Research

Ballot Initiatives and Economic Performance

DOUGLAS HOLTZ-EAKIN, DAN BOSCH, DAN GOLDBECK, TOM LEE | AUGUST 3, 2021

Executive Summary

- Recent headline-grabbing ballot initiatives underscore that direct-to-voter efforts have become an increasingly common way to enact economic policy in the states.
- The volume and frequency of initiatives raises the possibility that they contribute to economic uncertainty, which can lead to reduced economic growth.
- This analysis finds that additional ballot initiatives are associated with greater state-level policy uncertainty, which in turn reduces state-level gross state product, employment, and income.

Introduction

Recent high-profile ballot initiatives have highlighted the increased role of these mechanisms to pursue economic policy changes in the states. One notable example is California's Proposition 22, approved by voters in 2020, which granted an exemption to certain online platforms from a 2019 state law regarding worker classification. While the direct-to-voter approach to policy can have some appeal compared to the standard legislative pathway, the use of initiative-passed economic policies may contribute to an uncertain policy environment for businesses, and research has shown that uncertainty has negative impacts on economic performance.

This analysis investigates whether the volume and frequency of ballot initiatives contribute to uncertainty using data on state-level ballot initiatives from 2000-2019 by comparing the number of initiatives and referenda on issues affecting the economy to a measure of state-level policy uncertainty.

Notably, this analysis finds that additional ballot initiatives are associated with greater state-level policy uncertainty, which in turn reduces state-level gross state product (GSP), employment, and income.

Method

This study uses straightforward empirical methods that build on a growing literature linking policy uncertainty to economic performance. Much of the past work in this area has focused on national-level policies. Recently, however, Elkamhi, Jo, and Salerno (2020) developed 50 separate indices of state economic policy uncertainty (SEPU). The indices reflect key observable state events, and the average of these indices tracks the national-level measures of uncertainty over time. The authors found that increases in policy uncertainty generate negative impacts on GSP, income, and employment.[1]

This analysis builds on this research by focusing on the linkage between ballot initiatives and SEPU. It demonstrates a statistically significant link between the number and frequency of state ballot initiatives and referenda and the indices of SEPU. Finally, it evaluates the quantitative impact of rising ballot initiatives on

economic performance.

Data Description

This study's ballot data are taken from the National Council of State Legislatures Statewide Ballot Measures Database. Of the 39 initiative topics available, this analysis focuses on the 18 topics likely to impact economic performance, such as Labor & Employment, Environmental Protection, and Tax & Revenue. (A full list of the topics chosen is available in the appendix.) This study includes all ballot initiatives considered, not just those that were enacted.

There was wide disparity in the number of ballot initiatives among the states. California had the most, 132, over the 2000-2019 period, while Delaware was the only state that did not have any. The state-level initiative data is presented in Table 1 below. The majority of states, 27, held at least 20 initiatives over the 20-year period.

Table 1: Total Number of Ballot Initiatives from 2000-2019, by State

California	132	South Carolina	17
Louisiana	99	Idaho	14
Texas	84	New York	14
Maine	82	Virginia	14
Washington	79	Hawaii	10
Oregon	75	Wyoming	10
Arizona	68	West Virginia	8
Colorado	66	Maryland	7
Rhode Island	56	North Carolina	6
New Mexico	53	Illinois	5
Oklahoma	49	Pennsylvania	5
Alabama	48	Kansas	4
Georgia	47	Tennessee	4
Florida	44	Indiana	3
Missouri	43	Kentucky	3
Nevada	36	New Hampshire	3
South Dakota	36	Connecticut	2
Montana	29	Minnesota	2
North Dakota	27	Iowa	1
Massachusetts	26	Mississippi	1
New Jersey	25	Vermont	1

Alaska	24	Wisconsin	1
Arkansas	23	Delaware	0
Nebraska	22		
Ohio	22		
Utah	21		
Michigan	20		

There is also wide variation among years in the total number of ballot initiatives across all states, as shown in Table 2, with the prevalence of initiatives occurring in even years to coincide with most state and federal elections.

Table 2: Total Number of Ballot Initiatives Across All States, by Year

2006	159
2002	145
2000	144
2010	118
2008	114
2004	113
2018	112
2012	111
2016	99
2014	97
2003	47
2007	32
2005	29
2001	27
2011	25
2009	23
2017	22
2013	18
2015	18
2019	18

Results

There is a positive and statistically significant relationship between the number of ballot initiatives and the level of state economic policy uncertainty. This relationship is represented by Model 1 and can be found in Table 3 below. The model can be interpreted as, for a one percent increase in the number of ballot initiatives, SEPU increases by about 1.746 points. It is statistically significant at the five percent significance level.

Table 3: Model 1 Number of Ballot Initiatives and SEPU

Variable	Coefficient (Standard Error)
LN of Number of Ballot Initiatives	1.746 (0.8016) **
Constant	69.546 (2.9954) ***
R^2 Within	53.11%

***$p < 0.01$, **$p < 0.05$, *p < 0.10

Similarly, there is a positive and statistically significant relationship between the frequency of ballot initiatives and the level of state economic policy uncertainty, calculated in Model 2 and represented in Table 4 below. The model can be interpreted as, for an additional consecutive year where there was a ballot initiative, SEPU increases by about 2.193 points. It is also statistically significant at the five percent significance level.

Table 4: Model 2 Frequency of Ballot Initiatives and SEPU

Variable	Coefficient (Standard Error)
Consecutive Years	2.193 (0.8757) **
Constant	69.963 (2.9058) *** *
R^2 Within	53.84%

***$p < 0.01$, **$p < 0.05$, *p < 0.10

Implications

This analysis uses the estimated relationships to quantify the impact of increasing the number and frequency of ballot initiatives. It uses the statistical analysis described above to project the impact on SEPU. In their work, Elkamhi, Jo, and Salerno estimate the impact of an increase in SEPU on the growth of GSP, state employment, and state income. Using their results, this analysis can quantify the impact of increased ballot initiative activity on state economic performance.

To begin, consider Table 5, which displays the impact of adding an additional ballot initiative in each state. Using the statistical relationships, adding an additional ballot initiative in any year lowers GSP in Alabama by $25 million, reduces employment by 251 jobs, and reduces personal income by $20,000 across the state. By implication, an additional ballot initiative every year would have impacts that are a multiple of these estimates.

Table 5

Impact of Adding One More Ballot Initiative

State	Gross State Product[1]	Employment[2]	Income[3]
Alabama	-25	-251	-20
Alaska	-6	-42	-4
Arizona	-42	-364	-31
Arkansas	-15	-153	-12
California	-342	-2,256	-238
Colorado	-44	-362	-31
Connecticut	-31	-214	-24
Delaware	-8	-56	-5
District of Columbia	-16	-85	-5
Florida	-122	-1,179	-102
Georgia	-69	-588	-46
Hawaii	-10	-85	-7
Idaho	-10	-98	-8
Illinois	-96	-730	-67
Indiana	-42	-367	-29
Iowa	-22	-192	-15
Kansas	-19	-178	-14
Kentucky	-24	-236	-18
Louisiana	-27	-252	-20
Maine	-7	-79	-6
Maryland	-47	-349	-35
Massachusetts	-65	-453	-47
Michigan	-57	-529	-45

Minnesota	-42	-350	-29
Mississippi	-13	-148	-10
Missouri	-36	-350	-27
Montana	-6	-64	-5
Nebraska	-15	-123	-10
Nevada	-20	-174	-14
New Hampshire	-9	-83	-8
New Jersey	-69	-517	-57
New Mexico	-11	-104	-8
New York	-186	-1,180	-124
North Carolina	-66	-567	-45
North Dakota	-6	-54	-4
Ohio	-75	-655	-53
Oklahoma	-21	-214	-17
Oregon	-28	-240	-20
Pennsylvania	-87	-722	-67
Rhode Island	-7	-60	-5
South Carolina	-27	-266	-21
South Dakota	-6	-57	-4
Tennessee	-41	-386	-29
Texas	-199	-1,653	-136
Utah	-22	-195	-14
Vermont	-4	-40	-3
Virginia	-61	-496	-45
Washington	-69	-426	-44
West Virginia	-8	-82	-7
Wisconsin	-38	-344	-27
Wyoming	-4	-38	-3

[1]Millions of current dollars

[2]Based on 2019 employment data

[3]Thousands of 2020 dollars

Similarly, the analysis can simulate the impact of extending a consecutive string of ballot initiatives by another year. These estimates are shown in Table 6.

Table 6

Impact of an Additional Consecutive Year of Ballot Initiatives

State	Gross State Product[1]	Employment[2]	Income[3]
Alabama	-61	-610	-48
Alaska	-14	-103	-10
Arizona	-102	-886	-75
Arkansas	-35	-373	-29
California	-833	-5,489	-580
Colorado	-106	-881	-76
Connecticut	-76	-520	-58
Delaware	-20	-135	-12
District of Columbia	-38	-206	-13
Florida	-296	-2,869	-248
Georgia	-168	-1,432	-113
Hawaii	-24	-208	-18
Idaho	-23	-239	-18
Illinois	-234	-1,777	-163
Indiana	-102	-894	-71
Iowa	-53	-467	-36
Kansas	-47	-434	-34
Kentucky	-57	-574	-43
Louisiana	-66	-612	-48

Maine	-18	-191	-15
Maryland	-114	-849	-85
Massachusetts	-158	-1,101	-113
Michigan	-140	-1,288	-109
Minnesota	-102	-852	-72
Mississippi	-31	-361	-26
Missouri	-88	-853	-65
Montana	-14	-155	-12
Nebraska	-35	-300	-23
Nevada	-48	-424	-35
New Hampshire	-23	-202	-19
New Jersey	-167	-1,257	-138
New Mexico	-27	-252	-20
New York	-453	-2872	-301
North Carolina	-160	-1,381	-109
North Dakota	-15	-131	-9
Ohio	-184	-1,594	-128
Oklahoma	-51	-521	-40
Oregon	-68	-584	-50
Pennsylvania	-211	-1,757	-164
Rhode Island	-16	-146	-13
South Carolina	-66	-647	-51
South Dakota	-15	-138	-11
Tennessee	-99	-938	-72
Texas	-484	-4,021	-332
Utah	-54	-475	-35
Vermont	-9	-98	-8
Virginia	-149	-1,206	-110
Washington	-168	-1,037	-108
West Virginia	-21	-200	-17
Wisconsin	-92	-837	-67
Wyoming	-10	-92	-8

[1]Millions of current dollars

[2]Based on 2019 employment data

[3]Thousands of 2020 dollars

Conclusion

This analysis demonstrates a statistically significant correlation between the volume of ballot initiatives and uncertainty, as well as the frequency of ballot initiatives and uncertainty. Broadly speaking, this uncertainty appears to contribute to negative impacts on GSP, employment, and personal income.

This analysis does not necessarily mean that all ballot initiatives are harmful, once impacts on productivity and growth are weighed against other potential societal benefits. As with all policy options, decisions about ballot initiatives involve tradeoffs. This analysis suggests, however, that states may have an economic interest in limiting the number and frequency of such initiatives—especially those dealing with taxation, employment, budgets, and similar policy categories most likely to impact overall economic performance.

Appendix

NCSL Database Topics
Banking and Financial Services
Bond Measures
Budgets
Business & Commerce
Drug/Alcohol/Tobacco Policy
Economic Development
Energy & Electric Utilities
Environmental Protection
Gambling & Lotteries
Health
Human Services
Insurance
Labor & Employment
Land Use/Property Rights
Natural Resources

Tax & Revenue
Telecom & Info Technology
Transportation

Empirical Models

The unobservable characteristics between states can introduce bias regarding the specific relationship between state ballot initiatives and economic uncertainty. The analysis uses fixed-effects models to control for all these unobservable state differences. The dependent variable in our models is the annual average of monthly State-Level Economic Policy Uncertainty Indices (SEPU). In the first model, the independent variable of interest is the natural log of total number of ballot initiatives in the corresponding state and year. In the second model, the independent variable of interest is coded as representing the number of consecutive prior years that had a ballot initiative. To account for macroeconomic forces that change over time, such as the loss of businesses and jobs during the Great Recession, it includes year dummies in both models.

Additional control variables such as state population and state tax collections were initially used but did not influence the magnitude or statistical significance of the independent variable of interest. Therefore, it does not include those controls as a matter of simplicity. Fixed effects models can face the problem of autocorrelation, in which a variable is correlated with itself over time and biases the results. The model addresses this issue by using heteroskedasticity- and autocorrelation-consistent standard errors. Finally, it weights the model according to the size of the state's economy.

Model 1 is:

$$\textit{Annual Average of Monthly SEPU}_{i,t} = ?_0 + ?_1\,(\textit{Natural Log of Total Number of Ballot Initiatives}) + ?_2\,(\textit{2001 Year Dummy}) + ?_3\,(\textit{2002 Year Dummy}) + ?_4\,(\textit{2003 Year Dummy}) + \ldots + ?_{21}(\textit{2019 Year Dummy}) + ?$$

Model 2 is:

$$\textit{Annual Average of Monthly SEPU}_{i,t} = ?_0 + ?_1\,(\textit{Consecutive Years}_{i,t}) + ?_2\,(\textit{2001 Year Dummy}) + ?_3\,(\textit{2002 Year Dummy}) + ?_4\,(\textit{2003 Year Dummy}) + \ldots + ?_{21}(\textit{2019 Year Dummy}) + ?$$

[1] Elkamhi, Redouane, Chanik Jo, and Marco Salerno. Measuring State-Level Economic Policy Uncertainty, *Working Paper* (2020). The American Action Forum thanks these authors for the data they provided.