Supplemental Materials and Data Replication Codebook

for

"Less Bang for Your Buck? How Social Capital Constrains the Effectiveness of Social Welfare Spending"[1]

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[1] All replication materials for this paper are available at http://doi.org/10.15139/S3/P3A3SQ.

Measurement of Social Welfare:
Social welfare effort by US governments is operationalized as the value of transfer receipts by individuals, from any government (local, state, or federal). These data are published by the Bureau of Economic Analysis, and the full methodology for measurement is available online (https://www.bea.gov/regional/pdf/spi2015.pdf). The measure referred to either as "total transfers" or "all individual transfer payments" is the sum of ALL transfer payments made to individuals by any federal, state, or local government source. This aggregate category is the sum of the following sub-categories, *which are mutually exclusive*:

1. **Retirement and disability insurance benefits**, including Social Security benefits, Railroad retirement and disability benefits, workers' compensation, temporary disability benefits, Black lung benefits, and Pension Benefit Guaranty benefits.

2. **Medical benefits**, including Medicare benefits, Medicaid benefits, other state medical care benefits including Children's Health Insurance Program (CHIP), and all military medical insurance benefits through the TRICARE Management Program.

3. **Income maintenance benefits,** including Supplemental Security Income (SSI) benefits, Earned Income Tax Credit (EITC), Supplemental Nutritional Assistance (SNAP), family assistance including Temporary Assistance to Needy Families (TANF) and formerly Families with Dependent Children (AFDC) programs, any and all general assistance benefit programs run by individual states, foster care and adoption assistance, Additional Child Tax Credit, energy assistance benefits, and lastly Special Supplemental Nutrition for Women, Infants, and Children (WIC) benefits.

4. **Unemployment insurance compensation,** which includes state unemployment insurance compensation, unemployment compensation of federal employees (UCFE), unemployment compensation for railroad employees, unemployment compensation for veterans (UCX), trade adjustment assistance benefits, Redwood Park benefits, public service employment benefits, and transitional benefits provided to specific industries.

5. **Veterans benefits,** which include veterans' pension and disability benefits, veterans' readjustment benefits, veterans' life insurance benefits, and any and all other assistance to veterans through state and local governments and bonuses.

6. **Education and training assistance,** including federal fellowship benefits such as National Science Foundation (NSF) grants, federal educational exchange benefits such as Fulbright scholarships, interest on guaranteed student loans, higher education student assistance, Job Corps benefits, and any other state-run educational assistance program.

7. **"Other" transfer receipts**, including compensation of survivors of public safety officers, compensation of victims of crime, Alaska Permanent Fund benefits, disaster relief benefits such as those made through the Federal Emergency Management Agency (FEMA), radiation exposure compensation, Japanese interns redress benefits, anti-terrorism judgement receipts, compensation of victims of September 11, Bureau of Indian Affairs benefits, TV Converter Box coupons, American Recovery and Reinvestment Act of 2009 (ARRA) Federal Additional Compensation for unemployment, ARRA COBRA premium reduction, ARRA Economic Recovery lump sum, ARRA Making Work Pay tax credit, ARRA Government Retiree tax credit, American Opportunity tax credit, Home Affordable Mortgage principle reduction, Temporary High Risk Health Insurance premium reduction, World Trade Center health benefits, Economic Stimulus Act of 2008 rebates, Alternative Minimum Tax (AMT) credit, Adoption tax credit, Health Coverage Tax Credit, Health Insurance Premium Assistance Tax Credit, and, lastly, Cost-Sharing Reduction Subsidy.

Returning to a discussion of operationalization, the transfer/spending measure labeled "unemployment Insurance" in the text of this manuscript includes only those line items included in item 4 above, all unemployment insurance compensation. Second, the transfer/spending measure I label as "public medical care" in the text includes only those line items listed in item 2 above, all medical benefits. Lastly, the transfer/spending category I refer to as "income maintenance" in the text includes those programs listed in item 3 above, all income maintenance benefits. Each of these three sub-categories are mutually exclusive and the aggregate "total transfers" measure is equal to the sum of items 1-7 above. This means that the "total transfers" measure is greater than the sum of the three sub-category measures examined. Each of these four independent variable transfer measures (total, unemployment, medical, and income maintenance) represent the (per capita real) value of direct transfers received by individuals in a state-year, from any government source, be it local, state, or federal.

These measures are also distinct from the "total government spending" measure included in the final model presented in column 6 of Tables A1 and A2. This "total spending" measure includes all government expenditures by state and local governments, as published in the US Census Bureau State Government Finances (https://www.census.gov/govs/state/). This measure includes all outlays in the form of (1) intergovernmental expenditures or transfers, (2) general expenditures (on education, public welfare, hospitals, health, highways, police protection, corrections facilities, natural resources, parks and recreation, government administration, interest on debt, and other or unallocable direct expenditures), (3) utility expenditure, (4) liquor store expenditure, and lastly (5) insurance trust expenditures. This independent variable expenditure measure represents the total value of all expenditures by state and local governments (in real per capita dollars) in a state-year.

Measurement of Social Capital

I have not disaggregated the social capital measure to examine support for the multiple causal mechanisms that I offer in the paper. I have not done this for two reasons: one empirical and one theoretical. First, it is not possible to decompose the measure because I do not have access to the component parts of the social capital factor as estimated by Hawes, Rocha and Meier (2013), because the data used in this estimation is proprietary. Second, for theoretical reasons, I am hesitant to consider the component parts of the social capital measure independently. Being a latent phenomenon, social capital is more than the sum of its parts. It is not only the cumulation of volunteering activity, charitable giving, or organizational participation. Rather, social capital is the latent propensity for cooperation and supporting norms of interaction, which manifests in these observable behaviors. Puntscher et al. (2016) and Paldam (2000) offer some excellent discussion and analysis of measurement theory on social capital, related to this point.

Possible Reverse Causality

Economic conditions may threaten valid inference in this analysis by influencing both social capital and social welfare spending. Recognizing the possibility that economic insecurity (y_t) might have predictive power over these independent variables (social capital and/or social spending) implies a system of simultaneous equations like the following:

$$y_t = \alpha_1 + \phi y_{t-1} + \beta_1 x_t + \beta_2 z_t + \cdots + u_{1t} \quad (1)$$
$$x_t = \alpha_2 + \gamma y_t + \gamma_2 z_t + \cdots + u_{2t} \quad (2)$$
$$z_t = \alpha_3 + \delta_1 x_t + \delta_2 y_t + \cdots + u_{3t} \quad (3)$$

Unfortunately, this kind of endogeneity, or "feedback," is a threat to any cross-sectional time-series analysis of observational analysis; it is omnipresent in political economy. Failing to account for this dependence violates OLS assumptions (as well as the assumptions of many other estimators) yielding inconsistent estimates of the parameters of interest in equation (1). The problem of identification must be dealt with before estimation of

coefficients. Solutions to the identification problem include two-stage least squares, instrumental variables, or generalized method of moments (GMM) estimation (Greene 2012). However, neither an instrumental variables design nor a two-stage least squares approach are feasible in this application, due to the absence of out-of-sample instruments satisfying relevance and orthogonality assumptions.

An instrumental variables design, using the number of non-profit organizations, for example, is not feasible due to the following reasons.

- First, the number of non-profit organizations in a state is included in the measurement of social capital. But even if it were not in this operationalization, using this, or any other measure of civic, voluntary, or charitable activity, or almost any other policy/political variable in a state as an instrumental variable, would violate at least one of the necessary assumptions in a two stage least squares research design. For valid inference, an instrumental variable (Z_i) must first be uncorrelated with the error term in the first stage model, u_i. It is almost certain that there exist unobserved covariates of both non-profit organization activity economic insecurity, thereby violating this assumption.
- Second, the correlation between the instrument (Z_i) and the endogenous regressor (X_i) must approach zero as N approaches infinity. Again, in this specific case, this is unlikely, as there is ample theory suggesting a nonzero covariance between social capital and non-profit activity (indeed the theory I offer in this paper would imply a correlation between these two factors).
- Lastly, the model specification used for my analyses address a concern about temporal feedback. By lagging the key independent variables by one year, I have some confidence that the estimated effects respect temporal order. Further, a Granger causality test indicates a significant instantaneous feedback and Granger causation of social capital on economic insecurity, but does <u>not</u> indicate a significant instantaneous feedback or Granger causation of economic insecurity on social capital (Geweke, 1982). Empirically, there is no evidence for a significant feedback effect of economic insecurity on social capital in these data.

The unavailability of an instrumental variables design is the driving reason for my estimation strategy in: (a) selecting a GMM model (the Arellano-Bond estimator, which exploits within-sample "instruments" to produce unbiased and consistent estimates, but also produces heteroscedasticity consistent standard errors to account for unobserved panel-level effects) and (b) lagging the right-hand side variables.

Having highlighted the advantages of this estimator, perhaps it's not sufficiently convincing to defer to the statistical properties of the estimator to alleviate endogneity concerns, so, let's go further. For consistent efficient estimation of β_1 and β_2 (and the respective standard errors) in equation (1), it needs to be demonstrated that (y_t) is strongly exogenous to models of both x_t and z_t, equations (2) and (3) respectively. First, modeling x_t and z_t as *predetermined variables* minimally ensures weak exogeneity (Greene 2012)— I have lagged relevant independent variables in my models to meet this criterion. So, now we have a system of equations:

$$y_t = \alpha_1 + \phi y_{t-1} + \beta_1 x_{t-1} + \beta_2 z_{t-1} + \cdots + u_{1t} \quad (4)$$
$$x_{t-1} = \alpha_2 + \gamma y_t + \gamma_2 z_{t-1} + \cdots + u_{2t} \quad (5)$$
$$z_{t-1} = \alpha_3 + \delta_1 x_{t-1} + \delta_2 y_t + \cdots + u_{3t} \quad (6)$$

Second, if it can be shown that economic insecurity (y_t) does not "Granger-cause" x_{t-1} or z_{t-1}, then economic insecurity is strongly exogenous to equations (5) and (6) and we can be confident about statistical inference with respect to β_1 and β_2 (and their respective standard errors) in equation (4) (Geweke 1982, Greene 2012). So, I need now to demonstrate that I've

satisfied this second requirement, that economic insecurity does not "Granger-cause" either social capital or any of the social policy measures.

Testing Granger causality in panel data can be done quite conveniently using a recently released user written Stata package (called xtgcause, Lopez and Weber 2017), which implements the panel test developed by Dumitrescu and Hurlin (2012). In the table below, I report the *p*-value for the $\tilde{\bar{Z}}$ test statistic of the null hypothesis that economic insecurity (specified as Δy_t because the lagged dependent variable is included in (4)) does not Granger-cause the independent variables included in tables A1 and A2 of the manuscript (characterized as x_{t-1} or z_{t-1} above, these are lagged social capital, lagged total transfer spending, lagged unemployment insurance transfers, lagged public medical care spending, and lagged income maintenance transfers). I report the $\tilde{\bar{Z}}$ test statistic *p*-value in favor of the $\bar{Z}$ statistic because the former is more appropriate for series with relatively small *T* and large *N* (Lopez and Weber 2017), as are the data in this analysis. The test statistics reported here are calculated by selecting the number of lags to include by minimizing the average Hannan-Quinn information criterion.

Table A1: Dumitrescu & Hurlin (2012) Granger non-causality test results

Non-causality test	**Z-bar tilde p-value**	**Implication**
Economic insecurity → social capital	0.345	Economic insecurity <u>does not</u> Granger-cause lagged social capital.
Economic insecurity → total transfers	0.303	Economic insecurity <u>does not</u> Granger-cause lagged total transfers per capita.
Economic insecurity → unemployment insurance transfers	0.000	Economic insecurity **<u>does</u>** Granger-cause lagged unemployment transfers per capita *for at least one panel.*
Economic insecurity → public medical care transfers	0.680	Economic insecurity <u>does not</u> Granger-cause lagged public medical care transfers per capita.
Economic insecurity → income maintenance transfers	0.100	Economic insecurity <u>does not</u> Granger-cause lagged income maintenance transfers per capita.

Given the results in Table A1, I conclude that any feedback of economic insecurity on social capital, total transfers, public medical care transfers, and income maintenance transfers is <u>not significant</u>. Thus, for these measures, I conclude that economic insecurity is strongly exogenous to models of these independent variables, and therefore does not pose a threat to valid inference with respect to estimation of parameters of interest in equation (4). This provides confidence in the validity of the results reported in the manuscript.

However, the same cannot be said for the relationship between economic insecurity and unemployment insurance transfers, as evidenced by the *p*-value of 0.000 in the table above. The results in Table A1 report tests of the null hypothesis that economic insecurity does not Granger-cause spending, with the alternative hypothesis that economic insecurity does Granger-cause spending *in at least one panel* (i.e. state). So, to unpack what's going on here, I tested this assumption of exogeneity with each state series separately. If the results reported in the manuscript are robust when the offending state series are excluded, I would assert confidence in the validity of the results.

<u>List A</u>: States in which economic insecurity *does not* Granger-cause real unemployment insurance transfers per capita (p-value > .05):

Alabama

Arizona
Connecticut
Illinois
Indiana
Kentucky
Louisiana
Maine
Massachusetts
Michigan
Minnesota
Mississippi
Montana
Nevada
New Hampshire
New Mexico
North Carolina
Oklahoma
Rhode Island
South Carolina
Utah
Vermont
Wisconsin
Wyoming

List B: States in which economic insecurity *does* Granger-cause real unemployment insurance transfers per capita (p-value ≤ .05):

Arkansas
California
Colorado
Delaware
Florida
Georgia
Idaho
Iowa
Kansas
Maryland
Missouri
Nebraska
New Jersey
New York
North Dakota
Ohio
Oregon
Pennsylvania
South Dakota
Tennessee
Texas
Virginia
Washington
West Virginia

Tables A2 and A3 (below) replicate the models presented in the manuscript, while omitting the states identified in List B above. As you can see by comparing the magnitude, sign, and significance of the coefficients for each of the key independent variables with the tables reported in the manuscript, the results hold. Despite cutting the sample in half by excluding the 24 states in which economic insecurity is shown to Granger-cause lagged unemployment insurance spending, the substantive implications from these models are not different than

those reported for the entire sample. I therefore have confidence in the results reported in the manuscript; endogeneity of this variety (i.e., reverse causality or feedback) is not a severe problem and does not bias the substantive or statistical inferences I draw from the analysis.

To be clear, there is *theoretical* reason to argue that economic conditions may shape the development or demonstration of social capital, and this might influence long and short term social welfare spending or institutions. However, as an *empirical* matter, this is not a threat to validity in this paper. The threat of this feedback mechanism has been addressed here with specification decisions (lagged independent and dependent variables) and with a conservative choice of estimator. Examining these feedback mechanisms with respect to both policy and social institution building are important questions for future research, and doing so would require a different research design and a very different model specification.

Table A2: Non-interactive models, excluding states with exogeneity concern about unemployment insurance spending

	1	2	3	4	5	6
ESI, t-1	0.760***	0.736***	0.746***	0.777***	0.761***	0.767***
	(0.030)	(0.032)	(0.032)	(0.030)	(0.030)	(0.030)
Social Capital, t-1	0.189**	0.150*	0.177**	0.204***	0.174**	0.183**
	(0.076)	(0.077)	(0.077)	(0.077)	(0.077)	(0.077)
All Welfare p.c., t-1	-0.619***					
	(0.176)					
Income Maintenance, t-1		-1.396	-2.626***			
		(0.928)	(0.849)			
Unemployment Insurance, t-1		1.600*		1.081		
		(0.878)		(0.884)		
Public Medical Care p.c., t-1		-1.121***			-1.271***	
		(0.319)			(0.290)	
Total Gov. Spend. p.c., t-1						0.892***
						(0.296)
Union Strength, t-1	0.007	0.000	0.017	0.019	-0.003	0.012
	(0.028)	(0.028)	(0.028)	(0.028)	(0.028)	(0.028)
Gov. Liberalism, t-1	-0.358**	-0.498***	-0.450***	-0.522***	-0.422**	-0.550***
	(0.176)	(0.177)	(0.173)	(0.179)	(0.173)	(0.175)
Individual Income Tax p.c., t-1	1.886***	1.809***	1.850***	1.928***	1.920***	1.788***
	(0.572)	(0.570)	(0.575)	(0.576)	(0.572)	(0.576)
Corporate Income Tax p.c., t-1	-2.123	-1.588	-1.656	-2.688*	-2.167	-2.659*
	(1.561)	(1.580)	(1.595)	(1.562)	(1.556)	(1.555)
Energy Price, t-1	0.103***	0.126***	0.092***	0.090***	0.113***	0.086***
	(0.017)	(0.019)	(0.017)	(0.018)	(0.018)	(0.016)
Poverty Rate	0.075***	0.079***	0.075***	0.069***	0.075***	0.077***
	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)
Post Reform	-0.059	-0.089	-0.088	-0.038	-0.063	-0.074
	(0.122)	(0.122)	(0.123)	(0.122)	(0.122)	(0.123)
Devolved	-0.443*	-0.489*	-0.473*	-0.462*	-0.476*	-0.415
	(0.264)	(0.262)	(0.264)	(0.265)	(0.264)	(0.265)
Unemployment, t-1	-0.119***	-0.214***	-0.140***	-0.249***	-0.175***	-0.184***
	(0.042)	(0.054)	(0.040)	(0.052)	(0.035)	(0.035)
Unemployment, Change	0.078**	0.03	0.064*	0.064	0.04	0.090**
	(0.038)	(0.039)	(0.038)	(0.039)	(0.039)	(0.039)
Total Gov. Spend, log	2.093***	2.339***	1.133**	0.652	2.507***	-0.819
	(0.642)	(0.653)	(0.534)	(0.527)	(0.655)	(0.734)
GSP Growth	1.043	1.558	0.336	0.201	1.664	-0.65
	(1.272)	(1.290)	(1.253)	(1.257)	(1.294)	(1.277)
Real GSP, log	-0.809	-1.212	0.04	-0.304	-1.475*	0.911
	(0.865)	(0.920)	(0.859)	(0.856)	(0.894)	(0.937)
Diversity	-3.996***	-3.226***	-3.104***	-3.269***	-3.545***	-2.218*
	(1.183)	(1.165)	(1.173)	(1.178)	(1.169)	(1.227)
Constant	-7.563	-1.068	-14.936	0.883	2.436	-9.22
	(16.184)	(16.941)	(16.703)	(16.352)	(16.126)	(16.307)
N	546	546	546	546	546	546

Table A3: Interactive models, excluding states with exogeneity concern about unemployment insurance spending

	1	2	3	4	5	6
ESI, t-1	0.752***	0.726***	0.740***	0.777***	0.752***	0.748***
	(0.030)	(0.032)	(0.032)	(0.030)	(0.030)	(0.030)
Social Capital, t-1	0.582**	0.669***	0.550***	0.176**	0.487***	1.079***
	(0.236)	(0.185)	(0.181)	(0.089)	(0.174)	(0.348)
All Welfare p.c., t-1	-0.660***					
	(0.176)					
Welfare X Soc. Cap., t-1	-0.110*					
	(0.062)					
Income Maintenance, t-1		-2.213**	-2.824***			
		(0.963)	(0.851)			
Income Maint. X Soc. Cap., t-1		-2.791***	-1.010**			
		(0.859)	(0.445)			
Unemployment Insurance, t-1		1.757*		1.047		
		(0.928)		(0.938)		
Unemp. Ins. X Soc. Cap., t-1		1.600***		0.284		
		(0.599)		(0.527)		
Public Medical Care p.c., t-1		-1.202***			-1.375***	
		(0.323)			(0.294)	
Pub. Med. Care X Soc. Cap., t-1		0.263			-0.234**	
		(0.205)			(0.117)	
Total Gov. Spend. p.c., t-1						1.022***
						(0.298)
Total Gov. Spend X Soc. Cap., t-1						-0.307***
						(0.116)
Union Strength, t-1	0.003	-0.011	0.014	0.016	-0.012	0.006
	(0.028)	(0.029)	(0.028)	(0.028)	(0.029)	(0.028)
Gov. Liberalism, t-1	-0.286	-0.332*	-0.343*	-0.534***	-0.349**	-0.552***
	(0.180)	(0.181)	(0.179)	(0.179)	(0.176)	(0.174)
Individual Income Tax p.c., t-1	1.840***	1.760***	1.820***	1.931***	1.896***	1.691***
	(0.572)	(0.567)	(0.573)	(0.577)	(0.571)	(0.575)
Corporate Income Tax p.c., t-1	-1.984	-1.127	-1.479	-2.766*	-2.01	-2.629*
	(1.559)	(1.576)	(1.591)	(1.562)	(1.554)	(1.547)
Energy Price, t-1	0.100***	0.122***	0.087***	0.090***	0.110***	0.085***
	(0.017)	(0.019)	(0.017)	(0.018)	(0.018)	(0.016)
Poverty Rate	0.073***	0.075***	0.073***	0.070***	0.074***	0.079***
	(0.022)	(0.021)	(0.022)	(0.022)	(0.022)	(0.022)
Post Reform	-0.043	-0.073	-0.072	-0.034	-0.042	-0.075
	(0.122)	(0.122)	(0.123)	(0.123)	(0.122)	(0.122)
Devolved	-0.520*	-0.685***	-0.574**	-0.485*	-0.576**	-0.495*
	(0.266)	(0.265)	(0.266)	(0.265)	(0.268)	(0.265)
Unemployment, t-1	-0.102**	-0.200***	-0.124***	-0.252***	-0.158***	-0.162***
	(0.043)	(0.055)	(0.041)	(0.053)	(0.036)	(0.036)
Unemployment, Change	0.088**	0.052	0.077**	0.066*	0.049	0.106***
	(0.039)	(0.039)	(0.039)	(0.039)	(0.039)	(0.039)
Total Gov. Spend, log	1.900***	2.386***	0.902*	0.706	2.327***	-1.332*
	(0.651)	(0.659)	(0.542)	(0.534)	(0.660)	(0.754)
GSP Growth	0.915	1.757	0.098	0.4	1.551	-0.96
	(1.272)	(1.284)	(1.253)	(1.261)	(1.291)	(1.277)
Real GSP, log	-0.35	-0.879	0.58	-0.433	-1.031	1.616*
	(0.901)	(0.938)	(0.889)	(0.867)	(0.920)	(0.967)
Diversity	-3.408***	-2.868**	-2.602**	-3.331***	-2.844**	-1.297
	(1.223)	(1.209)	(1.189)	(1.182)	(1.217)	(1.269)
Constant	-16.108	-9.984	-25.055	3.389	-5.902	-19.285
	(16.839)	(17.259)	(17.234)	(16.484)	(16.619)	(16.633)

N	546	546	546	546	546	546

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Replication Data Codebook

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year Year

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type: numeric (float)

range: [1986,2010] units: 1
unique values: 25 missing .: 0/1275

mean: 1998
std. dev: 7.21393

percentiles: 10% 25% 50% 75% 90%
1988 1992 1998 2004 2008

---

st_abb State Abbrev.

---

type: string (str3), but longest is str2

unique values: 51 missing "": 0/1275

examples: "GA"
"MD"
"NH"
"SC"

---

state State

---

type: string (str20)

unique values: 51 missing "": 0/1275

examples: "Georgia"
"Maryland"
"New Jersey"
"South Carolina"

warning: variable has embedded blanks

---

fips State FIPS ID

---

type: numeric (byte)

range: [1,56] units: 1
unique values: 51 missing .: 0/1275

mean: 28.9608

```
              std. dev:    15.683

           percentiles:        10%       25%       50%       75%       90%
                                 8        16        29        42        50
```

---

stname State Name

```
                  type:  string (str21), but longest is str20

         unique values:  51                       missing "":  0/1275

              examples:  "Georgia"
                         "Maryland"
                         "New Jersey"
                         "South Carolina"

               warning:  variable has embedded blanks
```

---

cps State CPS ID

```
                  type:  numeric (int)

                 range:  [11,95]                     units:  1
         unique values:  51                       missing .:  0/1275

                  mean:   54.8235
              std. dev:   25.3226

           percentiles:        10%       25%       50%       75%       90%
                                16        34        55        81        88
```

---

region4 Region, 4

```
                  type:  numeric (byte)

                 range:  [1,4]                       units:  1
         unique values:  4                        missing .:  0/1275

            tabulation:  Freq.  Value
                           225  1
                           300  2
                           425  3
                           325  4
```

---

regname Region , 4, name

```
                  type:  string (str13), but longest is str9
```

```
         unique values:  4                       missing "":  0/1275

            tabulation:  Freq.  Value
                           300  "Midwest"
                           225  "Northeast"
                           425  "South"
                           325  "West"

-------------------------------------------------------------------------------
region10                                                  Region, 10, name
-------------------------------------------------------------------------------

                  type:  string (str18)

         unique values:  9                       missing "":  0/1275

            tabulation:  Freq.  Value
                           125  "East North Central"
                           100  "East South Central"
                            75  "Middle Atlantic"
                           200  "Mountain"
                           150  "New England"
                           125  "Pacific"
                           225  "South Atlantic"
                           175  "West North Central"
                           100  "West South Central"

               warning:  variable has embedded blanks

-------------------------------------------------------------------------------
region10_num                                          Region, 10 number
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [1,10]                       units:  1
         unique values:  9                       missing .:  0/1275

            tabulation:  Freq.  Value
                           125  1
                            75  3
                           200  4
                           150  5
                           125  6
                           225  7
                           175  8
                           100  9
                           100  10

-------------------------------------------------------------------------------
stateupper                                            State name, upper
-------------------------------------------------------------------------------

                  type:  string (str20)
```

```
         unique values:  51                       missing "":  0/1275

              examples:  "GEORGIA"
                         "MARYLAND"
                         "NEW JERSEY"
                         "SOUTH CAROLINA"

               warning:  variable has embedded blanks
```

---

enerprice — Energy price

```
                  type:  numeric (float)

                 range:  [4.96422,36.21054]          units:  .00001
         unique values:  1246                     missing .:  25/1275

                  mean:    11.234
             std. dev:    4.65631

           percentiles:        10%       25%       50%       75%       90%
                             7.0156   7.86256   9.55901   13.8268   18.2157
```

---

pov_rtfull — Poverty Rate

```
                  type:  numeric (float)

                 range:  [2.9,27.2]                  units:  .1
         unique values:  187                      missing .:  25/1275

                  mean:   12.6142
             std. dev:   3.71086

           percentiles:        10%       25%       50%       75%       90%
                               8.6       9.9      12.1      14.7      17.4
```

---

socap_ma — Social Capital, 3 yr ma

```
                  type:  numeric (float)

                 range:  [-2.9036119,2.7295229]      units:  1.000e-11
         unique values:  1200                     missing .:  75/1275

                  mean:   .146642
             std. dev:    .97594

           percentiles:        10%       25%       50%       75%       90%
                            -1.11098   -.46333   .125404   .765239   1.47296
```

```
-------------------------------------------------------------------------------
ESI                                                      Economic Security Index
-------------------------------------------------------------------------------

                  type:  numeric (float)

                 range:  [10.25237,24.53998]          units:  1.000e-07
          unique values:  1225                    missing .:  50/1275

                  mean:   17.0463
             std. dev:   2.35134

            percentiles:        10%       25%       50%       75%       90%
                           14.0355   15.3897    17.027   18.5672   20.1565

-------------------------------------------------------------------------------
unemprt                                                        Unemployment Rate
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [2.3,13.8]                   units:  .1
          unique values:  98                      missing .:  25/1275

                  mean:   5.50544
             std. dev:   1.82549

            percentiles:        10%       25%       50%       75%       90%
                                3.5       4.3       5.2       6.4       7.9

-------------------------------------------------------------------------------
transfers_edtpcr                  Employment Training Transfers, per cap real
-------------------------------------------------------------------------------

                  type:  numeric (float)

                 range:  [.02127172,.35861972]        units:  1.000e-09
          unique values:  1275                    missing .:  0/1275

                  mean:   .082861
             std. dev:   .033757

            percentiles:        10%       25%       50%       75%       90%
                           .047161   .061928   .076035   .098034   .121121

-------------------------------------------------------------------------------
transfers_incpcr                   Income Maintenance Transfers, per cap real
-------------------------------------------------------------------------------

                  type:  numeric (float)

                 range:  [.10897146,1.0691911]        units:  1.000e-09
          unique values:  1275                    missing .:  0/1275

                  mean:   .392875
```

```
              std. dev:   .142373

           percentiles:        10%       25%       50%       75%       90%
                            .236333   .286005    .37214   .471548    .58357

-------------------------------------------------------------------------------
transfers_medpcr                                 Medical Care Transfers, per cap real
-------------------------------------------------------------------------------

                  type:  numeric (float)

                 range:  [.42173666,3.7014608]        units:  1.000e-08
          unique values:  1275                     missing .:  0/1275

                  mean:   1.47945
              std. dev:   .591981

           percentiles:        10%       25%       50%       75%       90%
                             .76076   1.02938   1.39921   1.85738    2.2901

-------------------------------------------------------------------------------
transfers_oasdipcr                Oald Age & Disability Ins Transfers, per cap real
-------------------------------------------------------------------------------

                  type:  numeric (float)

                 range:  [.45353794,2.8985846]        units:  1.000e-08
          unique values:  1275                     missing .:  0/1275

                  mean:   1.55626
              std. dev:   .298333

           percentiles:        10%       25%       50%       75%       90%
                            1.17464   1.38366   1.56334   1.74104   1.89051

-------------------------------------------------------------------------------
transfers_uipcr                       Unemployment Insurance Transfers, per cap real
-------------------------------------------------------------------------------

                  type:  numeric (float)

                 range:  [.01810464,.68400502]        units:  1.000e-09
          unique values:  1275                     missing .:  0/1275

                  mean:   .123024
              std. dev:   .091174

           percentiles:        10%       25%       50%       75%       90%
                            .046166   .064594     .0966   .146516   .233904

-------------------------------------------------------------------------------
transfers_allpcr                                      All transfers, per cap real
-------------------------------------------------------------------------------

                  type:  numeric (float)
```

```
                range:  [1.7875619,7.2640748]       units:  1.000e-07
        unique values:  1275                    missing .:  0/1275

                 mean:   3.80139
            std. dev:   .993732

          percentiles:        10%       25%       50%       75%       90%
                           2.6544   3.07104   3.63163   4.41367   5.23269
```

---

gsp_stlgovpcr — Gross State Product, per cap real

```
                type:  numeric (float)

                range:  [1.7804366,5.7551036]       units:  1.000e-07
        unique values:  1275                    missing .:  0/1275

                 mean:   3.10978
            std. dev:   .662286

          percentiles:        10%       25%       50%       75%       90%
                           2.35916    2.6758   3.03604   3.41724   3.95209
```

---

indivinctaxpcr — Individual Income Tax, per cap real

```
                type:  numeric (float)

                range:  [0,1.5456432]               units:  1.000e-10
        unique values:  1079                    missing .:  25/1275

                 mean:   .541067
            std. dev:    .33828

          percentiles:        10%       25%       50%       75%       90%
                                 0   .355631   .567026   .742963   .966878
```

---

corptinctaxpcr — Corporate Income Tax, per cap real

```
                type:  numeric (float)

                range:  [0,1.7411734]               units:  1.000e-09
        unique values:  1151                    missing .:  25/1275

                 mean:   .113708
            std. dev:   .116319

          percentiles:        10%       25%       50%       75%       90%
                           .04133   .063857   .089981   .132463   .205795
```

```
-------------------------------------------------------------------------------
logtot                                  Total Government Spending, real, logged
-------------------------------------------------------------------------------

                  type:  numeric (float)

                 range:  [13.39696,19.112717]         units:  1.000e-07
         unique values:  1248                     missing .:  0/1275

                  mean:   15.9877
             std. dev:   1.08772

           percentiles:        10%       25%       50%       75%       90%
                            14.5102   15.1698   16.0251   16.7388   17.3958

-------------------------------------------------------------------------------
logrgdp                                      Real Gross State Product, logged
-------------------------------------------------------------------------------

                  type:  numeric (float)

                 range:  [23.275431,28.071735]        units:  1.000e-06
         unique values:  1250                     missing .:  25/1275

                  mean:   25.3922
             std. dev:   1.05054

           percentiles:        10%       25%       50%       75%       90%
                            24.0204   24.5061   25.4708   26.0883   26.6827

-------------------------------------------------------------------------------
uniondensity                                                    Union Strength
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [3.3,32.9]                   units:  .1
         unique values:  257                      missing .:  0/1275

                  mean:   14.9962
             std. dev:   6.13345

           percentiles:        10%       25%       50%       75%       90%
                               7.3      10.1      14.6      19.2      23.5

-------------------------------------------------------------------------------
govideo                                                  Government Liberalism
-------------------------------------------------------------------------------

                  type:  numeric (float)

                 range:  [0,.97916663]                units:  1.000e-09
         unique values:  1207                     missing .:  25/1275

                  mean:   .511935
```

```
              std. dev:   .261017

           percentiles:        10%       25%       50%       75%       90%
                            .129007   .296667   .525887    .72524   .861667

-------------------------------------------------------------------------------
post1996                                                            Post Reform
-------------------------------------------------------------------------------

                  type:  numeric (float)

                 range:  [0,1]                        units:  1
          unique values:  2                       missing .:  0/1275

             tabulation:  Freq.  Value
                            561  0
                            714  1

-------------------------------------------------------------------------------
gspgrowth                                          Gross State Product Growth rt
-------------------------------------------------------------------------------

                  type:  numeric (float)

                 range:  [-.26627645,.19519316]       units:  1.000e-12
          unique values:  1250                    missing .:  25/1275

                  mean:   .052069
             std. dev:   .035425

           percentiles:        10%       25%       50%       75%       90%
                            .013661   .035446    .05255   .073296   .092058

-------------------------------------------------------------------------------
racialdiversity                                      Racial Diversity, lag 1yr
-------------------------------------------------------------------------------

                  type:  numeric (float)

                 range:  [.01975564,.72015232]        units:  1.000e-09
          unique values:  1250                    missing .:  25/1275

                  mean:   .318663
             std. dev:   .163114

           percentiles:        10%       25%       50%       75%       90%
                            .098605    .18486   .304382   .453618   .535304

-------------------------------------------------------------------------------
welXsc                                          l.transfers_allpcr*l.socap_ma
-------------------------------------------------------------------------------

                  type:  numeric (float)

                 range:  [-10.087975,14.744594]       units:  1.000e-10
```

```
         unique values:  1200                     missing .:  75/1275

                  mean:   .469237
             std. dev:   3.47726

           percentiles:        10%       25%       50%       75%       90%
                           -4.25504  -1.65501   .503232   2.85738    4.8753
```

```
uiXsc                                                  l.transfers_uipcr*l.socap_ma
```

```
                  type:  numeric (float)

                 range:  [-.31468526,.89145637]       units:  1.000e-11
         unique values:  1200                     missing .:  75/1275

                  mean:    .03147
             std. dev:   .117409

           percentiles:        10%       25%       50%       75%       90%
                           -.085888  -.038893   .013069   .080976   .168112
```

```
medXsc                                                 l.transfers_uipcr*l.socap_ma
```

```
                  type:  numeric (float)

                 range:  [-4.1080995,6.9174528]       units:  1.000e-10
         unique values:  1200                     missing .:  75/1275

                  mean:   .127116
             std. dev:   1.33936

           percentiles:        10%       25%       50%       75%       90%
                           -1.62909  -.625132   .173425   .998157   1.61403
```

```
incXsc                                                 l.transfers_incpr*l.socap_ma
```

```
                  type:  numeric (float)

                 range:  [-1.2820408,1.5574088]       units:  1.000e-11
         unique values:  1200                     missing .:  75/1275

                  mean:   .011352
             std. dev:   .369928

           percentiles:        10%       25%       50%       75%       90%
                             -.5156   -.18256   .047647   .243262   .432899
```

```
totXsc                                                   l.gsp_stlgovpcr*l.socap_ma
```

```
-------------------------------------------------------------------------------

                type:  numeric (float)

               range:  [-8.531599,8.989996]         units:  1.000e-10
        unique values:  1200                     missing .:  75/1275

                mean:   .511992
            std. dev:   2.85749

          percentiles:        10%       25%       50%       75%       90%
                          -3.12471     -1.34   .411625   2.44741   4.12308

-------------------------------------------------------------------------------
devolvedpost1996                                        Strong 2nd order devolution
-------------------------------------------------------------------------------

                type:  numeric (float)

               range:  [0,1]                        units:  1
        unique values:  2                        missing .:  0/1275

           tabulation:  Freq.  Value
                         1163  0
                          112  1
```