

## Online Data Table 4: Complete County-Level Dataset: Causal Effects and Covariates

### *Description*

This table reports the gains (or losses) from spending one more year of childhood in each county in the U.S. It also reports data on permanent resident's intergenerational mobility, as defined in Chetty et al. (QJE 2014). Finally, it provides a set of observable characteristics for commuting zone.

The causal exposure effects (referred to as "causal" in the codebook) are defined for 30 outcomes (referred to as "[outcome]" in the codebook). Each of these variables uses only the data from movers and does not shrink towards the outcomes of permanent residents.

- 1) kr26: Rank in national household income distribution (i.e., including own earnings and spouse earnings) at Age 26. This is our preferred baseline measure.
- 2) kr26\_am: Rank in national household income distribution at Age 26 for children with above-median parent rank
- 3) kr26\_bm: Rank in national household income distribution at Age 26 for children with below-median parent rank
- 4) kr26\_pmi: Rank in national household income distribution at Age 26 controlling for change in parent income and marital status around move
- 5) kr26\_f: Rank in national household income distribution at Age 26 for female children
- 6) kr26\_m: Rank national household income distribution at Age 26 for male children
- 7) kr26\_sp: Rank national household income distribution at Age 26 for children with a single parent
- 8) kr26\_tp: Rank in national household income distribution at Age 26 for children with two parents
- 9) kr26\_pbo: Rank in national household income distribution at Age 26 for children with families who move after their child turns 23
- 10) kr26\_cc: Rank in national household income distribution at Age 26 for children excluding quadratic cohort controls
- 11) kr26\_cc3: Rank in national household income distribution at Age 26 for children using cubic cohort controls
- 12) c1823: College attendance at ages 18-23
- 13) c1823\_f: College attendance at ages 18-23 for female children
- 14) c1823\_m: College attendance at ages 18-23 for male children
- 15) c1823\_sp: College attendance at ages 18-23 for children with a single parent
- 16) c1823\_tp: College attendance at ages 18-23 for children with two parents
- 17) kir26: Rank in national individual income distribution (i.e., including only own earnings) at Age 26
- 18) kir26\_f: Rank in national individual income distribution at Age 26 for female children
- 19) kir26\_m: Rank in national individual income distribution at Age 26 for male children
- 20) kfi26: Dollar value of household income at Age 26
- 21) kfi26\_f: Dollar value of household income at Age 26 for female children
- 22) kfi26\_m: Dollar value of household income at Age 26 for male children
- 23) kii26: Dollar value of individual income at Age 26
- 24) kii26\_f: Dollar value of individual income at Age 26 for female children
- 25) kii26\_m: Dollar value of individual income at Age 26 for male children
- 26) km26: Being married at Age 26
- 27) kr26\_sq: Rank in national household income distribution at Age 26 using quadratic specification to estimate relationship between child and parent rank
- 28) kr26\_coli: Rank in national individual income distribution at Age 26 adjusted for cost-of-living estimates using parents location in 1996

- 29) tlpbo\_16: Indicator for working at age 16, restricting the sample to families who move after the child turns 16
- 30) kr26\_16: Rank in national household income distribution (i.e., including own earnings and spouse earnings) at Age 26 for the 1980-86 birth cohorts.

The permanent resident's intergenerational mobility (referred to as "perm\_res" in the codebook) is defined for the outcomes described above as well as 42 additional outcomes, pooled or by cohort (referred to as "[cohort]" in the codebook).

- 31) tb: Teenage birth rate for children in ages between 13 and 19
- 32) tb\_m: Teenage birth rate for fathers in ages between 13 and 19
- 33) tb\_f: Teenage birth rate for mothers in ages between 13 and 19
- 34) kr20: Rank in national household income distribution at age 20
- 35) kr21: Rank in national household income distribution at age 21
- 36) kr22: Rank in national household income distribution at age 22
- 37) kr23: Rank in national household income distribution at age 23
- 38) kr24: Rank in national household income distribution at age 24
- 39) kr25: Rank in national household income distribution at age 25
- 40) kr27: Rank in national household income distribution at age 27
- 41) kr28: Rank in national household income distribution at age 28
- 42) kr29: Rank in national household income distribution at age 29
- 43) kr30: Rank in national household income distribution at age 30
- 44) kr31: Rank in national household income distribution at age 31
- 45) kr32: Rank in national household income distribution at age 32
- 46) kr30\_f: Rank in national household income distribution at age 30 for female children
- 47) kr30\_m: Rank in national household income distribution at age 30 for male children
- 48) kir30: Rank in national individual income distribution at age 30
- 49) kir30\_f: Rank in national individual income distribution at age 30 for female children
- 50) kir30\_m: Rank in national individual income distribution at age 30 for male children
- 51) kfi30: Dollar value of household income at age 30
- 52) kfi30\_f: Dollar value of household income at age 30 for female children
- 53) kfi30\_m: Dollar value of household income at age 30 for male children
- 54) kii30: Dollar value of individual income at age 30
- 55) kii30\_f: Dollar value of individual income at age 30 for female children
- 56) kii30\_m: Dollar value of individual income at age 30 for male children
- 57) km30: Being married at age 30
- 58) km30\_f: Being married at age 30 for female children
- 59) km30\_m: Being married at age 30 for male children
- 60) p90\_24: Probability of being above p 90 at age 24 using quadratic specification to estimate relationship between child and parent rank
- 61) p90\_26: Probability of being above p 90 at age 26 using quadratic specification to estimate relationship between child and parent rank
- 62) p90\_30: Probability of being above p 90 at age 30 using quadratic specification to estimate relationship between child and parent rank
- 63) kw24: Child worked at age 24 using quadratic specification to estimate relationship between child and parent rank
- 64) kw26: Child worked at age 26 using quadratic specification to estimate relationship between child and parent rank
- 65) kw30: Child worked at age 30 using quadratic specification to estimate relationship between child and parent rank
- 66) kr24\_[cohort]: Rank in national household income distribution at age 24 – by cohort
- 67) kr26\_[cohort]: Rank in national household income distribution at age 26 – by cohort

- 68) c1823\_[cohort]: College attendance at ages 18-23 – by cohort
- 69) c19\_[cohort]: College attendance at age 19 – by cohort
- 70) tl16\_8386: Teenage Labor Participation at Age 16 for cohorts 1983-86
- 71) c19: College attendance at age 19
- 72) c1820: College attendance at age 18-20

We provide the causal exposure effect and the permanent resident’s intergenerational mobility estimates at two percentiles of the parent national income distribution (referred to as “[percentile]” in the codebook):

- 1) p25: Parents at the 25th percentile of the national household income distribution (among parents with children in the same birth cohort)
- 2) p75: Parents at the 75th percentile of the national household income distribution (among parents with children in the same birth cohort)

We provide a set of 48 covariates (referred to as [covariate] in the codebook):

- 1) cs\_race\_bla : Fraction Black
- 2) poor\_share : Poverty Rate
- 3) cs\_race\_theil\_2000: Racial Segregation
- 4) cs00\_seg\_inc : Income Segregation
- 5) cs00\_seg\_inc\_pov25 : Segregation of Poverty (<p25)
- 6) cs00\_seg\_inc\_aff75 : Segregation of Affluence (>p75)
- 7) frac\_travelttime\_lt15 : Fraction with Commute < 15 Mins
- 8) log\_pop\_density: Log. Population Density
- 9) hhinc00: Household Income per Capita
- 10) gini: Gini Coefficient
- 11) inc\_share\_1perc: Top 1% Income Share
- 12) gini99: Gini Bottom 99%
- 13) frac\_middleclass: Fraction Middle Class (between p25 and p75)
- 14) taxrate: Local Tax Rate
- 15) subcty\_total\_taxes\_pc: Local Tax Rate Per Capita
- 16) subcty\_total\_expenditure\_pc: Local Govt Expenditures Per Capita
- 17) tax\_st\_diff\_top20: Tax Progressivity
- 18) eitc\_exposure: State EITC Exposure
- 19) ccd\_exp\_tot: School Expenditure per Student
- 20) ccd\_pup\_tch\_ratio: Student Teacher Ratio
- 21) score\_r: Test Score Percentile (Income adjusted)
- 22) dropout\_r: High School Dropout Rate (Income adjusted)
- 23) num\_inst\_pc: Number of Colleges per Capita
- 24) tuition: College Tuition
- 25) gradrate\_r: College Graduation Rate (Income Adjusted)
- 26) cs\_labforce: Labor Force Participation
- 27) cs\_elf\_ind\_man: Share Working in Manufacturing
- 28) d\_tradeusch\_pw\_1990: Growth in Chinese Imports
- 29) frac\_worked1416: Teenage (14-16) Labor Force Participation
- 30) mig\_inflow: Migration Inflow Rate
- 31) mig\_outflow: Migration Outflow Rate
- 32) cs\_born\_foreign: Fraction Foreign Born
- 33) scap\_ski90pcm: Social Capital Index

- 34) rel\_tot: Fraction Religious
- 35) crime\_violent: Violent Crime Rate
- 36) crime\_total: Total Crime Rate
- 37) cs\_fam\_wkidsinglemom: Fraction of Children with Single Mothers
- 38) cs\_divorced: Fraction of Adults Divorced
- 39) cs\_married: Fraction of Adults Married
- 40) med\_rent\_am: Median Monthly Rent for Above-Median Income Families
- 41) med\_rent\_bm: Median Monthly Rent for Below-Median Income Families
- 42) median\_house\_price\_am: Median House Price for Above-Median Income Families
- 43) median\_house\_price\_bm: Median House Price for Below-Median Income Families
- 44) house\_value\_p25: P25 of the House Price Distribution
- 45) house\_value\_p75: P75 of the House Price Distribution
- 46) low\_inc\_ht: Location Affordability for very Low Income Families
- 47) median\_inc\_ht: Location Affordability for Median Income Families
- 48) unemp\_rate: Unemployment Rate

Variable	Type	Description
cty1990	Num	County 1990 FIPS code
cty2000	Num	County 2000 FIPS code
county_name	Char	County Name
cty_pop2000	Num	County Population in 2000 Census
cz	Num	Commuting Zone Code
cz_name	Char	Commuting Zone Name
cz_pop2000	Num	Commuting Zone Population in 2000 Census
statename	Char	State Name
state_id	Num	State Code
stateabbrv	Char	State Abbreviation
csa	Num	Combined Statistical Area Code
csa_name	Char	Combined Statistical Area Name
cbsa	Num	Core Based Statistical Area Code
cbsa_name	Char	Core Based Statistical Area Name
intersects_msa	Num	Metropolitan Statistical Area Indicator
causal_[percentile]_cty_[outcome]	Num	County causal exposure effects
causal_[percentile]_cty_[outcome]_se	Num	County causal exposure effects – Standard Error
causal_[percentile]_cty_[outcome]_bs_se	Num	County causal exposure effects – Bootstrapped Standard Error
causal_[percentile]_cty_[outcome]_s1 causal_[percentile]_cty_[outcome]_s2	Num	County causal exposure effects – Split Sample
causal_[percentile]_cz_cty_[outcome]	Num	County plus CZ Causal Exposure Effects
causal_[percentile]_cz_cty_[outcome]_se	Num	County plus CZ Causal Exposure Effects – Standard Error
causal_[percentile]_cz_cty_[outcome]_bs_se	Num	County plus CZ Causal Exposure Effects – Bootstrapped Standard Error
perm_res_[percentile]_[outcome]	Num	Permanent resident’s intergenerational mobility as defined in Chetty et al. (QJE 2014)
[covariate]	Num	Covariate

[covariate]_st	Num	Standardized covariate (using population weights)
frac_`i`	Num	Fraction of Parents in National Income Decile `i` (`i` goes from 1 to 10)