

# Partisan Politics and Congressional Election Prospects: Evidence from the Iowa Electronic Markets

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**ABSTRACT** Using the Iowa Electronic Markets (IEM), this article assesses the political impact of several important events during the Fall of 2013: the US government shutdown, the Senate elimination of filibusters for presidential nominations (i.e., the “nuclear option”), and the implementation of the Patient Protection and Affordable Care Act (i.e., ObamaCare). Did these events have meaningful effects on congressional control prospects in the 2014 election? According to IEM price changes, Republican chances fell dramatically when the government shut down, and they did not recover on resolution. Eliminating filibusters had a negative impact on Democratic chances. Various aspects of the ObamaCare rollout and reporting, as well as new announcements that incumbents would not run for reelection, had little effect. In contrast, the budget resolution reinforced the status quo. Overall, political rhetoric does not appear to affect congressional control prospects. Instead, actions matter: deliberate partisan actions of Congress adversely affect the initiating party’s prospects, whereas bipartisan initiatives help the party that initiates the bipartisan effort.

**H**ow do congressional partisan actions and policies affect House and Senate control in upcoming elections? Election forecasting is a matter of considerable research.<sup>1</sup> Public-opinion polls capture changes in current perception and approval ratings. However, some research suggests that perceptions may be transitory (e.g., “convention bounce”). In this article, we use the IEM to assess how major political events affect the chances of various congressional outcomes in an upcoming election. The IEM have proven accurate in forecasting vote shares, outperform the most obvious alternative (i.e., polls), and are more stable than

polls (Berg et al. 2008; Berg, Nelson, and Rietz 2008). Prices of contracts designed to forecast outcome probabilities effectively incorporate new information (Bondarenko and Bossaerts 2000) and correlate closely with outcome probabilities across markets (Berg and Rietz 2012).

We study the period between September 1, 2013, and February 28, 2014, which included (1) a partial government shutdown, the events leading up to it, and its resolution; (2) the ObamaCare rollout, subsequent website problems, and periodic enrollment reports; (3) the Senate’s restriction of filibusters for presidential nominees (i.e., the “nuclear option”), an extended House pro forma session to prevent recess appointments, and a court fight over recess appointments; (4) passage of a two-year bipartisan budget; and (5) announcements that 28 representatives and 1 senator would not seek reelection.

We systematically identify significant movements in forecasts and determine whether they appear associated with significant political events. The results suggest that prospects for House and

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Senate control are tied to whether parties play partisan politics or engage in bipartisan behavior.

**THE IOWA ELECTRONIC MARKETS**

The IEM are real money-prediction markets operated at the University of Iowa’s Henry B. Tippie College of Business. They have proven accurate in predicting election outcomes (Berg et al. 2008) and generally forecast vote shares better than polls (Berg, Nelson, and Rietz 2008). The relative accuracy of the IEM versus polls actually increases farther in advance of an election.

Because the IEM is described elsewhere,<sup>2</sup> this article discusses only the IEM tied to the 2014 US House and Senate elections. Three markets predicted the control configuration of the House and Senate as a result of the 2014 US election: the House Control Market, the Senate Control Market, and the joint Congressional Control Market. We use the Congressional Control Market for three reasons. First, it shows the likelihood of various control combinations of the two chambers, which allows a simultaneous analysis of the combined effects of events on House and Senate control probabilities. Second, it represents whether parties have absolute control of each chamber. It does not have contracts associated with increasing or decreasing the degree of control (as in the other two markets) and neither does it effectively ignore third parties (which could play a pivotal role in a closely divided chamber). Third, it is more liquid and, therefore, more likely to price outcomes efficiently.<sup>3</sup>

*Three markets predicted the control configuration of the House and Senate as a result of the 2014 US election: the House Control Market, the Senate Control Market, and the joint Congressional Control Market.*

The Congressional Control Market prospectus is in the online appendix associated with this article. Table 1 lists the contracts traded in the market.

Market participants trade contracts with payoffs based on the joint outcome of Senate and House control. Each contract pays \$1 or \$0 based on the composition of Congress following the 2014 US elections. The contracts represent possible combinations of Democratic and Republican House and Senate control, with an “Other” contract representing neither major party outright controlling one or both chambers because of independent and third-party seats.

The contract representing the actual election outcome pays \$1. All other contracts expire worthless. Contracts are created when

traders buy “unit portfolios” (i.e., one of each contract) from the IEM exchange. The IEM continuously stands ready to buy or sell unit portfolios for \$1 each. This forces the risk-free rate of return to zero. In addition, there are always equal numbers of each contract at any time, which creates zero-aggregate market-level uncertainty. Together, these factors imply that contract prices should equal expected values. Thus, for each contract:

$$P_t^i = E_t(LV_t^i) = pr_t(LV_t^i = 1) \times \$1 + pr_t(LV_t^i = 0) \times \$0 = pr_t(LV_t^i = 1), \quad (1)$$

where  $P_t^i$  is the price of contract  $i$  on date  $t$ ,  $E_t(LV_t^i)$  is the date- $t$  expected liquidation (i.e., payoff) value of contract  $i$  at the terminal date ( $T$ ), and  $pr_t$  represents the probability given date- $t$  information.<sup>4</sup> Thus, the contract price equals the forecast probability that the contract’s event will occur: for example, the DH\_DS14 price forecasts the probability that Democrats will control the House and the Senate, the DH\_RS14 price forecasts the probability that Democrats will control the House and Republicans will control the Senate, and so forth. Price changes show how traders’ beliefs regarding the parties’ control chances evolve over time.

**TIMELINES, EVENTS, AND PRICES**

Figure 1 shows Congressional Control Market prices from September 1, 2013, through February 1, 2014. This period includes several significant events: the government shutdown, the rollout of ObamaCare and periodic enrollment reports, and the Senate

nuclear option on filibusters. For most of this period, prices forecasted that the most likely election outcome would be continued Republican House control and Democratic Senate control. However, major price swings indicated significant shifts in the control prospects of the parties, leading to a Republican sweep (i.e., the actual outcome) as the most likely outcome by the end of the period. We asked whether significant swings appear related to major political events identified in the news.

Instead of relying solely on judgment to identify significant price swings, we used statistical price-change measures related to  $\chi^2$ -tests to identify major and sustained price changes. We used these measures to tag significant events, as follows:

1. We computed the one-day change measures for each day relative to the prior day, eliminating days that were not above the 90th percentile.
2. We computed the two-day change measures across a day (prior to the next day), eliminating days that were not above the 90th percentile.
3. We computed the two-day change measures leading up to a day (current versus two days prior), eliminating days that were not above the 90th percentile.

The first step identified significant price changes. The second and third steps assured that the changes neither result in a reversal the next day nor from the reversal of a prior significant change.

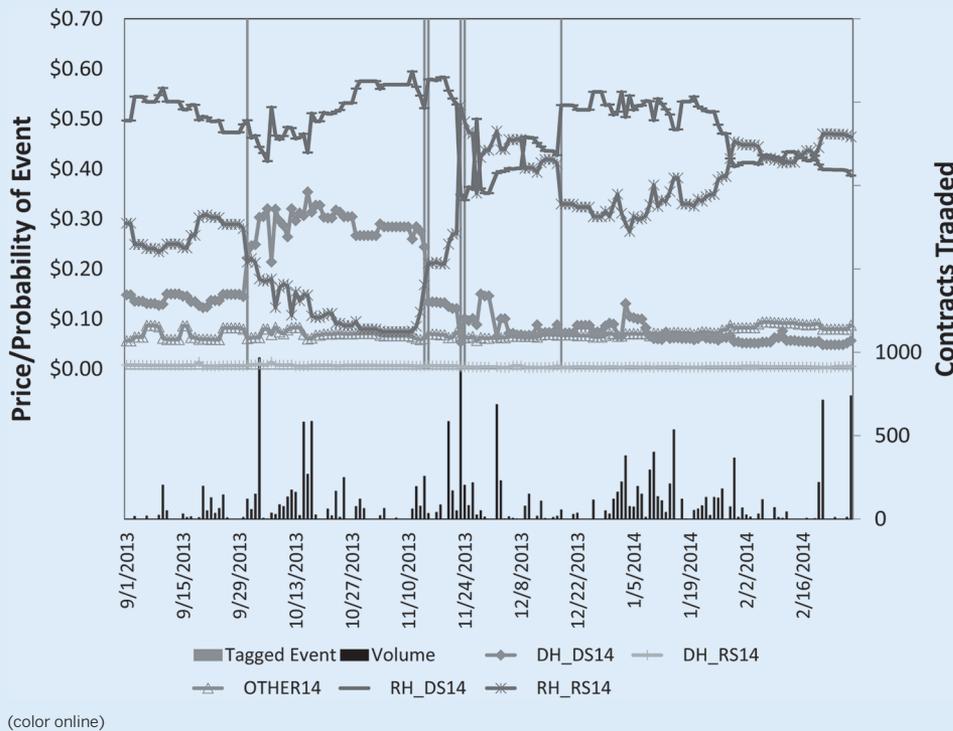
Table 1

**Contracts Traded in the 2014 IEM Congressional Control Winner-Takes-All Market**

Contract	Liquidation Value
DH_DS14	\$1 if Democratic House, Democratic Senate; \$0 otherwise
DH_RS14	\$1 if Democratic House, Republican Senate; \$0 otherwise
RH_DS14	\$1 if Republican House, Democratic Senate; \$0 otherwise
RH_RS14	\$1 if Republican House, Republican Senate; \$0 otherwise
OTHER14	\$1 if none of the named contracts pays off; \$0 otherwise

Figure 1

## Prices, Contract Volumes, and Events in the 2014 Congressional Control Market from September 1, 2013, through February 28, 2014



The measure we used mirrors the weighting scheme in a  $\chi^2$ -test of independence in a contingency table. Specifically, we defined the measure of price change from day  $t$  to day  $t+j$  as follows:

$$\chi_{t,t+j}^2 = \sum_{i=1}^n \frac{(P_{t+j}^i - P_t^i)^2}{P_t^i(1 - P_t^i)}, \quad (2)$$

where prices are normalized and the sum is across contracts in the market. The numerators capture sizes of price changes of individual contracts; the denominators weight these by relative sizes of initial prices. Intuitively, a given price movement compared to high- and low-probability outcomes is more likely statistically significant than the same change relative to mid-range probability outcomes.<sup>5</sup>

Dates in 2013 that were tagged as significant by passing all three measures are October 1; November 14, 15, 23, and 24; and December 18. These dates appear as vertical bars in figure 1.

For comparison, we collected national polling data on overall congressional approval ratings from PollingReport.com. The polling organizations and the specific questions used for analysis are listed in Table 2. For each poll, we defined the normalized net approval rating as follows:

$$NNA_t^i = \frac{\%Approve - \%Disapprove}{\%Approve + \%Disapprove}, \quad (3)$$

where  $i$  indexes the polling organization,  $t$  indexes the date,  $\%Approve$  is the percentage of respondents who approve of the job that Congress is doing, and  $\%Disapprove$  is the percentage

of those who disapprove. Figure 2 shows net approval ratings between September 1, 2013, and February 28, 2014, as well as IEM-tagged significant events. Overall, net approval ratings are negative.<sup>6</sup>

To identify political events perceived as significant in the news, we conducted a Lexis-Nexis search of news articles using the keyword “Congress.” After identifying events with numerous articles, we narrowed the search to the *New York Times* to create the summaries listed in table 3. This is by no means a comprehensive list, but it allowed us to correlate major political events with the IEM-tagged events.<sup>7</sup>

### The Shutdown, Resolution, and Budget

From October 1 to 16, 2013, the US government was shut down partially by congressional failure to pass a budget bill or continuing resolution. The budget fight included disagreements

over spending, debt levels, and ObamaCare. Overall polled congressional approval ratings fell before the shutdown (see figure 2). October 1 was the first IEM-tagged event (see figure 1). The Republican chances of controlling the House and the Senate (RH\_RS14) fell, whereas the chances of Democrats controlling the House and the Senate rose (DH\_DS14).

During the first 16 days of October, numerous proposals, counterproposals, and limited congressional actions attempted partial resolution of the crisis (see table 3). Poll approval ratings were relatively flat during this period. Although volatile, IEM prices showed no significant tagged events during this period. In particular, the October 16 resolution had little effect on either prices or polls.

The last IEM-tagged date was December 18, the day after the bipartisan two-year budget plan was passed by the Senate. The Senate also reached an agreement on several Obama nominations on that day. Poll approval ratings may have risen slightly before the resolution. On the IEM, the chances of continuing the status quo (RH\_DS14) increased, whereas the chances of a Republican sweep (RH\_RS14) decreased.

### ObamaCare Rollout

ObamaCare was officially rolled out on October 1, 2013. During the next month, there were frequent website failures and congressional attempts to “defund” the bill. Initial enrollment numbers were disappointing but improved over the time period. Polled approval ratings were flat during this period.

October 1 was the first IEM-tagged major event. The Republican chances of controlling the House and the Senate (RH\_RS14) fell, whereas the chances of Democrats controlling

Table 2

### Congressional Approval-Rating Polls Selected for Analysis

Polling Organization	Question
Fox News	"Do you approve or disapprove of the job Congress is doing?"
Gallup	"Do you approve or disapprove of the way Congress is handling its job?"
NBC News/Wall Street Journal	"In general, do you approve or disapprove of the job that Congress is doing?"
ABC News/Washington Post	"Do you approve or disapprove of the way the US Congress is doing its job?"
CBS News	"Do you approve or disapprove of the way Congress is handling its job?"
George Washington University	"Thinking now about Congress: How would you rate the job Congress is doing? Do you approve or disapprove of the job they are doing?"
Allstate/National Journal	"Do you approve or disapprove of the way Congress is handling its job?"
CNN/ORC	"Do you approve or disapprove of the way Congress is handling its job?"

both chambers rose (DH\_DS14). This is counter to the argument that the rollout had a negative impact on Democratic chances.

It is interesting that most other news about ObamaCare, whether in the form of website crashes or announced enrollment figures, had little effect on IEM prices. The exception was the IEM-tagged event days of November 14 and 15. On November 14, Obama announced that people whose plans were canceled could keep them or re-enroll in ObamaCare after one year. On November 15, the House passed the "Upton Bill," which also allowed continuation of employer plans.<sup>8</sup> This bill was passed with some bipartisan support (i.e., 4 Republicans against; 29 Democrats for). On both days, the chances of a Republican sweep rose and the chances of a Democratic sweep fell.

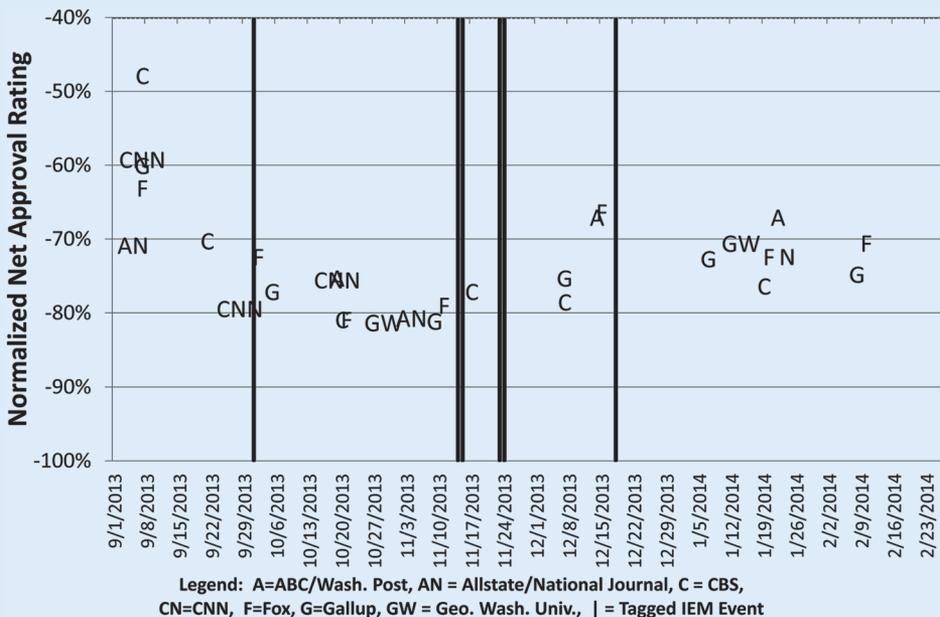
### The Nuclear Option

The next two IEM-tagged events were November 23 and 24, which were the two days following the Senate's use of the nuclear option.<sup>9</sup> The Senate changed its rules, ending the opportunity to filibuster most presidential nominations. This action increased the probability of a Republican sweep (RH\_RS14) at the expense of the status quo (RH\_DS14).

Two other events were related to presidential appointments: on January 13, 2014, the Supreme Court heard arguments in the *National Labor Relations Board v. Noel Canning* case about when the president can make recess appointments. From January 21 through 23, 2014, the House held an extended pro forma session to prevent recess appointments. Neither action had a significant effect on either IEM prices or approval ratings.

Figure 2

### Normalized Net Approval Ratings from Polls and IEM-Tagged Events between September 1, 2013, and February 28, 2014



### Open Seats

During the time period, 28 representatives and 1 senator announced that they would not run for reelection. Table 4 lists the announcements during the period. Most were retiring, a few were running for another office, one died, and some resigned.

The popular perception is that extensive gerrymandering means few House districts are truly competitive (Mann 2007). The IEM evidence is consistent with this perception. Only one announcement date is close to an IEM-tagged event—on December 17, three House members announced their retirement: Wolf (R-VA), Latham (R-IA), and Matheson (D-UT). December 18 is an IEM-tagged event. Both Latham's district in Iowa and Wolf's in Northern Virginia are "swing" districts, believed to be contested, bellwether districts

Table 3

### Partial List of Political Events between September 1, 2013, and February 28, 2014

Date	Event
9/20/13	House denies ObamaCare funding.
10/1/13	Partial shutdown begins. ObamaCare open enrollment begins; website crashes.
10/2/13	House passes several measures restoring partial funding.
10/3/13	House passes National Guard pay and veterans benefits.
10/4/13	House passes several more measures restoring partial funding.
10/5/13	House passes back pay for furloughed federal workers. Most Department of Defense employees return to work.
10/6/13	Boehner says House will not pass bills ending shutdown or raising debt limit without negotiations on GOP demands.
10/7/13	House approves FDA programs.
10/8/13	T-Bill rate spikes because of debt-ceiling fears. Dow falls dramatically.
10/10/13	Boehner proposes six-week debt-limit extension.
10/15/13	House GOP fails to craft plan to end shutdown.
10/16/13	Deal to reopen government through January 15 and extend debt limit to February 7 passes Senate and House.
10/22/13	HHS Secretary Sebelius appoints team to "fix" ObamaCare website.
10/27/13	ObamaCare website crashes.
10/29/13	CMS Administrator Tavenner testifies on failed ObamaCare website launch.
10/31/13	ObamaCare website crashes.
11/2/13	ObamaCare enrollment announced: 106,185.
11/14/13	Obama announces that people can keep canceled plans.
11/15/13	House passes Upton Bill (39 Democrats vote for bill).
11/22/13	News analysis appears on effects of the Senate "nuclear option."
11/30/13	ObamaCare enrollment announced: 365,000.
12/28/13	ObamaCare enrollment announced: 2,153,000.
1/13/14	Supreme Court hears arguments on recess appointments.
1/21-23/14	House holds pro forma session to block recess appointments.
1/28/14	State of the Union Address.
2/1/14	ObamaCare enrollment announced: 3,299,492.

for the ensuing election (Peters 2013). It is conceivable that both seats might have changed parties. December 18 also was the day after the bipartisan budget bill was passed. Most of the change in prices reflected changes in the odds for Senate control, not House control: RH\_DS14 rose and RH\_RS14 fell. This change was unlikely to result from contested House seats. Thus, we concluded that the December 18 shift was more likely due to the budget bill. The evidence overall is consistent with House districts that generally are not highly contested.

#### DISCUSSION

During the Fall of 2013, much political rhetoric focused on ObamaCare. One effect observed in midterm elections is voting against the president's party as a means of voting against unpopular presidential initiatives (Abramowitz 1988). However, the lack of response to events associated with ObamaCare provides evidence against this hypothesis.

Instead, the main factors driving major IEM changes appear to be related to partisan-versus-bipartisan politics.<sup>10</sup> The partisan budget fight led to major changes in IEM prices. The partisan Senate move to eliminate filibusters on presidential

nominations led to significant changes in IEM prices. In both cases, prices moved against the party leading the partisan charge. In contrast, the Republican-sponsored Upton Bill aligned with a presidential action and attracted Democratic support. This bipartisan bill improved the control prospects of the sponsoring party across both houses of Congress. Finally, the two-year budget plan was worked out by a Senate Democrat (i.e., Murray) and a House Republican (i.e., Ryan), which improved the chances of both Senate Democrats and House Republicans.

Overall, the evidence suggests that at least in the expectations of IEM traders, partisanship has a negative impact on the chances of the party initiating the partisan fight. In contrast, bipartisan accomplishments help the party initiating the efforts that become bipartisan. Although not definitive, the results are strong enough that the issue of partisanship and future congressional-control prospects warrants further investigation.

#### SUPPLEMENTARY MATERIAL

To view supplementary material for this article, please visit <http://dx.doi.org/S1049096515000785>. ■

Table 4  
**New Announcements Regarding Open House and Senate Seats between September 1, 2013, and February 28, 2014**

Panel A: House			Panel A: House (continued)		
Date	Representative	Event	Date	Representative	Event
9/30/2013	Bachus (R-AL)	Not running	1/16/2014	McKeon (R-CA)	Not running
10/18/2013	Young (R-FL)	Death	1/27/2014	Radel (R-FL)	Resignation
10/21/2013	Griffin (R-AR)	Not running	1/30/2014	Waxman (D-CA)	Not running
11/6/2013	Runyan (R-PA)	Not running	2/4/2014	Andrews (D-NJ)	Resignation
11/7/2013	Coble (R-NC)	Not running	2/12/2014	Miller (R-CA)	Not running
12/16/2013	Stockman (R-TX)	Not running	2/13/2014	Hastings (R-WA)	Not running
12/17/2013	Wolf (R-VA)	Not running	2/18/2014	Holt (D-NJ)	Not running
12/17/2013	Latham (R-IA)	Not running	2/18/2014	McLeod (D-CA)	Not running
12/17/2013	Matheson (D-UT)	Not running	2/18/2014	Andrews (D-NJ)	Resignation
12/16/2013	Watt (D-NC)	Not running	2/24/2014	Dingell (D-MI)	Not running
1/6/2014	Gerlach (R-PA)	Not running	2/27/2014	Pastor (D-AZ)	Not running
1/8/2014	McCarthy (D-NY)	Not running	2/28/2014	Rogers (R-MI)	Not running
1/8/2014	McIntyre (D-NY)	Not running			
1/13/2014	Miller (D-CA)	Not running			
1/14/2014	Owens (D-NY)	Not running			
1/15/2014	Moran (D-VA)	Not running			
			Panel B: Senate		
			Date	Senator	Event
			1/16/2014	Coburn (R-OK)	Not running

Sources: <http://politics.nytimes.com/congress/members/113/house/departures> and <http://politics.nytimes.com/congress/members/113/senate/departures>, both accessed 5/20/14.

**NOTES**

- For surveys presenting various viewpoints, see Lewis-Beck and Tien (2011) and Stegmaier and Norpoth (2013).
- See Berg et al. (2008) and Berg, Nelson, and Rietz (2008).
- A more “liquid” market has more trading and more accurately incorporates information. Between September 1, 2013, and February 28, 2014, the dollar volume in the Congressional Control Market was 1.7 times the House Control Market volume and 4.1 times the Senate Control Market volume. The deviation of the sum of closing prices of contracts in the Congressional Control Market from the alternative bundle (i.e., no-arbitrage) price of \$1 averaged 0.6 cent per contract versus 2.0 and 1.8 cents in the House and Senate Control Markets, respectively.
- For a more complete proof, see Borch (1960), who showed that the relative prices of these securities reflect relative probabilities across states with fixed aggregate payouts. The result here relies on a minor extension to Borch’s model: fixing the aggregate payout across all states of the world.
- This measure also treats changes in low- and high-priced contracts symmetrically. Analysis based on absolute dollar sizes of contract-price changes produces virtually identical results: one of our six dates (i.e., November 24) is not identified as significant. However, because November 23 remains significant under both metrics, our conclusions are unchanged.
- Polled approval ratings may be unrelated to which party controls the next Congress if all parties experience low approval.
- Correlations may arise at different time lags depending on how rapidly traders realize the implications of and respond to different events. Although it is only indicative, the analysis shows significant news events that occur close to major price swings.
- The press discussed extensively the effects of allowing noncompliant plans to continue. Some journalists argued that allowing these plans to continue would be detrimental to the risk-pool of ObamaCare, threatening the plan. A RAND report released on January 21 (Saltzman and Eibner 2014) concluded that although the Upton Bill would have a more significant effect than Obama’s announced plan, neither would endanger compliant plans.
- The vote actually occurred on November 21 (Thursday) and first appeared in the newspapers on November 22 (Friday). Considerable news discussion on implications occurred over the weekend when prices in the IEM moved.
- Events that we identify also might be economically significant. Then, price changes might indicate that parties that initiate economic improvements are rewarded at the polls. We tested this hypothesis by asking whether IEM-tagged

event dates are associated with major stock-market price changes (S&P500). We did not find a correlation between the six IEM-tagged events and major stock-price changes.

**REFERENCES**

Abramowitz, Alan I. 1988. “Explaining Senate Election Outcomes.” *American Political Science Review* 82 (2): 385–403.

Berg, Joyce E., and Thomas A. Rietz. 2012. “Longshots, Overconfidence and Efficiency on the Iowa Electronic Market.” Working Paper, University of Iowa, Henry B. Tippie College of Business.

Berg, Joyce, Robert Forsythe, Forrest Nelson, and Thomas Rietz. 2008. “Results from a Dozen Years of Election Futures Markets Research.” In *Handbook of Experimental Economics Results*, ed. Charles R. Plott and Vernon L. Smith, 742–51. Amsterdam: North-Holland.

Berg, Joyce E., Forrest D. Nelson, and Thomas A. Rietz. 2008. “Prediction Market Accuracy in the Long Run.” *International Journal of Forecasting* 24 (2): 285–300.

Bondarenko, Oleg, and Peter Bossaerts. 2000. “Expectations and Learning in Iowa.” *Journal of Banking & Finance* 24 (9): 1535–55.

Borch, Karl. 1960. “The Safety Loading of Reinsurance Premiums.” *Scandinavian Actuarial Journal* 43 (3–4): 163–84.

Lewis-Beck, Michael, and Charles Tien. 2011. “Election Forecasting.” In *The Oxford Handbook of Economic Forecasting*, ed. Michael Clements and David Hendry, 655–71. Oxford: Oxford University Press.

Mann, Thomas E. 2007. “Polarizing the House of Representatives: How Much Does Gerrymandering Matter?” In *Red and Blue Nation? Characteristics and Causes of America’s Polarized Politics, Volume 1*, ed. Pietro S. Nivola and David W. Brady, 263–83. Baltimore: Brookings Institution.

Peters, Jeremy W. 2013. “3 House Retirements Complicate Outlook for Midterms.” *New York Times*, December 18, 2013.

Saltzman, Evan, and Christine Eibner. 2014. *Evaluating the “Keep Your Own Health Plan” Fix*. Santa Monica, CA: RAND Corporation.

Stegmaier, Mary, and Helmut Norpoth. 2013. “Forecasting, Election.” In *Oxford Bibliographies in Political Science*, ed. Rick Valesly. Oxford: Oxford University Press.

## Appendix

### Congressional Control Market Prospectus

#### IEM Prospectus: Congress14

##### 2014 U.S. Congressional Control Winner-Takes-All Market

On Wednesday, December 26, 2012, at 9:30am CST, the Iowa Electronic Market (IEM) will open trading in a market based on the composition of the two houses of Congress following the 2014 U.S. elections. Contract liquidation values in this Congressional Control market will be determined by the number of seats won by members of the Democratic, Republican, and other parties in each house. Initially, five contracts will trade in this market, each representing one of five possible unique and exhaustive outcomes. The liquidation value of the contract which represents the actual outcome of the election will be \$1.00. All other contracts will have a value of zero.

This document describes the market and should be viewed as a supplement to the Trader's Manual. Except as specified in this prospectus, trading rules for this market are the same as those specified in the Trader's Manual for the Iowa Electronic Market.

#### Contracts

The financial contracts initially traded in this market are:

Code	Contract Description
DH_DS14	\$1 if Democratic House, Democratic Senate; \$0 otherwise
DH_RS14	\$1 if Democratic House, Republican Senate; \$0 otherwise
RH_DS14	\$1 if Republican House, Democratic Senate; \$0 otherwise
RH_RS14	\$1 if Republican House, Republican Senate; \$0 otherwise
OTHER14	\$1 if none of the named contracts pay off; \$0 otherwise

The first two letters of the contract symbol represent the net effect of the U.S. House of Representative elections. DH means that Democrats hold 218 or more of the 435 seats in the House. RH means that Republicans hold 218 or more seats in the House.

The next two letters in the symbol represent the net effect of the U.S. Senate elections. DS means that Democrats hold 51 or more of the 100 seats in the Senate or 50 seats plus the Vice Presidency. RS means that Republicans hold 51 or more of the 100 Senate seats or 50 seats plus the Vice Presidency in the Senate.

The contract OTHER14 represents the outcome that for at least one house of Congress, neither Democrats or Republicans hold more than half the seats as defined above.

All references to "House seats" in this document are to voting seats in the House of Representatives and specifically exclude those non-voting seats held by Representatives from American Samoa, Guam, Puerto Rico, the U.S. Virgin Islands, and the District of Columbia.

#### Determination of Liquidation Values

This is a winner-takes-all market. The contract that denotes the actual outcome of the election will have a liquidation value of \$1.00; all others will have values of \$0.00. For example, if the number of House seats won by Democrats in the 2014 election is 218 and the number of Senate seats won by Democrats plus the number of seats held by incumbent Democratic Senators not up for re-election is 51, the contract DH\_DS12 will have a value of \$1.00 and the other four contracts will have values of zero. Similarly, if the number of House seats won by Democrats in the 2014 election is 218, while the number of seats held by Democrats in the Senate after the election (as defined above) is 49 and the number of seats held by Republicans in the Senate after the election (as defined above) is also 49, then the contract OTHER12 will have a value of \$1.00 and the other four contracts will have values of zero.

The New York Times and Congressional Quarterly Weekly Report will be the official sources for election results and party affiliations of continuing Senators, respectively. The election data posted on the New York Times official website at 5pm on Thursday, November 6, 2014, or as soon after as available, will be the official source used to determine the results of the election. In the event that the results are not reported at that website by midnight, Thursday, November 6, 2014, the Washington Post official website will become the official source. Should neither source report 2014 election results by midnight Thursday, the information reported in the print version of the New York Times on Thursday, November 6, 2014, or as soon thereafter as reported, will be used.

For purposes of determining payoffs, we will use the composition of the House and Senate for the 114th Congress as determined by each member's party affiliation at the time of the election. For Representatives and newly elected Senators, this will be their party affiliations as shown on the election ballot. For Senators not standing for re-election, this will be their party affiliations as reported at the senate.gov website the day before the election.

In the event that the election is delayed or postponed, liquidation will take place in a timely fashion after the close of polling sites for the popular vote.

In the event that the liquidation values of contracts cannot be determined until after run-off elections are completed, liquidation will occur after a sufficient number of run-off elections are completed so as to determine the liquidation values. In this case, we will count the parties of elected

representatives as of the date that they won their respective elections. That is, party changes or vacancies that arise between the general election and runoffs will have no effect on IEM contract values. If there is a vacant senate seat not up for re-election and not filled by the election, that seat will be counted as belonging to the party of the governor of the state of that senate seat after the election. If a candidate is nominated by more than one party and one of the parties is a major party (Democrat or Republican), that candidate will be counted according to his or her major party affiliation (Democrat or Republican). If none of the parties nominating a candidate are Republican or Democrat, we will count that candidate as Other. If a party goes by multiple designations (such as the Democratic-Farmer-Labor Party of Minnesota) and one of the party designations is a major party (Democrat or Republican), the candidate of that party will be counted according to the party's major party designation (Democrat or Republican). If none of the designated parties are Republican or Democrat, we will count that party's candidate as Other.

Liquidation formulas can be viewed while you are logged into the IEM trading system by clicking on the market name, Congress14, at the upper right-hand corner of the market window.

The judgment of the IEM Governors and Directors will be final in resolving questions of typographical or clerical errors and ambiguities.

#### Contract Spin-Offs

The Directors of the IEM reserve the right to introduce new contracts to the market as spin-offs of existing contracts. When a contract spin-off occurs, an original contract will be replaced by new contracts which divide the payoff range of the original contract into sub-intervals.

No holder of the pre-spinoff contracts will be adversely affected. Traders will receive the same number of each of the new contracts as they held in the original, and the sum of the liquidation values of the new contracts will equal the liquidation value of the original. Outstanding limit orders to buy or sell the contract which is to be spun-off will be canceled just prior to the spin-off.

Decisions to spin-off a contract will be announced at least two days in advance of the spin-off. The new contract names, the specifications regarding liquidation values and the timing of the spin-off will be included in the announcement. This announcement will appear as an Announcement on your WebEx login screen.

#### Contract Bundles

Fixed price contract bundles consisting of one share of each of the contracts in this market can be purchased from or sold to the IEM system at any time. The price of each fixed price contract bundle is

\$1.00. Because exactly one of the listed U.S. Congressional Control contract outcomes will result from the election, the total payoff from holding a contract bundle until the market closes is \$1.00.

To buy or sell fixed price contract bundles from the system, use the "Market Orders" option from the Trading Console. Select "Congress14 (buy at fixed price)" from the Market Orders list to buy bundles. Select "Congress14 (sell at fixed price)" to sell bundles.

Bundles consisting of one share of each of the contracts in this market may also be purchased and sold at current aggregate market prices rather than the fixed price of \$1.00. To buy a market bundle at current ASK prices, use the "Market Order" option as above but select "Congress14 (buy at market prices)." To sell a bundle at current market BID prices, select "Congress14 (sell at market prices)." Bundle purchases will be charged to your cash account and bundle sales will be credited to your cash account.

This market will remain open until contract liquidation. Liquidation values will be credited to the cash accounts of market participants.

#### Market Access

Current and newly enrolled IEM traders with U.S. dollar accounts will automatically be given access rights to trade in the 2014 U.S. Congressional Control Market. Access to this market is achieved by logging into the IEM and choosing "Congress14" from the Navigation Bar.

Funds in a trader's cash account are fungible across markets so new investment deposits are not required. Additional investments up to the maximum of \$500 can be made at any time. New traders can open accounts using the IEM Online Account Application page at <http://iemweb.biz.uiowa.edu/signup>. There is a one-time account registration fee of \$5.00, and investments are limited to the range of \$5.00 to \$500.

Requests to withdraw funds may be submitted at any time by completing the IEM's Online Withdrawal Request form or by completing and mailing the paper version of the request form (<http://tippie.uiowa.edu/iem/accounts/cashout.html>). Additional information about requesting withdrawals is available at the IEM website at <http://tippie.uiowa.edu/iem/accounts/withdrawals.html>.