"Retrospective Economic Voting and the Intertemporal Dynamics of Electoral Accountability in the American States"

George A. Krause and Benjamin F. Melusky

Data Codebook

Variable Name: Description

1. name: Full name of the governor (from the biographies of each governor as listed on the National Governors Association website http://www.nga.org/cms/home/governors/past-governors-bios.html).

2. govidentifier: Individual identifier constant for a given individual – whether or not they became ex-governor twice and subsequently ran for election for either governor or senate.

3. exgov: Begins at 1 increases by units of 1 per each individual ex-governor observations in the database. Baseline cases are coded as 0.

4. numexgov: Is equal to the number of times that individual was an ex-governor who subsequently sought re-election as Governor or Senator in the same state. Baseline cases are coded as 0.

5. baseline: Is equal to 1 if the observation is a baseline case, 0 if ex-governor observation

6. state: The full name of the state of the governor

7. statecode: Individual identifier constant for given state, ranges between '1' (i.e. ,Alabama) and '50'(i.e., Wyoming) in alphabetical order.

8. partyswitch: coded as 1 if ex-governor switched political parties to run in a given future election contest, coded as 0 if they remain the same partisan affiliation as when they were originally governor (from the biographies of each governor as listed on the National Governors Association website http://www.nga.org/cms/home/governors/past-governors-bios.html).

9. entrydate: The date (mm/dd/yyyy) which the governor began their first term in office (from the biographies of each governor as listed on the National Governors Association website http://www.nga.org/cms/home/governors/past-governors-bios.html).

10. exitdate: The date (mm/dd/yyyy) which the governor vacated their last term in office (from the biographies of each governor as listed on the National Governors Association website http://www.nga.org/cms/home/governors/past-governors-bios.html).

11. eleccyclecount: Identifier for each subsequent election cycle that the ex-governor participates in as a candidate for either governor or Senate – i.e., coded = 1 if 1st election cycle

after leaving office; coded =2 if 2nd election after leaving office, coded = 3 if 3rd election after leaving office. Baseline cases coded as NOT/APPLICABLE (from Scammon, McGillivray, and Cook's *America Votes* various years).

12. eleccycletrend: Identifier that is a counter variable that increases by values of 1 for each potential election contest – i.e., Election 1: Primary = 1; Election 1: Primary Run-off = 2; Election 1: General = 3; Election 2: Primary = 4; Election 2: Primary Run-off = 5; Election 2: General = 6; Election 3: Primary = 7; Election 3: Primary Run-off = 8; Election 3: General = 9. Baseline cases coded as NOT/APPLICABLE (from Scammon, McGillivray, and Cook's *America Votes* various years).

13. senateseat: Indicates whether the ex-governor is seeking a gubernatorial or Senate seat – i.e., coded = 1 if seeking a Senate seat, coded = 0 if seeking gubernatorial seat. Baseline cases coded as Missing (.) (from Scammon, McGillivray, and Cook's *America Votes* various years).

14. general: = 1 if election contest of interest is a general election, = 0 if election contest of interest is a primary election (from Scammon, McGillivray, and Cook's *America Votes* various years).

15. primrunoff: = 1 if election contest of interest is a primary runoff election, = 0 otherwise (from Scammon, McGillivray, and Cook's *America Votes* various years).

16. incumbparty: = 1 if the ex-governor is running in an election contest where their party currently holds the seat (governor or senate seat in question), = 0 if the ex-governor is running in an election contest representing the "opposition party" – i.e., the party that currently does not hold the governorship or senate seat in question. 777 = incumbent (from Scammon, McGillivray, and Cook's *America Votes* various years).

17. incumbdeficit: = 1 if ex-governor is running against an incumbent, = 0 otherwise (from Scammon, McGillivray, and Cook's *America Votes* various years).

18. openseat: = 1 if ex-governor is running for an open seat vacated by the incumbent, = 0 otherwise (from Scammon, McGillivray, and Cook's *America Votes* various years)..

19. lastelectionresults: The percentage of the total vote received by the governor in the general election for their last term in office (from Scammon, McGillivray, and Cook's *America Votes* various years).

20. reasonforexit: Reason for which the governor left office: 1=did not seek reelection, 2=term limit, 3=lost reelection bid, 4=ran for senate, 5=impeached, 6=dropped out after election went to primary runoff, 7=appoint Secretary of Agriculture, or other reason as listed (term limit from *Book of the States:* Table "The Governors" various years, lost reelection bid from from Scammon, McGillivray, and Cook's *America Votes* various years, and other reasons from various web searches). [Baseline cases coded 0 as they are not ex-governors currently].

21. pctunifiedlastterm: Percent of time during the governor's final term in office that there was unified government. Nebraska is always considered divided government due to non-partisan unicameral legislature (derived from Carl Klarner' State Partisan Balance Data : http://www.indstate.edu/polisci/klarnerpolitics.htm).

22. pctunifiedtenure: Percent of time during the governor's entire continuous term in office that there was unified government. Nebraska is always considered divided government due to non-partisan unicameral legislature (derived from Carl Klarner' State Partisan Balance Data: (http://www.indstate.edu/polisci/klarnerpolitics.htm).

23. cumyrsgovexperience: The number of years, cumulative, prior to and including last term the governor served (from Scammon, McGillivray, and Cook's *America Votes* various years).

24. stateideolpast: This variable is the ideology of the state, NOMINATE score for the governor's last full year (>6 months) in office. In instances where the governor only served part of a year, <6 months, was coded as the ideology of the year prior (measure originally developed by Berry, et al. (1998) taken from http://www.bama.ua.edu/~rcfording/stateideology.html).

25. stateideolcurrent: This variable is the ideology of the state, NOMINATE score for the given election year (measure originally developed by Berry, et al. (1998) taken from http://www.bama.ua.edu/~rcfording/stateideology.html).

26. stateideolchange: Difference between **stateideolpast** – **stateideolcurrent** which captures net change in state government ideology from the time of the ex-governor's last full year in office to the time of the given election contest.

27. stateideolchangepartyadj: stateideolchange adjusted for (multiplied by) the partisan identification of the non-incumbent governor at the time of the election (partisan identification coded 1= Democrat; -1=Republican; 0=Independent, from the biographies of each governor as listed on the National Governors Association website http://www.nga.org/cms/home/governors/past-governors-bios.html).

28. preselectyr: 1= if the year of the election corresponds with a presidential election year, 0=otherwise (from Scammon, McGillivray, and Cook's *America Votes* various years).

29. samepartypres: 1=If the governor in the election year is of the same party as the incumbent president, 0=otherwise (from the biographies of each governor as listed on the National Governors Association website http://www.nga.org/cms/home/governors/past-governors-bios.html).

30. elyear: The year of the election of interest (from Scammon, McGillivray, and Cook's *America Votes* various years).

31. eldate: The date (mm/dd/yyyy) the election of interest (from Scammon, McGillivray, and Cook's *America Votes* various years).

32. eddurdays: The number of days between the day they individual first became an ex-governor (i.e., day they left office as reported by the National Governors Association bios as listed on the National Governors Association website http://www.nga.org/cms/home/governors/past-governors-bios.html) and the actual day a given election contest is being held. (Baseline cases are coded 0).

33. eddurmonths: Duration measured in MONTHS (round up when greater than 15 days in terms of number of months; round down in terms of number of months when less than or equal to 15 days) between the day they individual first became an ex-governor (i.e., day they left office as reported by the National Governors Association bios as listed on the National Governors Association website http://www.nga.org/cms/home/governors/past-governors-bios.html) and the actual day a given election contest is being held. (Baseline cases are coded 0).

34. eddurmonths2: eddurmonths + 1 ($k \geq 1$ by construction). (Baseline cases are still coded 0).

35. edduryears: Duration measured in years between the day the governor first became an ex-governor and the actual day a given election contest is being held. **eddurmonths** variables divided by 12. (Baseline cases are coded 0).

36. electionresults: The percentage of the total vote received by the governor in the election of interest (from Scammon, McGillivray, and Cook's *America Votes* various years).

37. electionstatus: The ex-governors status in the election of interest. 1= Open Seat, 2=Challenger, 3=Incumbent (from Scammon, McGillivray, and Cook's *America Votes* various years).

38. baselinegeneral: Coded 1 if the row is a baseline case (**baseline**=1) and it is a general election contest (**general** = 1), coded 0 otherwise.

39. exgovnonincumb: Coded 1 if the row is an ex-governor case and the ex-governor is not running as an incumbent (**electionstatus**=1 or 2), coded 0 otherwise (from Scammon, McGillivray, and Cook's *America Votes* various years).

40. exgovsent0: Coded 1 if the row is an ex-governor case running for a future gubernatorial election or a senate election not at time t= 0, coded 0 otherwise (from Scammon, McGillivray, and Cook's *America Votes* various years).

41. exgovsent0general: Of those cases where an ex-governor is running for a future gubernatorial election or a senate election not at time t= 0 (**exgovsent0**=1) and it is a general election contest (**general**=1), coded 0 otherwise.

42. change_in_pop_last_elec: Measured as LN(Voting Age Population in Governor's New Election Year) – LN(Voting Age Population in Governor's Last Election Year) x 100. If the Duration in Years variable = < 1, coded as 0 (from the Census Bureau's yearly population estimates http://www.census.gov/popest/data/historical/index.html).

43. change_in_pop_left_office: Measured as LN(Voting Age Population in governor's new election year) – LN(Voting Age Population in the year in which the governor left office) x 100. If the Duration in Years variable = < 1, coded as 0 (from Census Bureau's yearly population estimates http://www.census.gov/popest/data/historical/index.html).

44. vapabschangele: Measured as the absolute value of **change_in_pop_last_elec**.

45. vapabschangelo: Measured as the absolute value of the **change_in_pop_left_office**.

46. notes: Coders notes.

47. badexit: Coded 1 for involuntary exit by ex-governor (i.e., electorally defeated or resigned/impeached from office due to scandal, **reasonforexit** = 1, 3, or 5), equals 0 otherwise

48. unifiedgovtlastterm: If the governor enjoyed unified government during their last term in office (**pctunifiedlastterm**=1) (derived from Carl Klarner' State Partisan Balance Data : http://www.indstate.edu/polisci/klarnerpolitics.htm).

49. unifiedgovttenure: If the governor enjoyed unified government during their tenure in office (**pctunifiedtenure**=1) (derived from Carl Klarner' State Partisan Balance Data : http://www.indstate.edu/polisci/klarnerpolitics.htm).

50. exgovdum: Ex-governor dummy identifier. Coded 1 if observation is an Ex-governor (**baseline**=0), 0 if an incumbent governor (**baseline**=1).

51. eleccyccountrev: Identifier for the number of election cycles which have elapsed when the governor seeks office. Baseline cases coded as 0 (from Scammon, McGillivray, and Cook's *America Votes* various years).

52. senateseatrev: Indicates whether the ex-governor is seeking a Senate seat, coded = 1 if seeking a Senate seat, 0 otherwise (including baseline incumbent governor cases) (from Scammon, McGillivray, and Cook's *America Votes* various years).

53. incumbpartyrev: Coded 1 if the ex-governor is running in an election contest where their party currently holds the seat (governor or senate seat in question), = 0 if the ex-governor is running in an election contest representing the "opposition party" – i.e., the party that currently does not hold the governorship or senate seat in question (including baseline incumbent governor cases) (from Scammon, McGillivray, and Cook's *America Votes* various years).

54. badexit2: Coded 1 for involuntary exit by ex-governor (i.e., electorally defeated or resigned/impeached from office due to scandal, **reasonforexit** = 3, or 5), equals 0 otherwise

55. eddurmonths2uglt: Duration measured in MONTHS (**eddurmonths2**) multiplied by **unifiedgovtlastterm** [If the governor enjoyed unified government during their last term in office (**pctunifiedlastterm**=1)].

56. eddurmonths2ugten: Duration measured in MONTHS (**eddurmonths2**) multiplied by **unifiedgovttenure** [if the governor enjoyed unified government during their tenure in office (**pctunifiedtenure**=1)].

57. eddurmonths2gen: Duration measured in MONTHS (**eddurmonths2**) multiplied by if it is a general election contest (**general**=1).

58. eddurmonths2genten: Duration measured in MONTHS (**eddurmonths2**) multiplied by if it is a general election contest (**general**=1).

59. eddurmonths2exgov: Duration measured in MONTHS (**eddurmonths2**) multiplied by if the governor was an ex-governor observation (**exgovdum**).

60. partyatelection2: Partisan identification of the governor, coded 1 if governor was a Democrat and = 0 if a Republican (from the biographies of each governor as listed on the National Governors Association website http://www.nga.org/cms/home/governors/past-governors-bios.html).

61. personalincometenure: Average annual real per capita personal income growth for governor's tenure in office (from the Bureau of Economic Analysis, www.bea.gov/regional/index.html. Defined as the income received by all persons from all sources. Personal Income is the sum of net earnings by place of residence, property income, and personal current transfer receipts).

62. personalincomerecentterm: Average annual real per capita personal income growth for governor's most recent term in office (from the Bureau of Economic Analysis, www.bea.gov/regional/index.html. Defined as the income received by all persons from all sources. Personal Income is the sum of net earnings by place of residence, property income, and personal current transfer receipts).

63. personalincomerecentyear: Average annual real per capita personal income growth for governor's most recent year in office (from the Bureau of Economic Analysis, www.bea.gov/regional/index.html. Defined as the income received by all persons from all sources. Personal Income is the sum of net earnings by place of residence, property income, and personal current transfer receipts).

64. pictenure: Average quarterly real per capita personal income growth during governor's tenure in office (from the Bureau of Economic Analysis, www.bea.gov/regional/index.html. Defined as the income received by all persons from all sources. Personal Income is the sum of net earnings by place of residence, property income, and personal current transfer receipts).

$$\frac{\ln(\text{PC Personal Income}_{t-1}) - \ln(\text{PC Personal Income}_{t-32})}{32} * 100$$

65. picrterm: Average quarterly real per capita personal income growth during governor's most recent term in office (from the Bureau of Economic Analysis, www.bea.gov/regional/index.html. Defined as the income received by all persons from all sources. Personal Income is the sum of net earnings by place of residence, property income, and personal current transfer receipts).

$$\frac{\ln(\text{PC Personal Income}_{t-1}) - \ln(\text{PC Personal Income}_{t-16})}{16} * 100$$

66. picryear: Average quarterly real per capita personal income growth during governor's most recent year in office (from the Bureau of Economic Analysis, www.bea.gov/regional/index.html. Defined as the income received by all persons from all sources. Personal Income is the sum of net earnings by place of residence, property income, and personal current transfer receipts).

$$\frac{\ln(\text{PC Personal Income}_{t-1}) - \ln(\text{PC Personal Income}_{t-4})}{4} * 100$$

67. eddur2binary: Dummy variable for type of governor, coded 1 if an ex-governor observation, and 0 if an incumbent governor observation.

68. personalincometenureann: Annualized average quarterly state per capita personal income growth during governor's tenure in office.

69. personalincomerecenttermann: Annualized average quarterly state per capita personal income growth during governor's most recent term in office.

70. personalincomerecentyearann: Annualized average quarterly state per capita personal income growth during governor's most recent year in office.

71. pictenureann: personalincometenureann multiplied by duration measured in MONTHS (**eddurmonths2**).

72. picrtermann: personalincomerecenttermann multiplied by duration measured in MONTHS (**eddurmonths2**).

73. picryearann: personalincomerecentyearann multiplied by duration measured in MONTHS (**eddurmonths2**).

74. pictenureannabovemed: Dummy variable for if the annualized average quarterly state per capita personal income growth during governor's tenure in office was above the median value, coded 1 if above, 0 otherwise.

75. picrtermannabovemed: Dummy variable for if the annualized average quarterly state per capita personal income growth during governor's most recent term in office was above the median value, coded 1 if above, 0 otherwise.

76. picryearannabovemed: Dummy variable for if the annualized average quarterly state per capita personal income growth during governor's most recent year in office was above the median value, coded 1 if above, 0 otherwise.

77. picrtermanndurabovemed: picrtermann multiplied by **picrtermannabovemed.**

78. personalincpctchangeelectquarter: The percent change in real per capita personal income from the quarter 1 year prior to the election (time = t-4) to the quarter in which the election is held (time = t), same evaluative windows as state analogue (from the Bureau of Economic Analysis, www.bea.gov/regional/index.html. Defined as the income received by all persons from all sources. Personal Income is the sum of net earnings by place of residence, property income, and personal current transfer receipts).

79. incumbpartypicelectqtr: incumbpartyrev multiplied by **personalincpctchangeelectquarter**

80. generalpicryearann: general multiplied by **picryearann**

81. generalduration: general multiplied by **eddurmonths2**

82. picrtannzeroadj: pictenureann zero adjusted

83. picrtannzeroadjdur: picrtannzeroadj multiplied by **eddurmonths2**

84. res: residuals

85. termlimited: Coded if the ex-governor vacated office as a result of binding term limits; 0 otherwise (including baseline cases) (constructed from Carl Klarner's "Governor's Dataset" located at http://www.indstate.edu/polisci/klarnerpolitics.htm).

86. eddur2binarypred1: Binary prediction of **eddurmonths2**

87. imr1: Inverse Mills Ratio

88. eddur2binarypred2: Binary prediction of **eddurmonths2**

89. imr2: Inverse Mills Ratio

90. imr1sq: Inverse Mills Ratio squared

91. imr1cub: Inverse Mills Ratio cubed

92. imr2sq: Inverse Mills Ratio squared

93. senateseat_01: Indicates whether the ex-governor is seeking a gubernatorial or Senate seat – i.e., coded = 1 if seeking a Senate seat, coded = 0 if seeking gubernatorial seat (from Scammon, McGillivray, and Cook's *America Votes* various years).

94. senateseatnew: Indicates whether the ex-governor is seeking a gubernatorial or Senate seat – i.e., coded = 1 if seeking a Senate seat, coded = 0 if seeking gubernatorial seat. Baseline cases coded as Missing (.) (from Scammon, McGillivray, and Cook's *America Votes* various years).

95. electionage: Age of the governor at the time of the election contest (calculation from governor's birthdays retrieved from the biographies of each governor as listed on the National Governors Association website http://www.nga.org/cms/home/governors/past-governors-bios.html).

96. eddur2binarypred3: Binary prediction of **eddurmonths2**

97. imr3: Inverse Mills Ratio

98. imr3sq: Inverse Mills Ratio squared

99. imr3cubic: Inverse Mills Ratio cubed

100. residtenurefull1sscubic: Residuals

101. residtenurefull1sscubiccd: Cook's D

102. predtenurefull1sscubic: Linear Prediction

103. residyearfull1sscubiccd: Cook's D

104. electionagesq: elect1ionage squared

105. termlimit: Coded if the ex-governor vacated office as a result of binding term limits; 0 otherwise (including baseline cases) (constructed from Carl Klarner's "Governor's Dataset" located at http://www.**indstate**.edu/polisci/klarnerpolitics.htm).

106. involuntaryexit: Coded 1 for involuntary exit by ex-governor (i.e., electorally defeated or resigned/impeached from office due to scandal), equals 0 otherwise (i.e., left office of own choice or due to term limit restrictions) (derived from **reasonforexit**).

107. sharedprespartytenure: Percentage of the governor's tenure (in quarters) that the president and governor were of the same political party (derived from governor's partisan affiliation retrieved from the biographies of each governor as listed on the National Governors Association website http://www.nga.org/cms/home/governors/past-governors-bios.html).

108. sharedprespartylastterm: Percentage of the governor's recent year (in quarters) that the president and governor were of the same political party (derived from governor's partisan

affiliation retrieved from the biographies of each governor as listed on the National Governors Association website http://www.nga.org/cms/home/governors/past-governors-bios.html).

109. sharedprespartyfinalyear: Percentage of the governor's recent year (in quarters) that the president and governor were of the same political party (derived from governor's partisan affiliation retrieved from the biographies of each governor as listed on the National Governors Association website http://www.nga.org/cms/home/governors/past-governors-bios.html).

110. natpersonalincpctchangeelectquar: The percent change in national real per capita personal income from the quarter 1 year prior to the election (time = t-4) to the quarter in which the election is held (time = t), same evaluative windows as state analogue (**personalincpctchangeelectquarter**) (from the Federal Reserve of St. Louis, research.stloiuisfed.org/fred2/series/USAURHARMMDSMEI, provided by the Organisation for Economic Co-operation and Development –quarterly, seasonally adjusted, averaged, percent).

111. relpincpctchangeelectquarter: Difference between **personalincpctchangeelectquarter** and **natpersonalincpctchangeelectquar**.

112. relincumbpartypicelectqtr: incumbparty multiplied by **relpincpctchangeelectquarter**.

113. natpersonalincometenureann: National AIG for governor's tenure across exact same evaluative window as state analogue (**pictenure**) (from the Federal Reserve of St. Louis, research.stloiuisfed.org/fred2/series/USAURHARMMDSMEI, provided by the Organisation for Economic Co-operation and Development –quarterly, seasonally adjusted, averaged, percent).

114. natpersonalincomerecenttermann: National AIG for governor's recent term across exact same evaluative window as state analogue (**picterm**) (from the Federal Reserve of St. Louis, research.stloiuisfed.org/fred2/series/USAURHARMMDSMEI, provided by the Organisation for Economic Co-operation and Development –quarterly, seasonally adjusted, averaged, percent).

115. natpersonalincomerecentyearann: National AIG for governor's recent year across exact same evaluative window as state analogue (**picyear**) (from the Federal Reserve of St. Louis, research.stloiuisfed.org/fred2/series/USAURHARMMDSMEI, provided by the Organisation for Economic Co-operation and Development –quarterly, seasonally adjusted, averaged, percent).

116. relpersonalincometenureann: Difference between **personalincometenureann** and **natpersonalincometenureann** (annualized).

117. relpersonalincomerecenttermann: Difference between **personalincomerecenttermann** and **natpersonalincomerecenttermann** (annualized).

118. relpersonalincomerecentyearann: Difference between **personalincomerecentyearann** and **natpersonalincomerecentyearann** (annualized).

119. relpictenureann: relpersonalincometenureann multiplied by **eddurmonths2.**

120. relpicrtermann: relpersonalincomerecenttermann multiplied by **eddurmonths2.**

121. relpicryearann: relpersonalincomerecentyearann multiplied by **eddurmonths2.**

122. multiterm: Coded 1 if the governor served 2 or more terms, 0 if the governor only served a single term (from biographies of each governor as listed on the National Governors Association website http://www.nga.org/cms/home/governors/past-governors-bios.html).

123. firsttermaigann: first term average income growth (annualized growth rate) (from the Bureau of Economic Analysis, www.bea.gov/regional/index.html. Defined as the income received by all persons from all sources. Personal Income is the sum of net earnings by place of residence, property income, and personal current transfer receipts).

124. nonlasttermaigann: non-last term average income growth (annualized growth rate) (from the Bureau of Economic Analysis, www.bea.gov/regional/index.html. Defined as the income received by all persons from all sources. Personal Income is the sum of net earnings by place of residence, property income, and personal current transfer receipts).

125. picfirsttermann: firsttermaigann multiplied by **eddurmonths2**.

126. picnonlasttermann: nonlasttermaigann multiplied by **eddurmonths2**.

127. outcomesample: Linear prediction

128. eddurmonths2immediate: Coded 1 if the ex-governor was running in election contest immediately upon exit of their final ex-governor term, 0 otherwise (derived from **eddurmonths2**).

129. statetermlimits: 1 = if in the given election year, there were term limits on the governor's office in the state, 0 = otherwise (constructed from Carl Klarner's "Governor's Dataset" located at http://www.indstate.edu/polisci/klarnerpolitics.htm).

130. reelected: 1 = if in the given election year, the incumbent/ex-governor had been previously reelected to the governor's office, 0 = otherwise (constructed from Carl Klarner's "Governor's Dataset" located at http://www.indstate.edu/polisci/klarnerpolitics.htm).

131. tenurefullresidsimrcook3imr: Cook’s D