PSC 315: US Political Economy
Research project & presentation

Each student's research project will:

1. Use the cross-state data set provided by the instructor to investigate the political-economy hypothesis that was randomly assigned to them (look for your last name in the table below); and
2. Consider how the experience of their assigned state compares to the general pattern across all of the states in the data set.

Hypothesis assignments:

Hypothesis	**Student(s)**
H1: Long-run real GDP growth is higher in states with lower government debt per capita	Felschow Sayeed
H2: Long-run real GDP growth is higher in states with a higher % of college graduates	McOmber
H3: Long-run real GDP growth is lower in states with higher and more progressive income taxes	Hill Van Kerkhove
H4: Real GDP growth during the 2000s has been lower in states with larger manufacturing sectors	Stevenson
H5: Long-run wage growth is higher in states with higher % of employees represented by unions	Loope Middione
H6: Long-run wage growth is lower in states with right-to-work laws	Radcliffe Watkins
H7: Wage growth during the 2000s has been lower in states with higher % of their employees in manufacturing sector	French
H8: State tax revenue per capita is lower in states with more frequent Republican control of the governorship	Mattoon Sponaugle
H9: State income taxes are lower and less progressive in states with more Republican electorates	Kissi Boateng Terry
H10: Total state and local government spending per capita is lower in states with more Republican electorates	Haefner Manna
H11: Total Medicaid spending per capita is higher in states with more frequent Democratic control of the state legislature	Robinson Weiner
H12: Medicaid spending per capita on working-age, nondisabled adults is lower in states with more Republican electorates	Inwang
H13: State and local government spending per capita on education is lower in states with more Republican electorates	Casamassa Jackson
H14: State and local government spending per capita on health care is lower in states with more Republican electorates	Alouat Occhino
H15: Poverty rate is lower in states with more frequent Democratic control of the state legislature	Kobler
H16: Medicaid is more redistributive in states with more frequent Democratic control of the state legislature	Longo Mercado Madu
H17: State and local government spending on health care is higher in states with higher % of union members	Abraha
H18: Voter turnout in presidential elections is higher in states with election-day voter registration	Young
H19: Voter turnout in presidential elections is higher in states that allow early voting	Internicola

H20: Voter turnout in presidential elections is higher in states in which presidential elections are more competitive	Corda
H21: State government debt per capita is lower in states that are required by law to **execute** a balance budget	Dzemidzic Tomczak
H22: State government debt per capita is lower in states with more frequent Republican control of the governorship	Pearson Weinman
H23: Growth in manufacturing employment is lower in states with higher wage growth	Hicks Kim
H24: Growth in manufacturing employment is lower in states with higher % of employees represented by unions	Destefano Pooran
H25: Growth in manufacturing employment is higher in states with right-to-work laws	Sui Whitney
H26: Population growth is higher in states with higher long-run economic growth	Pinzon
H27: Population growth is higher in states with lower and less progressive state income taxes	Bravo Khromchenko
H28: State tax revenue per capita is higher in states with wealthier populations	Price

How to conduct the cross-state data analysis:
First, select the variables in the cross-state data set that are the most appropriate measures of the dependent and independent variables in your assigned political-economy hypothesis. The table below matches up the variables in the data set to the hypotheses assigned in the table above. These variables are defined at the end of these instructions. If more than one variable is listed, the student can either consider more than one variable or choose the one that they believe is most appropriate for investigating their hypothesis.

Hypothesis	**Dependent variable**	**Independent variable(s)**
H1	LRGrow	GvtDebtpc
H2	LRGrow	College%
H3	LRGrow	IncTaxRate
H4	LRGrow	Manu%
H5	WageGrw19	UnionRep%
H6	WageGrw19	R2Work
H7	WageGrw19	Manu%
H8	TaxRevpc	RepGov%
H9	IncTaxRate	Rep2Pty% (or RepLeg%)
H10	GvtSpend	Rep2Pty% (or RepLeg%)
H11	Medicaid	DemLeg%
H12	MCAdult	Rep2Pty% (or RepLeg%)
H13	Educ	Rep2Pty% (or RepLeg%)
H14	Health	Rep2Pty% (or RepLeg%)
H15	Poverty	DemLeg%
H16	MC_Prog	DemLeg%
H17	Health	Union%
H18	Turnout	ElecDay
H19	Turnout	EarlyVote
H20	Turnout	PresComp

easy pooling: 2 groups: yes no

H21	GvtDebtpc	BalBudget
H22	GvtDebtpc	RepGov%
H23	ManGrow	WageGrw14
H24	ManGrow	UnionRep%
H25	ManGrow	R2Work
H26	PopGrow	LRGrow
H27	PopGrow	IncTaxRate
H28	TaxRevpc	RGDPpc

Second, using the variables relevant to your hypothesis, assess the level of cross-state evidence in support of the hypothesis. When conducting this assessment, consider any confounding factors, especially ones that are measured by variables in the cross-state data set. This should also be done when comparing your state to the general pattern across states – in particular, are there aspects of your state's political-economy that make it less likely to conform to the hypothesized relationship? Similarly, if you believe the hypothesis should hold more strongly for states with a particular "conditioning" characteristic (e.g., higher union membership, above average real GDP per capita), consider whether the evidence in support of the hypothesis is stronger if your assessment is limited to the subset of states that have the characteristic (i.e., are most similar with respect to the conditioning variable). This decision should be based on a logical, theoretical justification rather than simply constituting a post hoc reaction to counter-intuitive findings.

This cross-state data analysis should be conducted using one of the following two approaches:

1. Divide the states into two groups based on their independent variable values such that the groups (on average) would be expected to be different on the dependent variable in a manner consistent with your chosen political-economy hypothesis. The best approach for dividing the states is not necessarily an even split; it should be determined based on what seems most appropriate for evaluating the hypothesis. Once the states are separated into two groups, calculate the mean of the dependent variable for each group and then assess whether the difference between the means is consistent with your hypothesis (e.g., does the group that is expected by the hypothesis to have the higher mean actually have the higher mean) and if so whether this difference is large enough to be meaningful. If more than one dependent or independent variable is analyzed, a separate group-mean comparison should be conducted for each. **If you believe another variable conditions the relationship, the best approach would be to create four groups using two independent variables**.
2. Construct a scatter plot of the dependent and independent variables relevant to your hypothesis (if you do not know how to do this, choose the first approach). If more than one dependent variable (or independent variable) is analyzed, separate scatter plots should be constructed for each. Interpret the scatter plot(s) in terms of whether the pattern is consistent with the hypothesis, and if so how strong it suggests the hypothesized relationship to be (you are not expected to evaluate your interpretation with a formal statistical test). As with the first approach above, a scatter plot could be constructed that excludes particular states if the student believes the relationship holds more strongly for a particular subset defined by another variable in the data set.

The cross-state data are posted on UBLearns (in the "Assignments section) as an Excel file labeled: PSC315_project_data

What is expected for the case study analysis of your assigned state:

- Compare your assigned state's experience to the general pattern revealed by your cross-state data analysis. Your state should be included in that analysis, i.e., be an observation in one of the two groups of countries or a point in the scatter plot. Is your state's experience consistent with or divergent from the general pattern? If there is no general pattern, is your state's experience consistent with the hypothesis or does it contribute to the absence of a relationship?
- If divergent, offer a possible explanation for why your state is different. What characteristics of your state might account for why its outcome experience (as measured by the dependent variable) is different from what would be expected by the hypothesis? How does your state differ from the other states that have similar values of the independent variable in your hypothesis?
- If consistent or if there is no general pattern, compare your state's experience to that of other states that are similar to your state in ways that might influence the dependent variable. Does this comparison reinforce or counter the general pattern revealed by your cross-state analysis?

Template for the research presentation:

- What is your political-economy hypothesis?
- Summarize the findings of your cross-state data analysis
    - What analysis approach did you use?
        - For approach 1, how did you divide the states into groups based on the independent variable(s)?
    - How consistent was the evidence with the hypothesis?
        - Present the group means or scatter plot
- Summarize the experience and relevant characteristics of your assigned state as they relates to your hypothesis
    - How does your state compare to the other states on the independent variable(s)?
    - How does your state compare to the other states on the dependent variable(s)?
- Summarize the conclusions of your case-study analysis
    - Is your state's experience consistent with or divergent from the general pattern in your cross-state data analysis?
    - Is your state consistent with or divergent from the hypothesized relationship (if not supported by your cross-state analysis)?
    - To the extent that your state is different, are there possible reasons for these differences, as suggested by political-economy theories covered in the course?

Your presentation should be 8-12 minutes in length and based on PowerPoint slides or some other visual (written) summary of your findings and conclusions. Students are expected to give their presentation to the instructor in a Zoom meeting. If scheduling this Zoom meeting is problematic, the student may request instead to submit a video recording of their presentation. Instructions will be distributed separately on how to record this video using Zoom in a manner that will allow you to provide the instructor with access via a web link.

If you have any questions, email the instructor, Professor Harvey Palmer, at hpalmer@buffalo.edu

Variable definitions:

- **LRGrow**: annual rate of growth of real GDP per capita from 1999-2019
- **GvtDebtpc**: state government debt per capita in 2015
- **College%**: % of state's adult population who are college graduates
- **IncTaxRate**: highest marginal tax rate in 2021 (zero if the state does not have income taxes)
- **Manu%**: % of state's employees who were in the manufacturing sector in 2014
- **Union%:** % of state's employees who are union members
- **UnionRep%**: % of state's employees who are represented by unions
- **R2Work**: Does the state have a right-to-work law? (Yes/No)
- **WageGrw19**: annual rate of growth of wages per employee from 1999-2019
- **WageGrw14**: annual rate of growth of wages per employee from 1999-2014
- **TaxRevpc**: state tax revenue per capita in 2019
- **RepGov%**: % of years from 1999-2019 with Republican governor
- **Rep2Pty%**: average Republican % of Republican-Democratic presidential vote total from 2008-2020
- **RepLeg%**: % of years from 1999-2019 with Republican majority control of both houses of the state legislature
- **DemLeg%**: % of years from 1999-2019 with Democratic majority control of both houses of the state legislature
- **GvtSpend**: total state & local government spending per capita in 2017
- **Medicaid**: total Medicaid spending per capita in 2018
- **MCAdult**: Medicaid spending per capita on working-age, nondisabled adults in 2018
- **Educ**: state and local spending per capita on elementary and secondary education in 2017
- **Health**: state and local spending per capita on health care in 2017
- **Poverty**: % of state's population who are under the poverty line in 2019
- **MC_Prog**: ratio of total Medicaid spending per capita and Medicaid spending per capita on working-age, nondisabled adults in 2018
- **Turnout**: average voter turnout for presidential elections from 2008-2020
- **ElecDay**: Does your state have election-day voter registration? (Yes/No)
- **EarlyVote**: How many days before presidential elections can voters cast their ballots?
- **PresComp**: absolute difference of average Republican 2-party presidential % from 50% for 2008-2020, i.e., absolute value of (Rep2Pty% - 50)
- **BalBudget**: Is your state's government required by law to execute a balanced budget? (Yes/No)
- **ManGrow**: annual rate of growth of manufacturing employment from 2014-2019
- **PopGrow**: annual rate of population growth from 1999-2019
- **RGDPpc**: Real GDP per capita in 2019
- **Farm%**: % of state's employees who worked in the Agricultural sector in 2014

Quick plot: x = State
y = debt (sorted)
color = Bal Budget