

# The Consequences of Inequality for Presidential Elections in the United States, 1976-2016

James Galbraith and Jaehee Choi

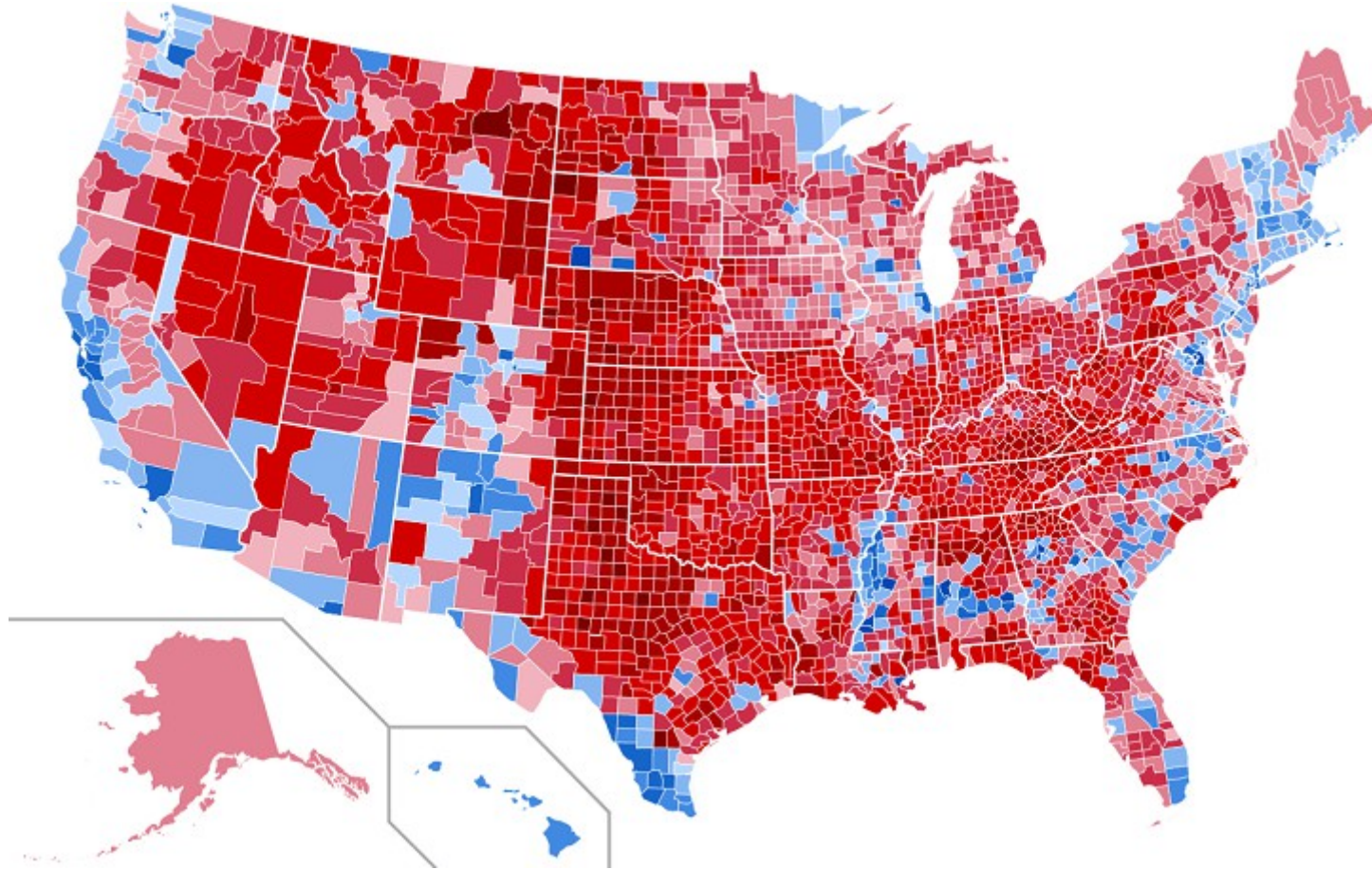
SNS Roma

October 7, 2019

This paper is based on a method for constructing dense and consistent measures of income inequality from administrative data, most prominently developed for the purpose of international comparisons, through the Estimated Household Income Inequality data set (EHII), based in the UNIDO Industrial Statistics. Details of that work are available at <http://utip.lbj.utexas.edu>

The objective of this paper is to suggest a simple but effective explanation for the pattern of voting and the Electoral College outcomes in recent presidential elections in the United States, especially the dramatic election of 2016.

# The US Vote 2016



Source: Magog the Ogre via Wikimedia

# The Electoral College

The peculiar feature of the US presidential election system is that it is indirect. The popular vote in each state is not for the presidential candidates but for electors – members of the Electoral College – who normally (but not always) cast the votes of their state en bloc for the winner by plurality of the popular vote in the state. The number of electors depends on the number of House plus Senate seats, thus overweighting small states in relation to large.



# Digression on Electors...

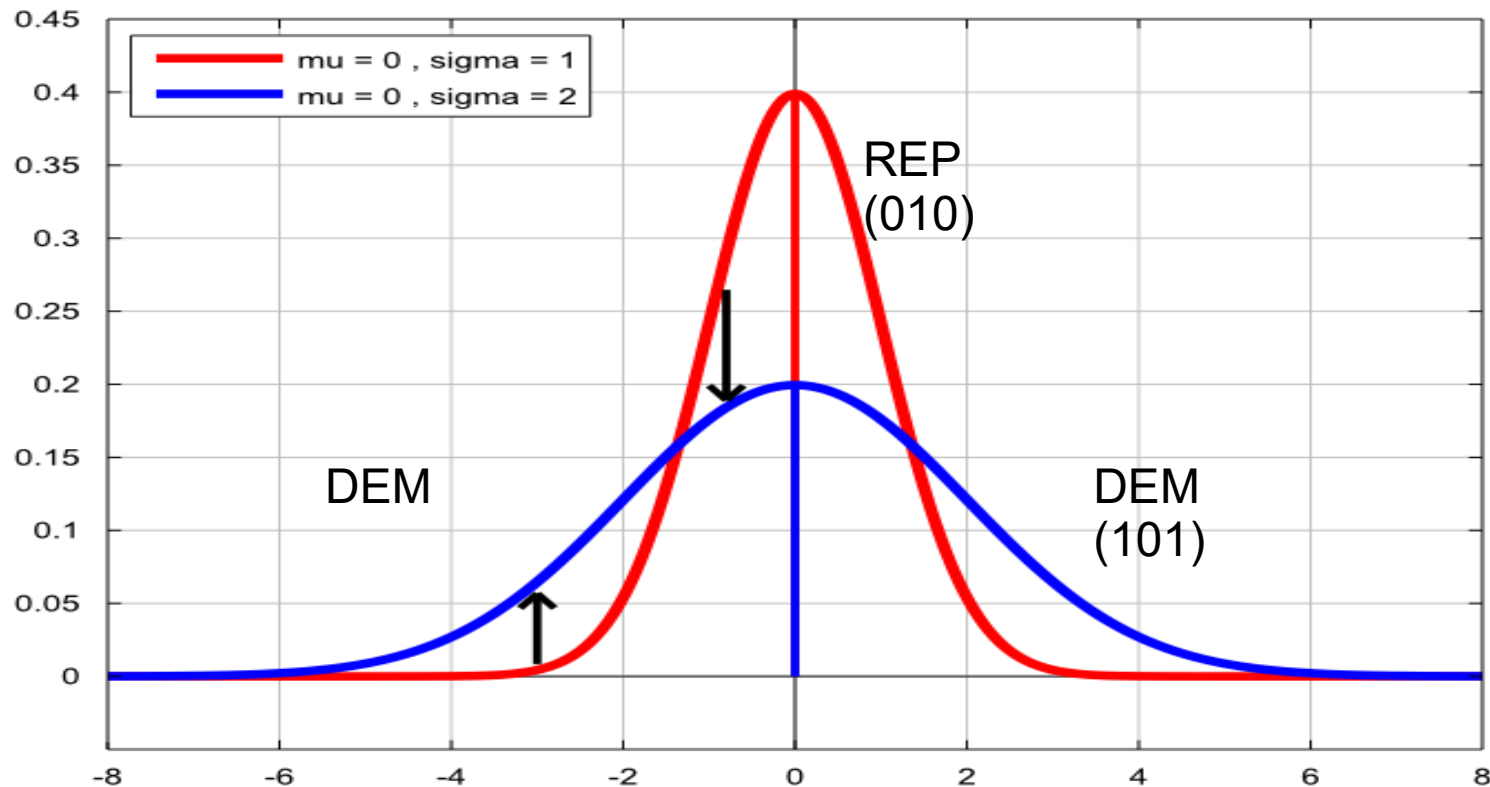
In two states, Maine and Nebraska, it is possible for the electoral vote to split, with one EC vote going to the winner in one congressional district while the other three go to the winner at the state level. It is also possible for electors to defy their state, as some Washington State electors did in 2016, casting votes for Colin Powell instead of Hillary Clinton in a quixotic effort to spark a rebellion among Republican electors against Donald Trump.

# Faithless Electors



The woman in the center, Esther John, was actually my high school sweetheart and played the flute at my mother's memorial and graveside services in 2008.

# Schema of Political Affiliation by State



The theory states that the party affiliation of American voters depends on their position in an income distribution, and the outcome of presidential elections by states depends on the kurtosis – or inequality -- of the log income distribution in that state. The Democratic Party has a disproportionate share of voters in both tails of the distribution, the Republican party (red states) has a larger share of voters in the center. Hence more unequal states tend to vote Democratic (blue states) in presidential elections.



# A simple model of voter choice

To keep things very simple, we suppose that the American electorate can be modeled as composed of three distinct elements: a low-income minority community with a Democratic voting propensity of about 0.8; a middle income suburban/rural community with a Republican voting propensity of about 0.7; and an upper-income urban professional community with a Democratic voting propensity of about 0.7. These numbers are notional, but the idea is that the outcome in each state depends largely on the demographic balance of these communities.

# Table 1: Expected Democratic Vote Shares by Economic Mixture in Hypothetical States: Examples from a Hypothetical Model

Code	Threshold	Propensity (D)	Dem Vote by Group
"111" Balanced			
Low	30	0.8	24
Middle	50	0.3	15
High	20	0.7	14
<b>Expected Democratic Vote Share</b>			<b>53</b>
"011" Upper/Middle			
Low	15	0.8	12
Middle	50	0.3	15
High	35	0.7	24.5
<b>Expected Democratic Vote Share</b>			<b>51.5</b>
"010" Extreme Middle Class			
Low	20	0.8	16
Middle	70	0.3	21
High	10	0.7	7
<b>Expected Democratic Vote Share</b>			<b>44</b>

# Table 1 cont'd

Code "101" Polarized			
Low	40	0.8	32
Middle	35	0.3	10.5
High	25	0.7	17.5
<b>Expected Democratic Vote Share</b>			<b>60</b>
Code "110" Poor/Middle			
Low	40	0.8	32
Middle	50	0.3	15
High	10	0.7	7
<b>Expected Democratic Vote Share</b>			<b>54</b>
Code "010" Middle Class			
Low	20	0.8	16
Middle	65	0.3	19.5
High	15	0.7	10.5
<b>Expected Democratic Vote Share</b>			<b>46</b>
Code "101" Extreme Case			
Low	70	0.8	56
Middle	10	0.3	3
High	20	0.7	14
<b>Expected Democratic Vote Share</b>			<b>73</b>

# Key Empirical Contribution

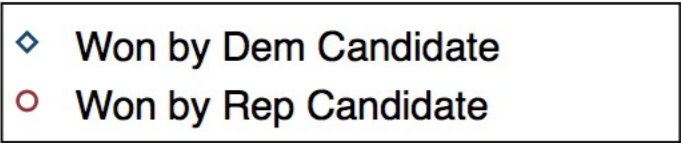
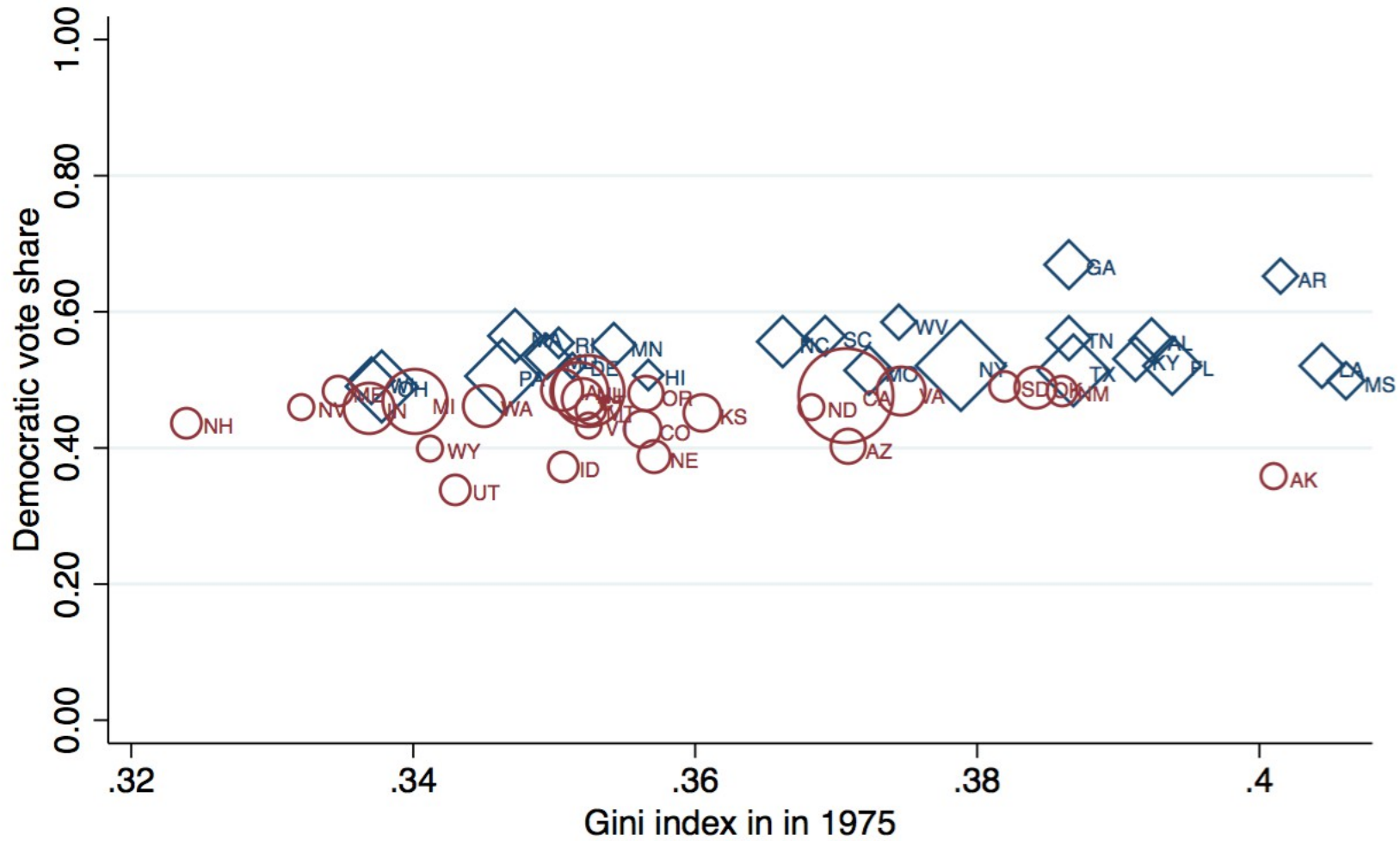
The empirical contribution underpinning the paper is the calculation of *annual measures* of household income inequality, in terms of the Gini Coefficient, for each US state and the District of Columbia for each year from 1969 to 2014. Previously state-by-state measures were only available from the decennial census until 2000 when annual surveys became available. Our method combined between-industry measures from Employment and Earnings with the census records.

# US Inequality in the 1970s

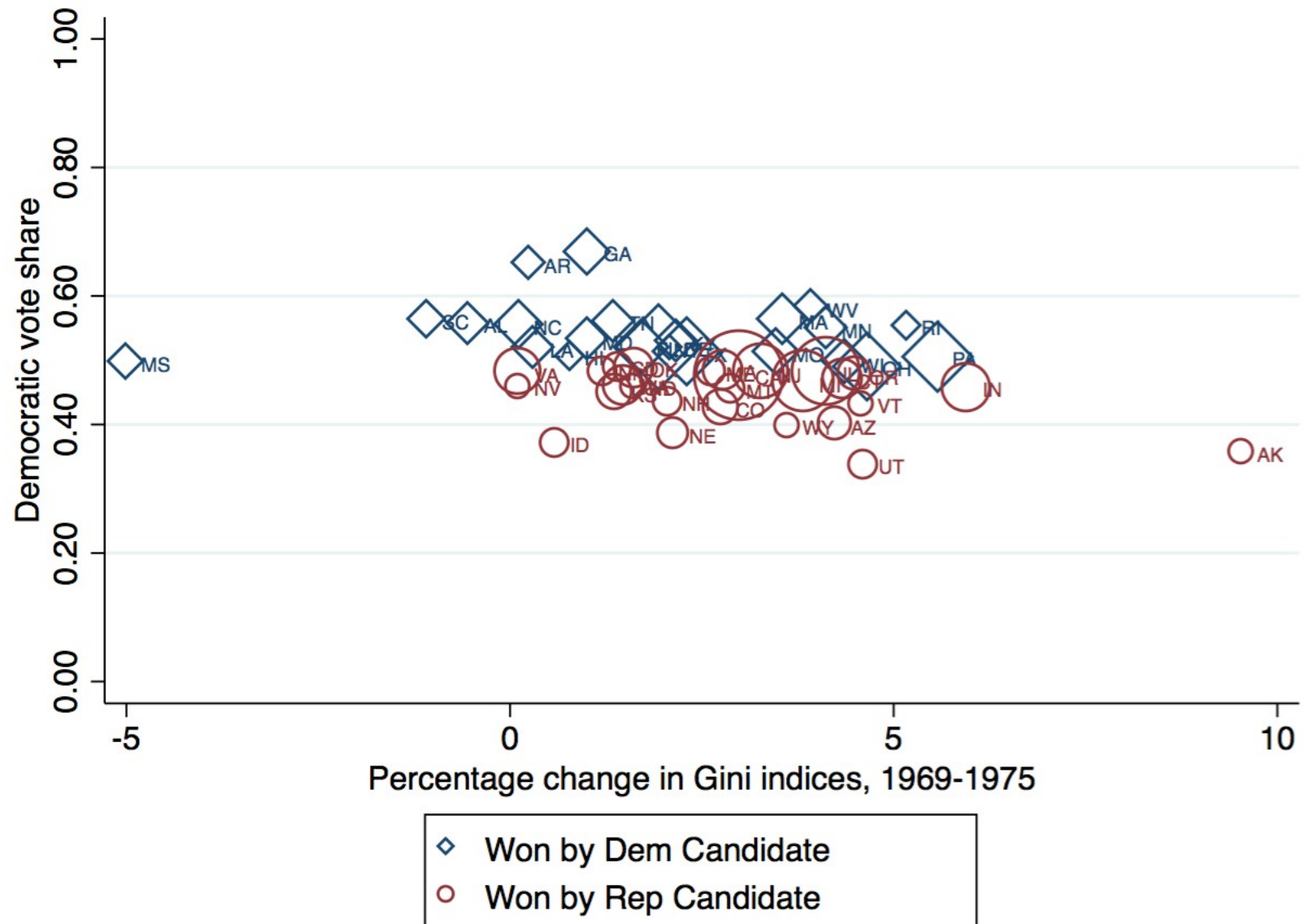
In the 1970s the most unequal states in the United States were in the South, a result of the racial divide and the plantation/sharecropper economies of those states, which had only begun the process of industrialization in the New Deal of the 1930s. Probably the data for these years largely reflect the gap between middle-class households on government payrolls and the rural poor. The theory we advance above would not apply to this period.

# Figure 1: Changes in Inequality and Election Outcomes in 1976

Using Gini Index



# Figure 1: Using % change from Gini Index in 1969



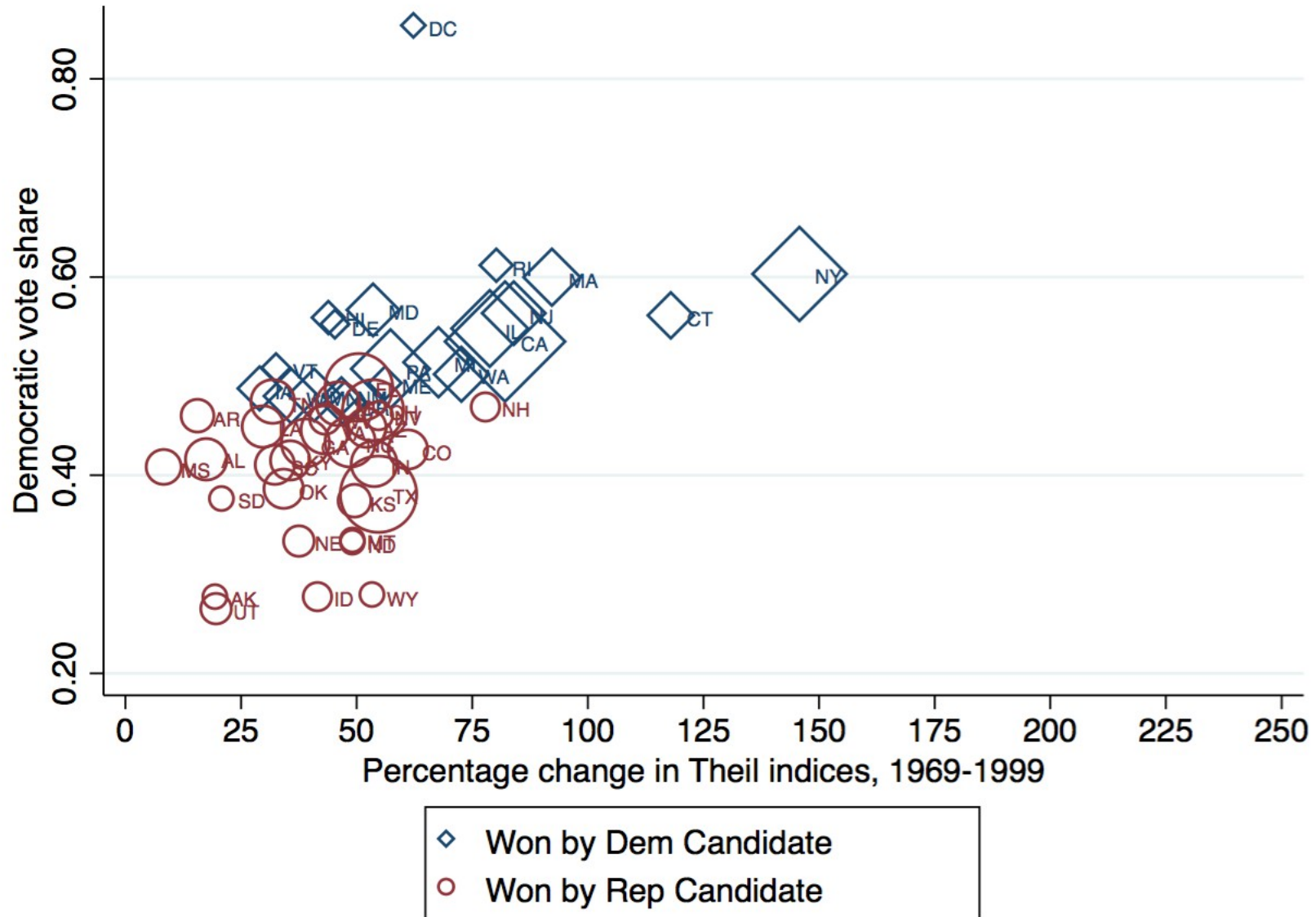
# Changing Inequality after 1990

The pattern of inequality in American states changes sharply in the 1990s, with the aftereffects of the 1980s recessions and resulting deindustrialization in the Midwest, and then the emergence of a bi-coastal economy with financial services dominating the East and aerospace and information technologies, along with entertainment, dominating the West.



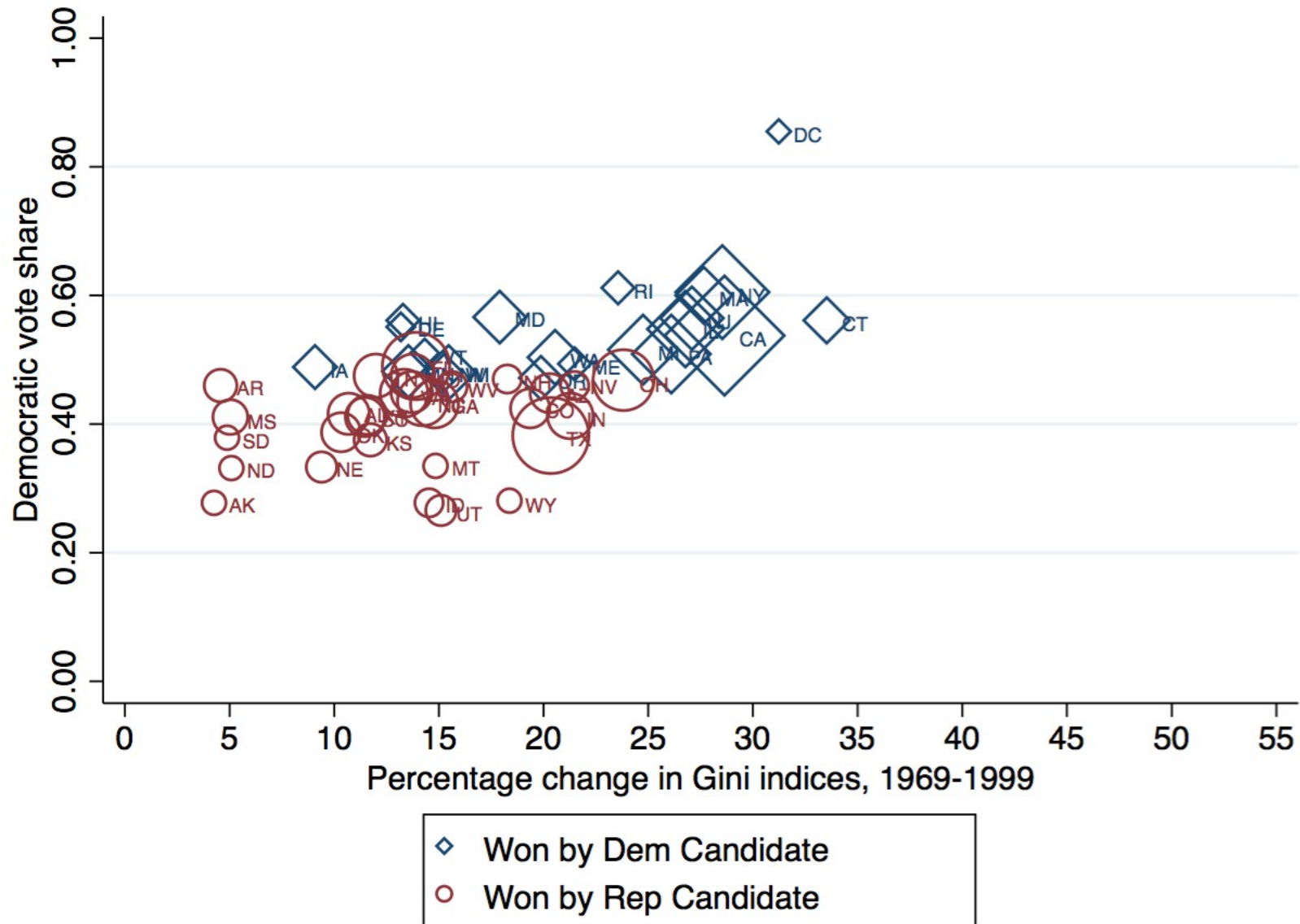
# Figure 2. Changes in Inequality and Election Outcomes in 2000

(a) Using Theil Index based on employment and pay



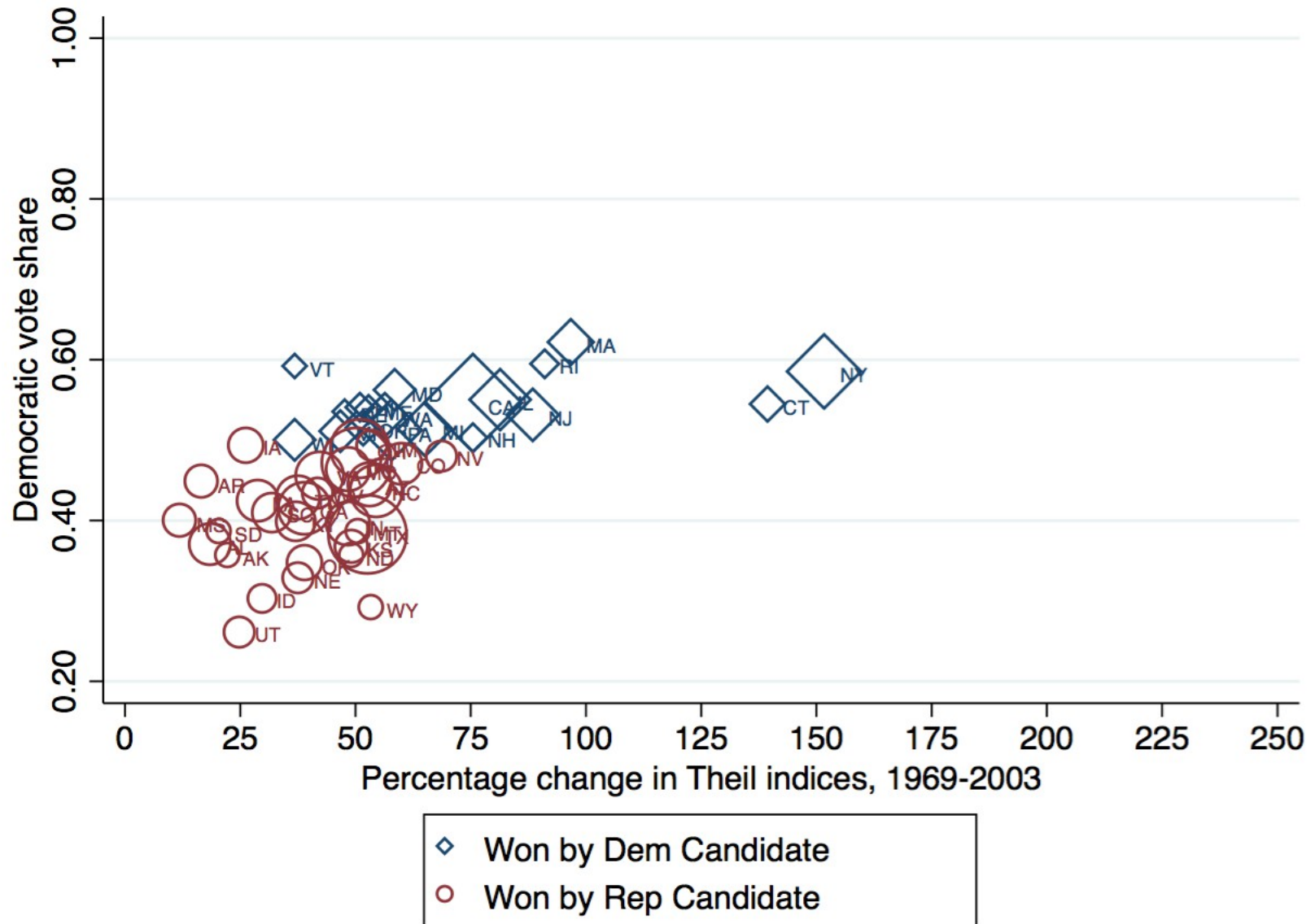
# Figure 2: Changes in Inequality and Election Outcomes in 2000

(b) Using Gini Index calibrated to Census Incomes



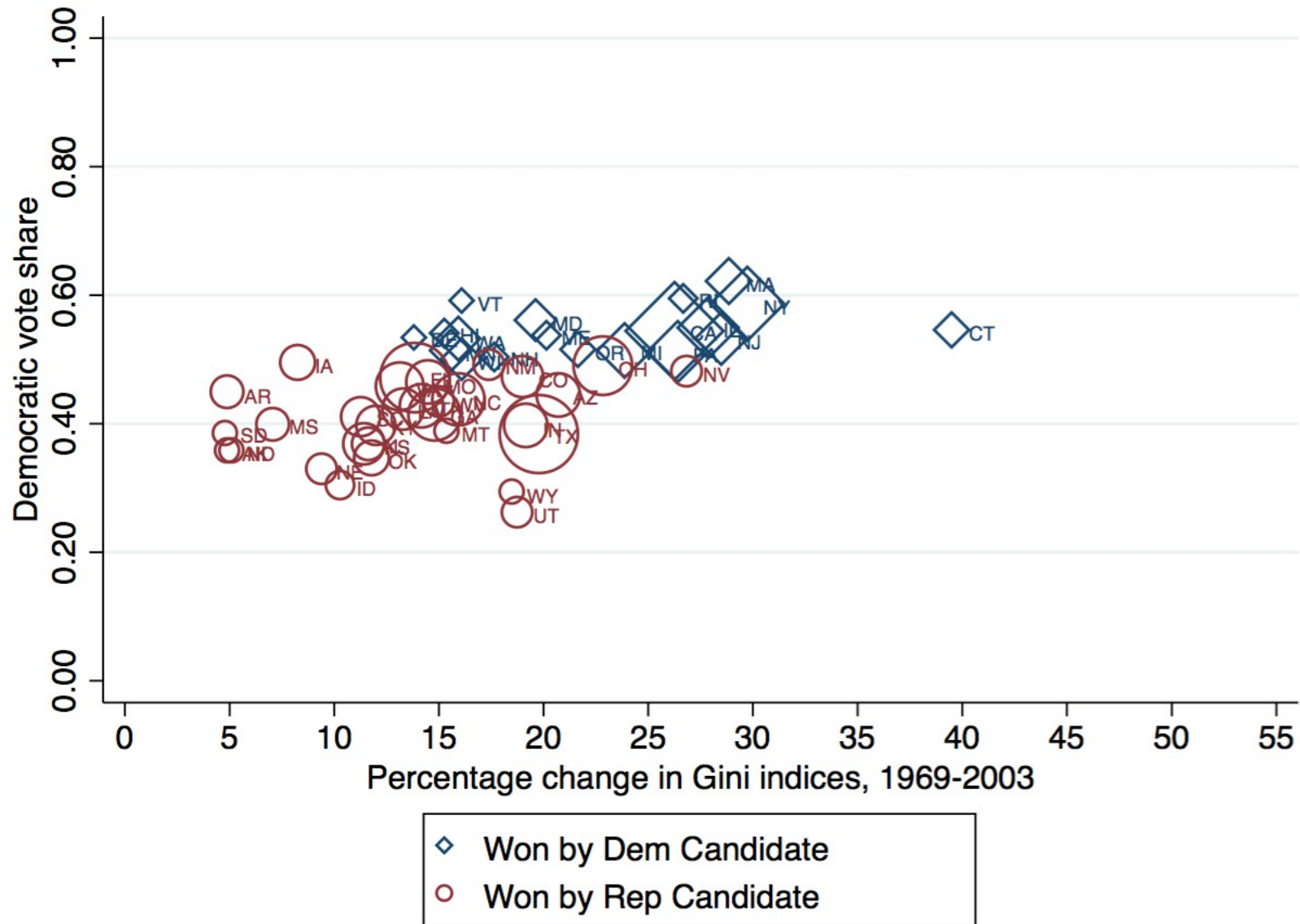
# Figure 3: Changes in Inequality and Election Outcomes in 2004

(a) Using Theil Index



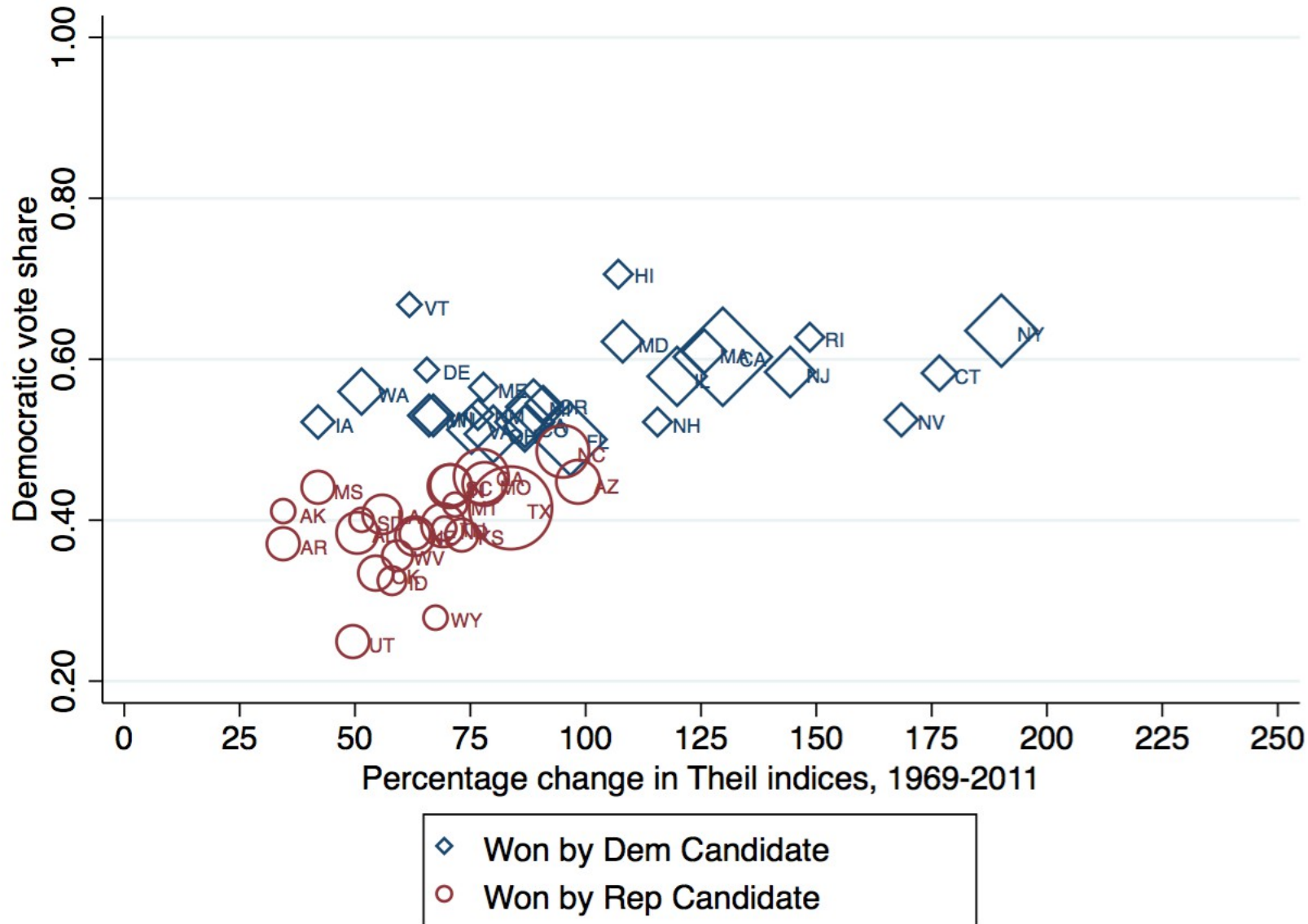
# Figure 3: Changes in Inequality and Election Outcomes in 2004

## (b) Using Gini Index



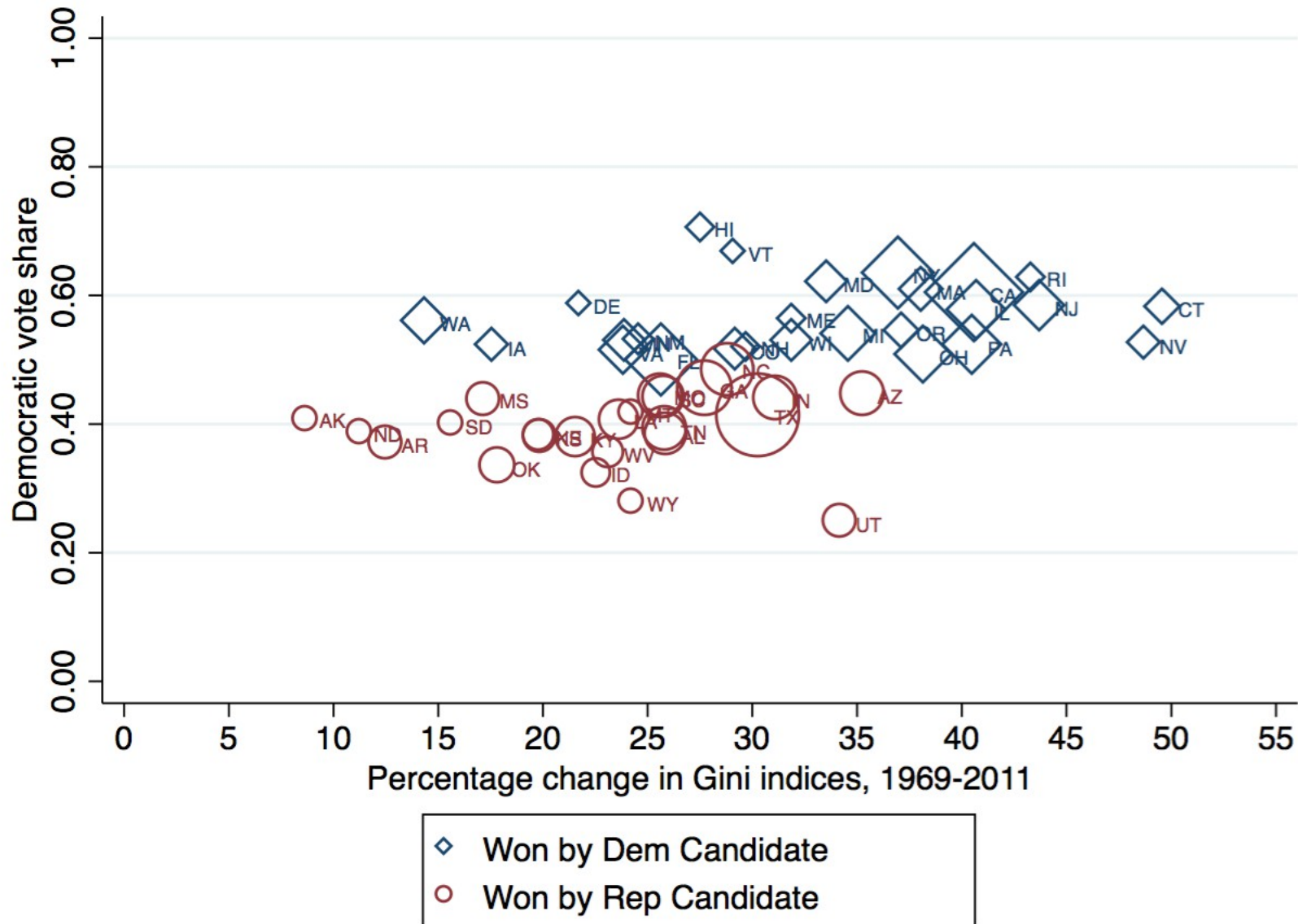
# Figure 4: Changes in Inequality and Election Outcomes in 2012

(a) Using Theil Index



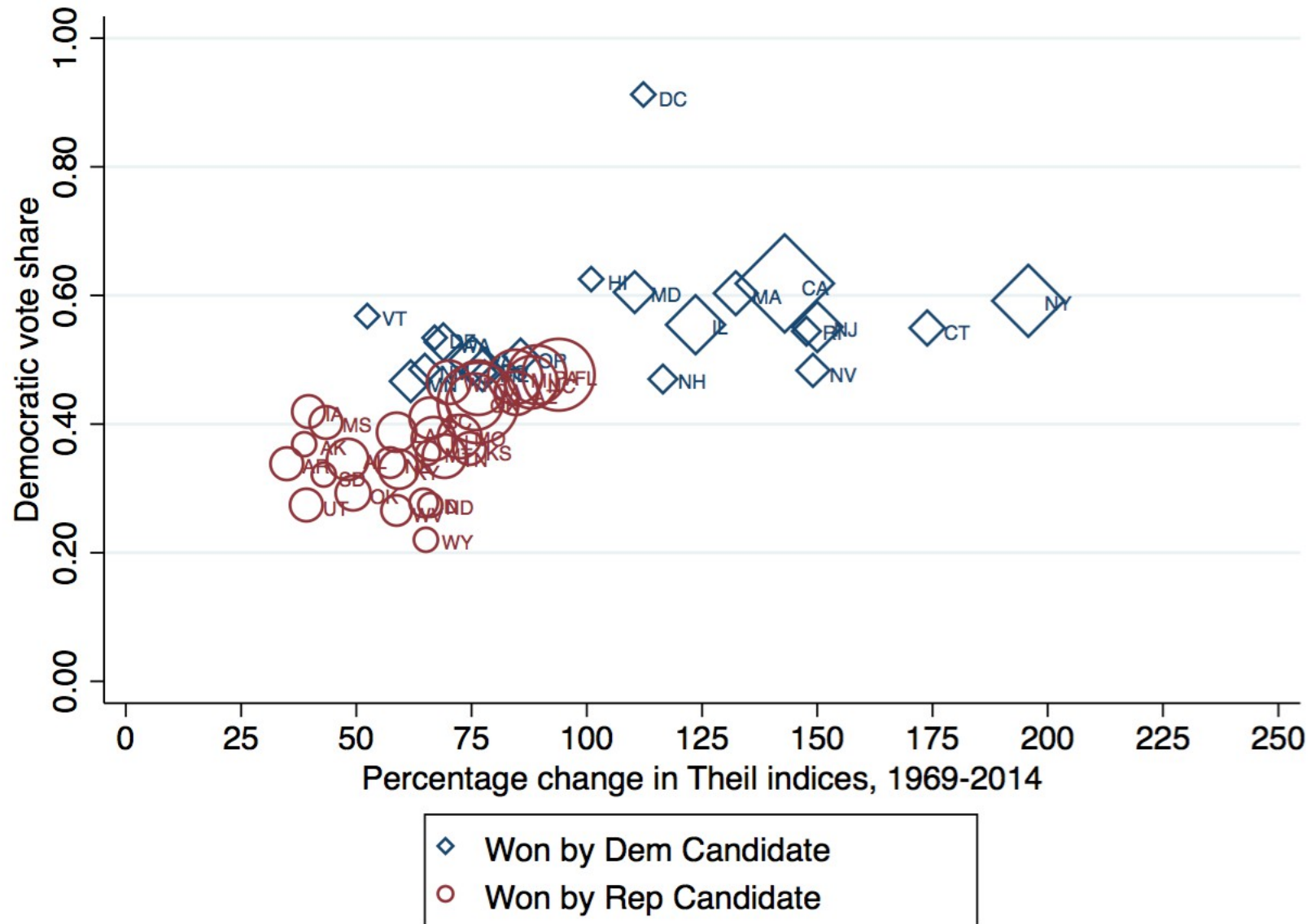
# Figure 4: Changes in Inequality and Election Outcomes in 2012

## (b) Using Gini Index



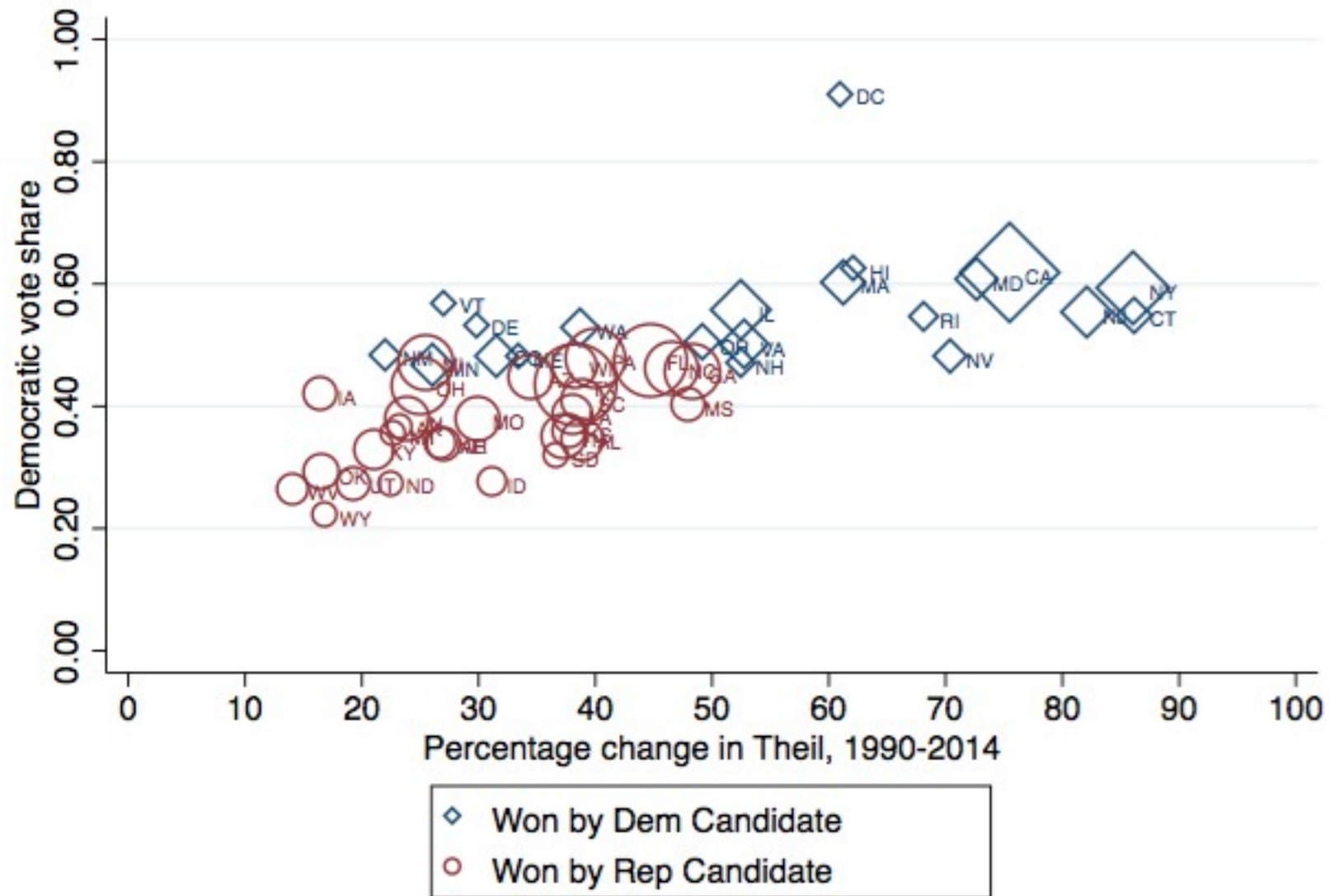
# Figure 5: Changes in Inequality and Election Outcomes in 2016

(a) Based at 1969, using Theil index



# Figure 5: Changes in Inequality and Election Outcomes in 2016

(b) Based at 1990, using Theil index

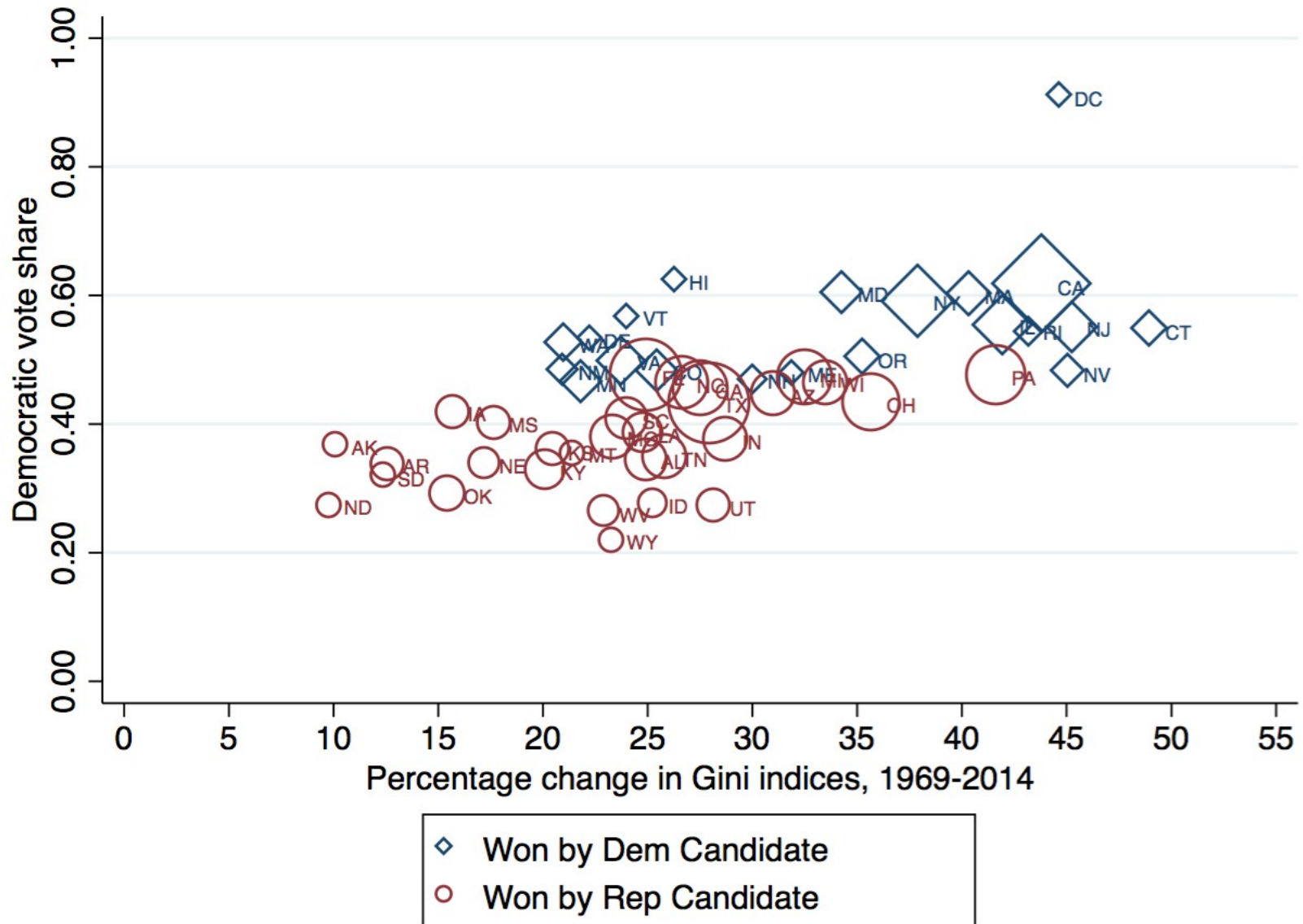


corr=0.39, markers weighted by # electoral votes



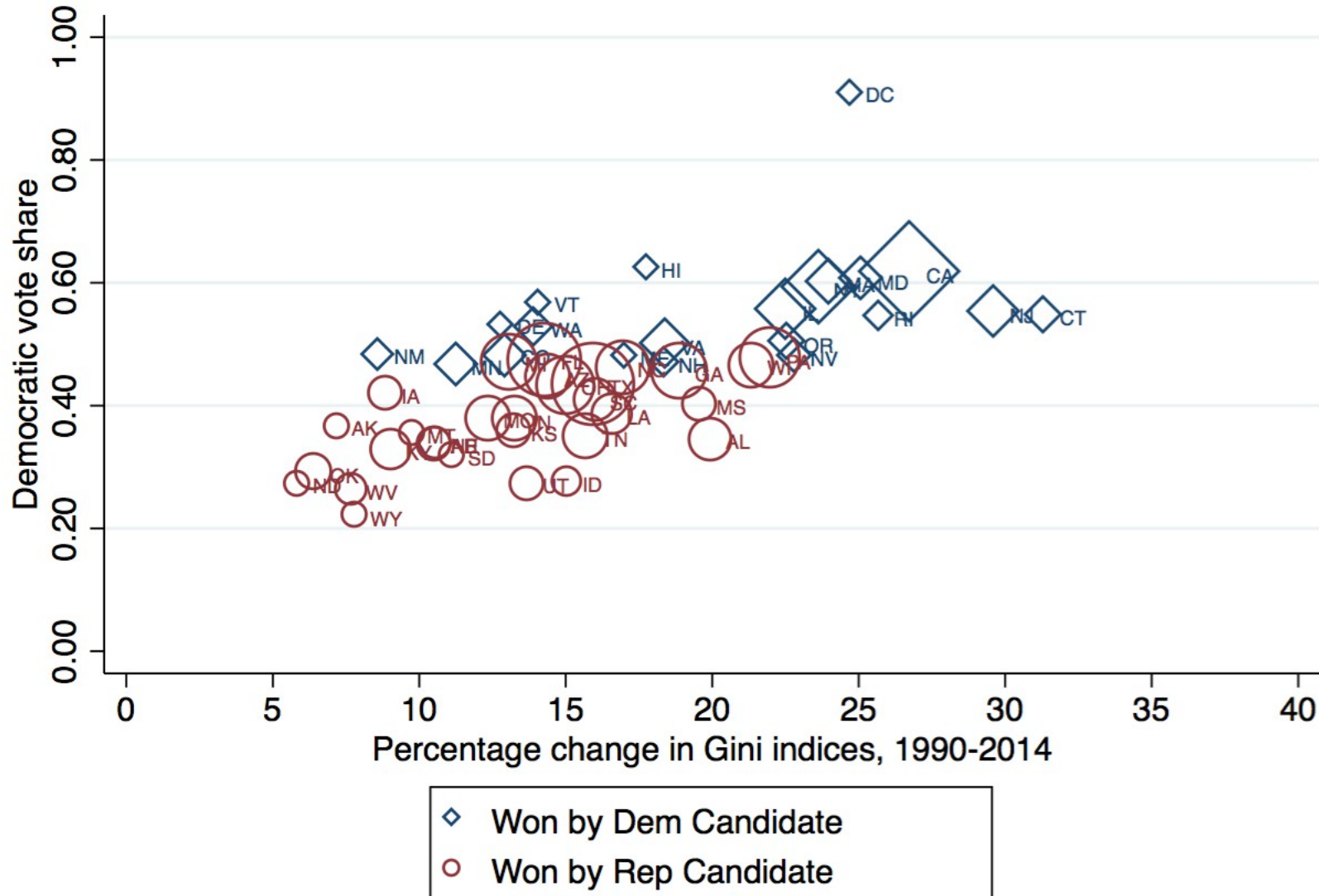
# Figure 5: Changes in Inequality and Election Outcomes in 2016

(c) Based at 1969, using Gini index



# Figure 5: Changes in Inequality and Election Outcomes in 2016

(d) based at 1990, using Gini index



Corr=0.40, markers weighted by # electoral votes

Figure 6: Trends in the Relationship between Changes in Inequality and Election Outcomes  
(a) Based at 1969, Theil Index

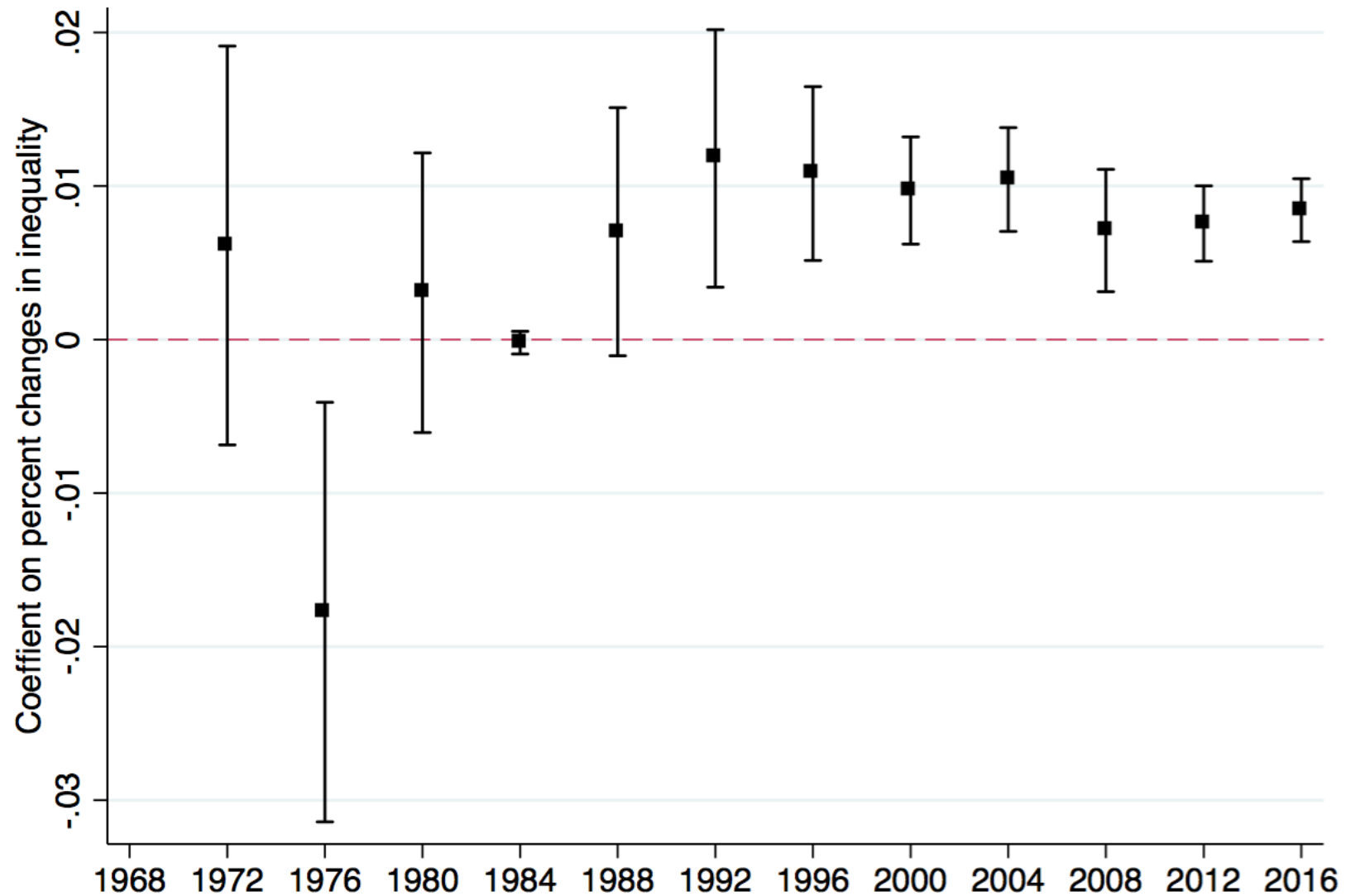


Figure 6: Trends in the Relationship between Changes in Inequality and Election Outcomes  
(b) Based at 1990, Theil Index

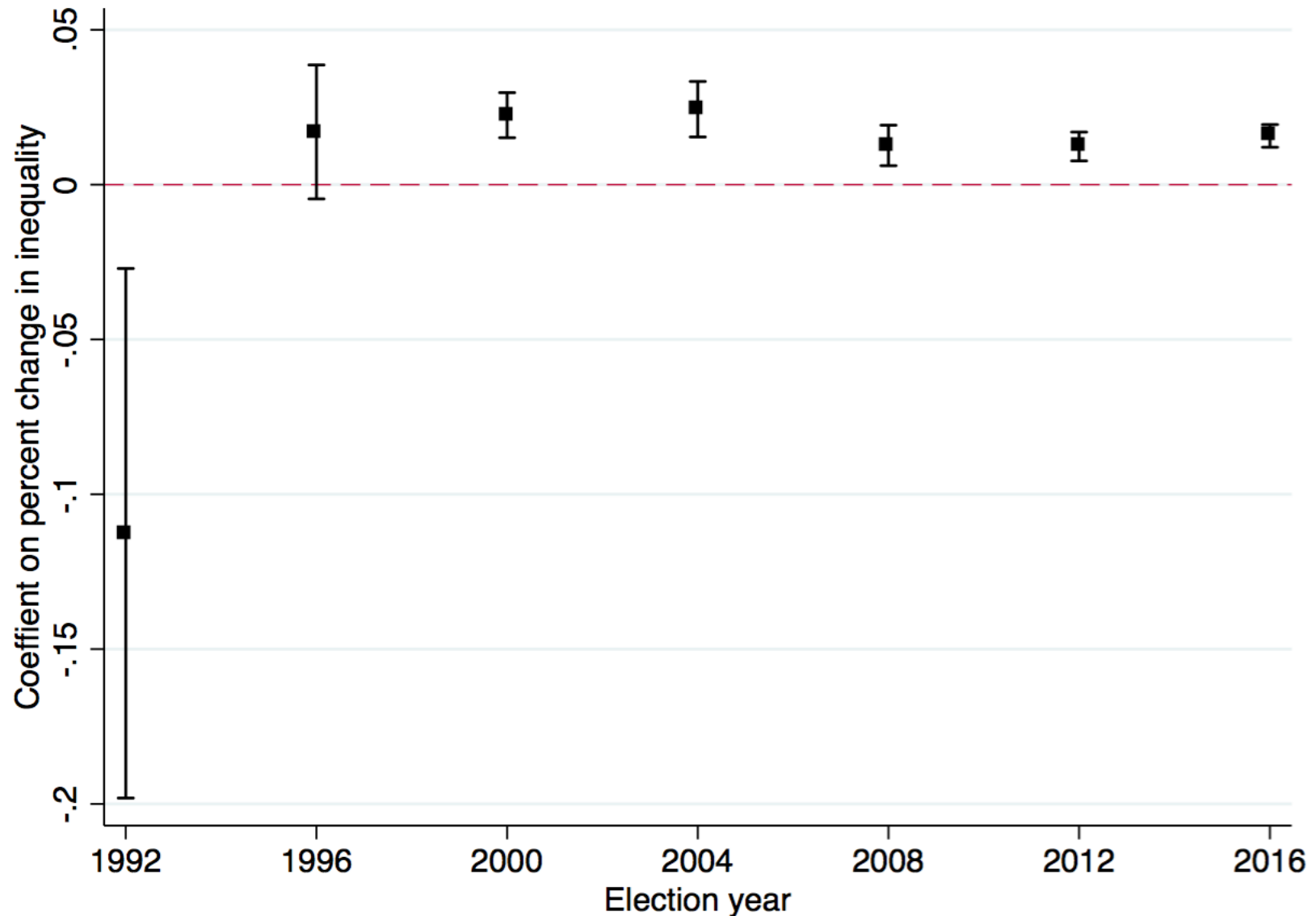


Figure 6: Trends in the Relationship between Changes in Inequality and Election Outcomes  
(c) Based at 1969, Gini Index

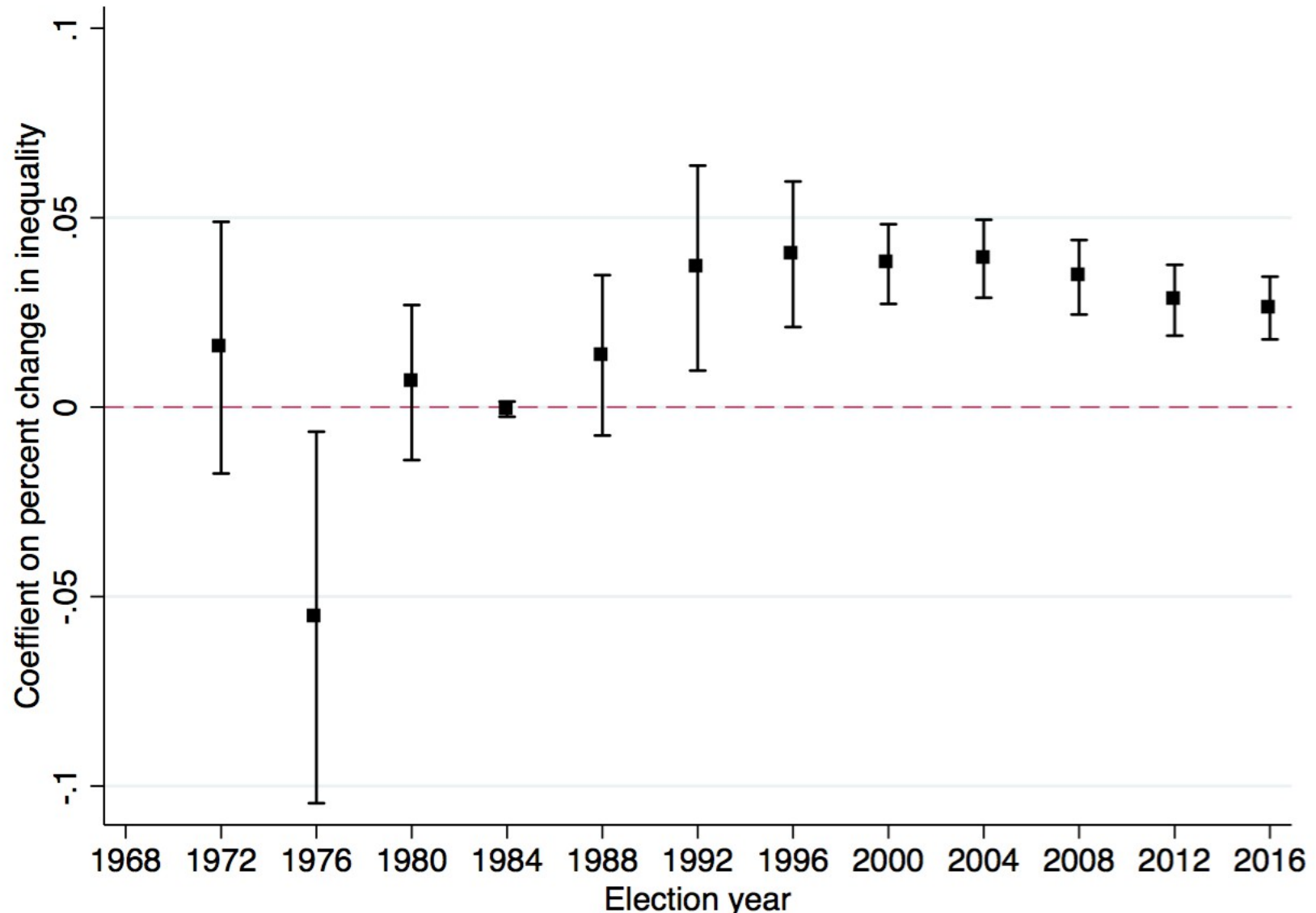
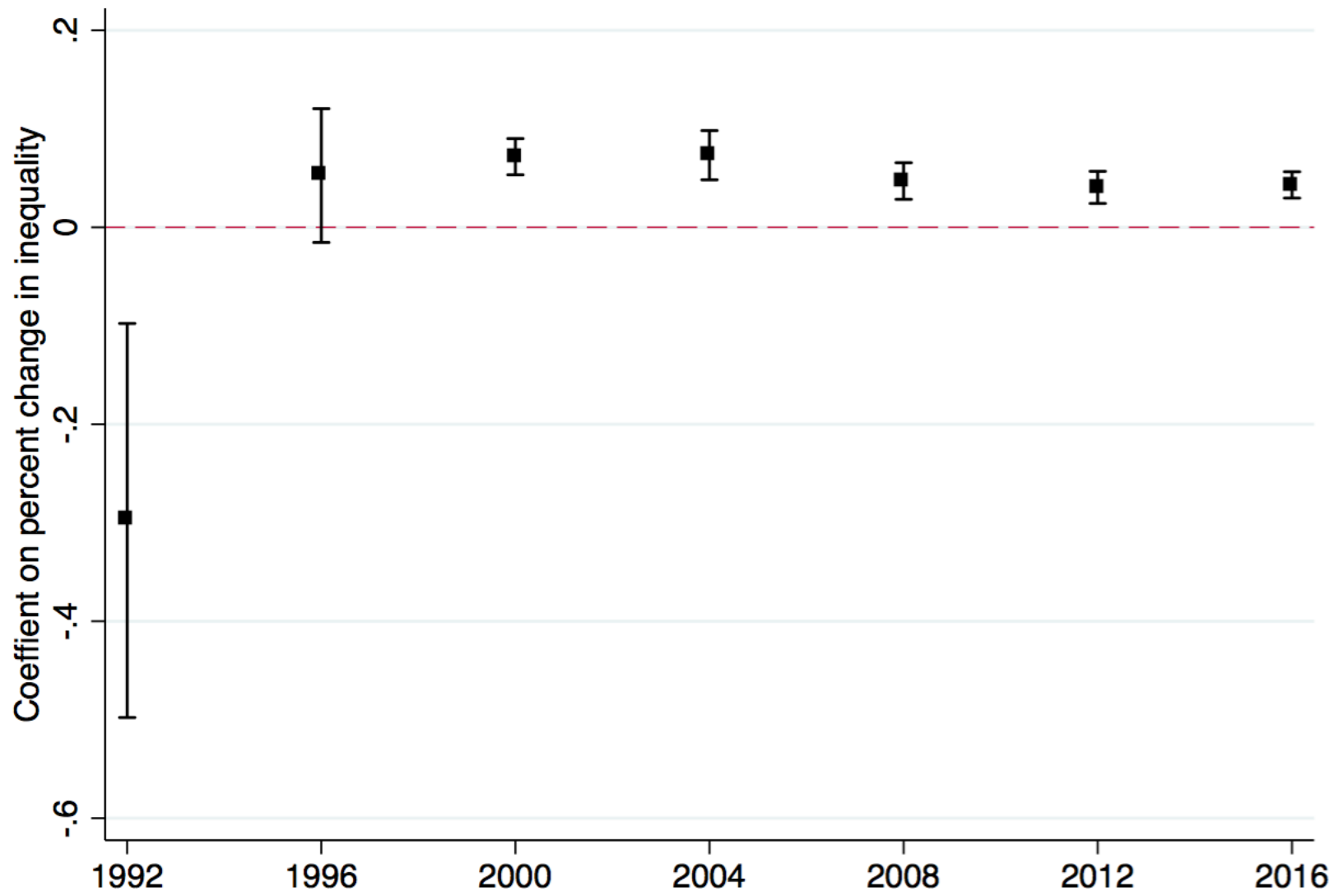


Figure 6: Trends in the Relationship between Changes in Inequality and Election Outcomes  
(d) Based at 1990, Gini Index



# Table 2: Income Inequality Ranking and Presidential Outcome, Selected States, 1972-2016

Year	CA		NY		NJ		CT		NV	
	Ranking	Vote	Ranking	Vote	Ranking	Vote	Ranking	Vote	Ranking	Vote
1972	21	R	15	R	35	R	37	R	48	R
1976	20	R	14	D	27	R	34	R	49	R
1980	11	R	17	R	25	R	30	R	44	R
1984	11	R	16	R	25	R	29	R	42	R
1988	11	R	8	D	31	R	29	R	21	R
1992	12	D	3	D	22	D	23	D	20	D
1996	7	D	2	D	20	D	15	D	28	D
2000	3	D	2	D	8	D	6	D	32	R
2004	6	D	2	D	12	D	3	D	16	R
2008	3	D	2	D	10	D	4	D	7	D
2012	2	D	3	D	9	D	4	D	11	D
2016	2	D	3	D	7	D	6	D	12	D