated at county level

Data: Predictor variables

- Unemployment rate: Percentage of the labor force that is jobless
- Labor force participation rate: Percentage of *total population* that is in labor force
 - Calculated manually for this project: BLS includes only those 16 years of age and older in official LFP measure

Data: control variables

- Rate of Supplemental Nutrition Assistance Program (SNAP, formerly known as Food Stamps) receipt (WI Dept. of Health Services)
- Household composition: rate of children born to unmarried mothers (KIDS COUNT)
- Proportion of population white, African American, Hispanic, Other (US Census Bureau)

Analytic Approach

- Fixed effects OLS regression
- State and Year fixed effects
- Standard errors clustered at state level
- Most rates are transformed to their natural logs
 - Exception: Unemployment rate & LFP

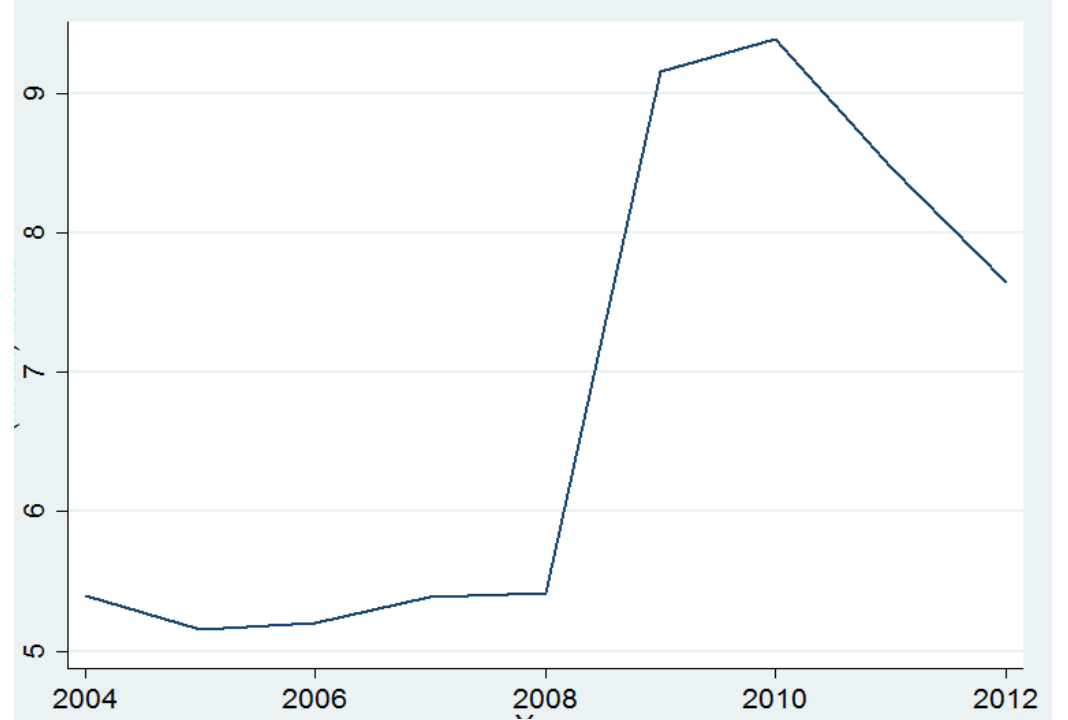
$$y_{ct} = \alpha + \beta_1 UE_{ct} + \beta_2 FS_{ct} + \beta_3 UM_{ct} + \gamma_c + \delta_t + \varepsilon$$

About the sample

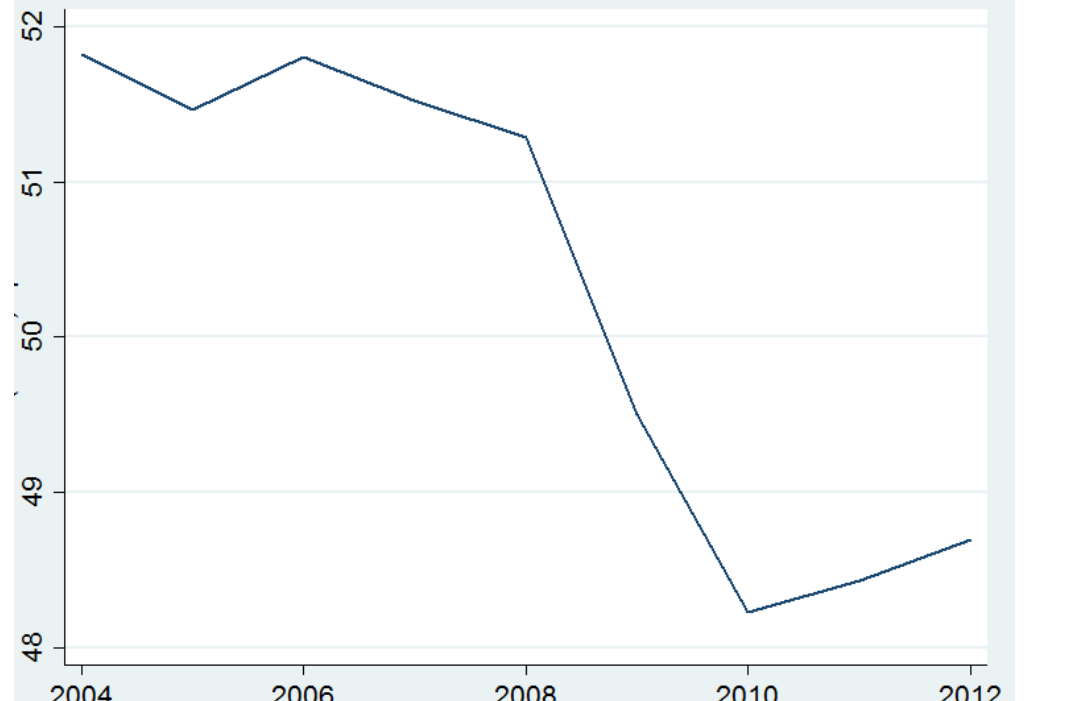
	Mean	SD	Min	Max
Substantiation rate	79.36	(16.62)	63.49	110.10
Screen-in rate	404.13	(51.24)	355.11	513.62
Repeat substantiation %	0.14	(0.01)	0.13	0.15
Repeat screen-in %	0.13	(0.01)	0.11	0.15
Unemployment %	6.80	(1.83)	5.15	9.39
Labor force participation %	50.31	(1.56)	48.22	51.83

Unemployment and LFP

Wisconsin average county unemployment rate, 2004-2012, %



Wisconsin average county labor force participation rate, 2004-2012, %



Results: Unemployment and CPS outcomes

N=646	Log(Substantiation Rate)	Log(Investigation Rate)	Log(Substantiation → Repeat contact)	Log(Investigation → Repeat contact)
Unemployment Rate	0.0711* (0.0321)	-0.00284 (0.0241)	0.00513 (0.00623)	0.00602* (0.00252)

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Results: LFP and CPS outcomes

N=646	Log(Substantiation Rate)	Log(Investigation Rate)	Log(Substantiation → Repeat contact)	Log(Investigation → Repeat contact)
Labor Force Participation Rate	-0.00795 (0.0134)	0.000776 (0.00966)	0.0000748 (0.00237)	-0.00240+ (0.00131)

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Limitations

- Covariate selection: What are important unobserved, time-varying county characteristics that may jointly determine CPS involvement and unemployment?
- Functional form assumptions
- All counties weighted equally, regardless of population, CPS system characteristics
 - Some low-population counties have a small number of CPS cases; a few cases can put significant leverage on rates

Conclusions

- Consistent with Frioux et al., a 1 percentage point increase in unemployment was associated with a 7% increase in the substantiation rate, no association with screen-in rate
- 1 point increase in UE rate associated with statistically significant but small increase (.6%) in repeat screen-ins
- Very little evidence that LFP is associated with CPS involvement

Next steps

- Disaggregate maltreatment by type: physical abuse, neglect, sexual abuse. Economic factors may have differential impacts
- Investigate potential effects of differences by population size

Discussion Questions

- The results here both conflict and reinforce previous findings about unemployment. What mechanisms might account for different findings in different jurisdictions?
- Is simple OLS with fixed effects the right analytical approach for such estimation?
- What kind of policy implications do findings such as these carry?

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