IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

KALSHIEX LLC,

Plaintiff,

v.

COMMODITY FUTURES TRADING COMMISSION,

Defendant.

No. 23-cv-03257-JMC

Joint Appendix under Rule 7(n)
Volume 2

JOINT APPENDIX UNDER RULE 7(n)
VOLUME 2

KALSHIEX LLC V. CFTC, NO. 1:23-CV-03257-JMC

Index of Joint Appendix Pursuant to Local Civil Rule 7(n)

Dear Commissioners of the Commodity Futures Trading Commission,

My name is Vivek Ranadivé. I am the co-owner and chairman of the NBA's Sacramento Kings. I am also the founder and former CEO of the business intelligence software company TIBCO Software, which was one of the first companies to facilitate instant communication in financial markets. In 2016, I founded an early stage investment firm called Bow Capital. I have a long time interest in the domain of business prediction. In 2006, I wrote a book called *The Power to Predict* about the importance of anticipating the future for business success. In 2011, I followed up that book with *The Two-Second Advantage: How We Succeed by Anticipating the Future–Just Enough*. This belief that predicting the future is absolutely crucial to commercial success has convinced me to support Kalshi's submission to the CFTC to list contracts on the outcome of Congressional elections.

I have no political affiliations and these contracts are not partisan. I have worked with politicians on both sides of the aisle, including joining then President Obama on his trip to India for Republic Day. People of all political persuasion should recognize the economic benefits these contracts provide, and allow them to proceed.

Specifically, these contracts give America's business owners the ability to reduce the risks they face through two key channels.

The first is direct hedging. As an investor and a business owner myself, I have seen time and again the way that federal policy can make or break a business. A business may be thriving until a tax break that they (or their customers) were relying on is cut in a last minute budget deal and the entire economics of their business go under. For example, the Wind Production Tax Credit (PTC) currently provides a rebate of up to 2c per kilowatt-hour (kwh) for the first ten years of a utility-scale wind farm's existence, and the Investment Tax Credit provides a tax credit of up to 30% of investment costs. Considering a single turbine can produce over 6 million kwh a year, the PTC alone could result in over $100,000/turbine a year in tax benefits. There are many utility-scale wind-projects whose economics simply do not work without that tax break as the margins are too thin. As a result, they are rather vulnerable to changes in Congressional control, as the probability that the tax break gets cut or eliminated changes depending on who is in power. Even if the tax remains in place, potential investors may be skittish to invest if a less wind-friendly Congress is in place for fear that changes might take place (incidentally, this expectations channel answers the second question under CFTC Question 6 about policy predictability–not all of the harms manifest through policy actually getting enacted). Considering how capital intensive many industries like wind power production are, the nervousness from investors (and the corresponding increase in interest rates they will demand to compensate them for the extra risk) might be even more damaging than the tax cut even being cut. Wind, of course, is far from the only example. The recent Inflation Reduction Act had a $7,500 tax rebate for electric vehicles, which could have enormous effects for a dealer or producer of those cars. But that tax break has very specific rules for which vehicles qualify (such as rules regarding the sourcing of the minerals used to make the battery). Minute adjustments to that tax break, then,

could have huge effects for many businesses. An election contract would allow these firms to reduce their risk exposure and manage it more appropriately.

The second is through improved prediction. As I argue in my book *The Power to Predict*, being able to anticipate and plan for future business risks is one of the biggest competitive advantages a company can have. As noted above, electoral risks *are* business risks. An event contract market, by aggregating the wisdom of thousands of traders trying to gain an edge by being ever so slightly more accurate than their competition, would provide a valuable data point to make the best business decision possible. An investor in renewable energy projects, for instance, may want to charge a developer a higher interest rate for fear that the wind tax breaks might be reduced. But if the investor can see that the odds of a wind-hostile Congress entering power is relatively low, they may feel the investment risk is lower and thus feel more comfortable submitting a lower bid. The consumer surplus from fewer businesses making imprudent financial decisions because they had incorrect information about the status of future policy could be enormous, as small improvements in the allocative efficiency of capital can be large in an economy as large as the United States's.

There remains a question about whether these contracts create perverse incentives regarding the integrity of the election. However, Britain has hosted these contracts for decades–are there major questions about the integrity of Liz Truss's recent election due to the presence of these markets? I have yet to see any proof of that. While it's true that a market such as this requires surveillance to ensure no candidate for Congress is participating and insider-trading on the market, that claim would be true for *all* event contracts, and is not unique to a Congressional control market.

This contract promotes the public interest by helping businesses anticipate and reduce the risks they face. I would urge the Commission to consider these facts when deciding the status of its application.

Vivek Ranadive, Sacramento Kings

September 23, 2022

SUBMITTED VIA CFTC PORTAL
Secretary of the Commission Office of the Secretariat
U.S. Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, N.W.
Washington, D.C. 20581

Dear Chairman and Commissioners of the U.S. Commodity Futures Trading Commission (CFTC):

I write in support of the Commission approving Kalshi's proposal for electoral prediction markets.

My name is Daniel Gorfine, and I am the former chief innovation officer and director, LabCFTC at the U.S. CFTC. I am the founder and CEO of Gattaca Horizons, co-founder of the Digital Dollar Project (DDP), and adjunct professor at the Georgetown University Law Center.

The Commission is receiving many letters in support of Kalshi's application from esteemed academics, economists and leaders, including Jason Furman, former Chairman of the Council of Economic Advisers under President Obama.[1] I agree with the arguments made by Mr. Furman and others in terms of the informational and hedging value provided by prediction markets, including with respect to election outcomes. Additionally, contracts regarding generalized election outcomes that are well-regulated with proper contract limits should mitigate any perceived risks related to election integrity.

Rather than repeat what the Commission no doubt will hear from many regarding the value, efficiency, and accuracy of election prediction markets, I will focus on two discrete items worth additional consideration.

The first is that the Internet has created new public forums whereby individuals can exchange value and information seamlessly. We have seen the proliferation of social media, e-commerce and related consumer review platforms, forums that allow discussion on a range of topics, and even crowdfunding platforms for raising or investing money. Underpinning much of this democratization is the hope that there is "wisdom in the crowd."

Unfortunately, as we have seen far too often, there are a range of motivations and incentives that may result in the propagation of misinformation across Internet and mobile platforms, whether by way of fraudulent reviews, fake news, poor-quality polling, or fraudulent postings intended to manipulate markets.

[1] https://comments.cftc.gov/PublicComments/ViewComment.aspx?ID=69708&GUID=264324ae75cb-4c97-9d45-62baa1877335.

One solution that can help solve many of these challenges is requiring people to “put their money where their mouth is.” In other words, informational models that require contributors to have “skin in the game” when opining or contributing to public discussion is a great way to disincentivize the propagation of misinformation. The overall integrity of such informational exchange should accordingly yield cleaner and more accurate information across whatever subject is being considered.

Against this backdrop, election prediction markets can cut through the noise of those peddling misinformation regarding important election events that undoubtedly impact the American economy and individual economic planning. The information resulting from such markets can be used to counter or check other sources of information, and provide individuals, researchers, market participants, and policymakers another key data point when making decisions. This value should not be underestimated.

A second consideration is that it is always preferable to channel activity with societal benefit into well-regulated constructs rather than suppressing such activity and driving it into the shadows. More specifically, demand for election prediction markets will likely spill into unregulated markets or offshore marketplaces outside the purview of U.S. regulators, as we have already seen. For this reason, it would be far better policy to subject such activity to oversight, monitor and measure outcomes, and then tailor regulations to solve for any risks that are identified.

I thank the Commission for the opportunity to provide comment on this issue and urge approval of what would be a beneficial innovation for markets, hedging, and information gathering.

Sincerely,

Daniel Gorfine

September 23, 2022

SUBMITTED VIA CFTC PORTAL
Secretary of the Commission
Office of the Secretariat
U.S. Commodity Futures Trading Commission
Three Lafayette Centre 1155 21st Street, N.W.
Washington, D.C. 20581

Dear Chairman and Commissioners of the Commodity Futures Trading Commission:

I am writing to support the Kalshi Exchange's request to list contracts related to the outcome of Congressional elections.

My name is Greg Kuserk, and I served at the Commission for 33 years in various capacities. My career there began in 1987 in the Research Section of the Division of Economic Analysis, where I eventually served as a Senior Economist. I served as the Economic Advisor to Commissioner Sharon Brown-Hruska and as her Chief of Staff during her tenure as Acting Chairman. I also served as Deputy Director of Market Surveillance in the Division of Market Oversight (DMO) and as Deputy Director of Product Review, also in DMO. Now retired, I am grateful for the time I was able to serve at the Commission and the accomplishments I was part of over the years. These accomplishments included fostering major industry innovations, such as the development of regulations for hybrid instruments/structured notes and swap contracts that produced meaningful value to market participants and the public. I also worked closely with the Division of Enforcement as both an expert witness and consultant on numerous actions related to illegal off-exchange activity. My interest in providing the comments below is to be able to share the institutional knowledge I developed over my years at the Commission to assist you in reaching a decision with respect to the products before you.

I encourage the Commission to recognize the value and importance of election markets. Although Event Contracts have not historically been the type of instruments that the Commission has been charged with regulating, Congress more recently in Dodd-Frank has seen it appropriate to authorize the Commission to regulate these markets. As the Commission has recognized through its various enforcement and similar actions—for example Intrade, the Iowa Electronic Market, PredictIt, and Nadex—on election markets, these markets have been appropriately determined to be within the Commission's jurisdiction under the Commodity Exchange Act. While Event Contracts are relatively new, the Commission is the appropriate choice of regulator. I believe that the Commission, through its staff, has significant expertise in regulating important and valuable markets, and I have no doubt that it can successfully regulate these markets too.

What I would like to offer to the Commission in this comment letter is an expansion on my views as to what I see as the most important issues involved in approving these election contracts. I see three issues. First, I want to clarify that Event Contracts differ from futures and options contracts and present different considerations. Second, even though they are new to the scene, Congress has placed these contracts under the Commission's jurisdiction, and the Commission has acted on that grant. Third, these contracts are not gaming, and are in the public interest because they essentially are a competitor to opinion polls, and likely a better product.

Futures or Options

Event Contracts are not futures or options and they do not have the hallmark of futures and options of being based on a price. As an example, if the price of corn goes up by x or down by y, the price of the futures contract will roughly change by x or y. For an option, the contract will go in- or out-of-the-money based on the price change of the underlying commodity. If in-the-money it will rise or fall in sync with the underlying price change. Event Contracts are not based on an underlying price. Given that these are not traditional futures or option contracts the question is whether Congress has given the Commission the authority to regulate them and whether the Commission has assumed that authority. I address this question next.

Congressional and Commission Approval

While I am not offering a legal opinion here, as discussed above I do believe that the language in the Act regarding Event Contracts shows that Congress entrusted the Commission with regulating these markets. I also note that actions taken by the Commission do establish that the Commission, more likely than not, has jurisdiction over these contracts. Regardless of how the Commission ultimately decides on the products before its consideration now, I encourage that you take this opportunity to clearly state the Commission's position on these contracts.

These Election Contracts are Valuable Contracts and are not Gaming

Because Event Contracts are not futures or options, they present different considerations to the Commission. One useful factor that the Commission can use in deciding whether to approve an Event contract is if the contracts are valuable in a public interest sense. That leads to the question of whether election contracts are valuable in a public interest sense. I argue yes.

These contracts are not gaming. Elections are events that are very important to the public, and there is a very strong public interest in having accurate data regarding elections. This is clear from the very prominent place that election polling plays in society. As stated above, these contracts will benefit the public interest by giving the public data that would complement or even compete with opinion polls, but with the advantage that participants in the market have a

monetary stake in their opinion. Elections have far more importance in a public interest sense than sporting events or other trivial matters. The public is better served by a regulated market that is subject to oversight and surveillance than by opinion polls that are unregulated and where participants have no incentive in providing sincere responses.

My recommendation is that the Commission approve the request by the Kalshi Exchange to list political event contracts and election contracts. I would also encourage the Commission to take this opportunity to revisit the 2008 Concept Release (73 Fed Reg 25669) and provide additional clarity on the types of events that are appropriate for Commission regulation.

I am grateful for the opportunity to give input on this matter, and am confident that these important markets will be an important addition to the markets that thrive under the Commission's regulation.

Sincerely,

Gregory Kuserk

Dear Commissioners,

My name is Greg Sirotek. I am the co-founder and CEO of Moneytree Power, an industry leader in bringing solar power to rental properties. We work with owners and renters of rental properties to find the right solar panel financing structure–either lease or ownership–to maximize total returns. We handle all of the installation work, as well as billing, payments, onboarding, performance monitoring and more. Political control has a major impact on my company's financials, and the CFTC should permit contracts that allow businesses and individuals to manage that risk to be publicly accessible for trading.

Congress has an incredible influence over the future of the zero-carbon energy industry, particularly the solar industry. The recent passage of the Inflation Reduction Act (IRA) was a major step forward, but it was only part of the battle.[1] Specifically, the IRA entitles taxpayers to an uncapped, nonrefundable credit equivalent to 30% of eligible expenses. The bill also temporarily extends the Section 45 Production Tax Credit for solar production.[2] These renewable energy credits can always be shrunk or expanded by future Congresses. The IRA may have created a $27 billion green bank, but a future Congress can always slash its budget (or grow it, depending on their political inclinations).

Naturally, the existence and size of these credits has a large impact on our company's finances. The credit de facto makes all solar purchases 30% cheaper for buyers. As a result, a purchase is far more attractive to millions more people than before. Running a company that's in the business of working with rental property owners to buy/rent, install and manage solar panels, if the universe of potential solar customers grows, the universe of our customers do as well. These credits are an incredible boon to our bottom line. One report from researchers Princeton, Dartmouth, Evolved Energy and Carbon Impact Consulting[3] estimates that the Act's provisions will *double* total investment in wind and solar photovoltaic power compared to the baseline without the act. Any risk that these temporary credits, subsidies and investments could expire or get cut would thus be highly detrimental to our bottom line.

Given the respective differences in the two parties' positions on the importance of climate change mitigation, renewable energy development and the deficit, the risk profiles depending on which party is in power is vast. An event contract which pays out on the basis of Congressional control would allow our business to manage this previously unhedged risk. While it's true that not all traders in the markets will be hedgers like myself, those non-hedgers are crucial as they become the individuals who accept the risk transfer from hedgers. Risk management tools shift

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[1] https://thehill.com/opinion/congress-blog/3611091-passing-ira-was-half-the-battle-now-the-real-work-begins/

[2] https://www.wiley.law/alert-The-Inflation-Reduction-Act-Provides-Potential-Game-Changing-Benefits-for-US-Solar-Industry

[3] https://repeatproject.org/docs/REPEAT_IRA_Prelminary_Report_2022-08-04.pdf

risk from one party to another–as someone who would like to offload risk, I need people on the other side willing to accept it.

Election contracts serve the public interest by giving business owners like myself the ability to manage and reduce my financial risks, allowing me to focus on delivering the best product available to my customers. I hope the CFTC recognizes that reality and allows them to proceed.

Secretary of the Commission
Office of the Secretariat
U.S. Commodity Futures Trading Commission
Three Lafayette Centre 1155 21st Street, N.W. Washington, D.C. 20581

Dear Chairman and Commissioners of the Commodity Futures Trading Commission:

I am writing in support of the Commodity Futures Trading Commission approving Kalshi's proposal for electoral prediction markets.

I serve as a strategic advisor to entrepreneurs, policymakers, investors, and philanthropists who are working on a wide range of issues in regulated sectors such as education, workforce training, climate technologies, and telecommunications. I am also a non-resident senior fellow at the American Enterprise Institute and previously served as a White House domestic policy advisor for President Bush and as Deputy Policy Director for the Secretary of Commerce.

Many of the organizations I work with develop multi-year policy agendas that seek to advance reforms to address pressing societal challenges. This often involves assessing the political environment and forecasting emerging political trends that might necessitate a change in strategy, grantmaking, or coalition building. I frequently use prediction markets, when they are available, to complement other sources of information to help inform these decisions and strategies.

Predictions markets provide valuable forecasting.

Political prediction markets provide valuable forecasting data that contributes to a better understanding of current events and possible future outcomes. An electoral prediction market does not replace other methods of forecasting or analyzing information; it rather adds an important tool to help make better informed decisions.

Prediction markets are similar in many respects to other markets. The price of a stock, bond, or a commodity future is in a sense a forecast of the value of an unknown future, be it the value of a commodity, the expected revenues of a business, or the business outcome resulting from an acquisition. The forecasts represented by these prices provide information that drives decisions in a variety of sectors. Farmers, for example, routinely use futures markets to make decisions about which crops to plant. Political prediction markets can do the same for those who are navigating a constantly evolving political landscape in order to manage risk and maximize their impact.

Prediction markets offer several benefits.[1] First, the market mechanism allows for near real-time incorporation of new information. In contrast, other tools, such as public polling, only offer a snapshot in time and can lag in reflecting the shifts in public sentiment as situations change.

[1] Erik Snowberg, Justin Wolfers, and Eric Zitzewitz, "Prediction Markets for Economic Forecasting," (National Bureau of Economic Research, July 13, 2012), https://www.nber.org/papers/w18222.

Second, the market mechanism creates a financial incentive for individuals to express what they *believe* will happen, not what they *hope* will happen or even necessarily want to have happen. This too is better than relying on many of the alternatives. For example, political analysts can provide insight but may have incentives to generate support for a particular position or outcome. Or social pressure sometimes leads individuals to share what they believe is the "right" opinion even if it differs from their private views. Recent research has found that across all demographics, every subgroup had multiple issues with a double-digit gap between public and private opinion.[2] One consequence is that individuals may publicly misrepresent their own private views in public polling or focus groups.

Finally, participants may not individually have all the needed information, but the market mechanism creates an incentive to reveal what they know, which is then pooled to produce the best estimate or forecast.

Political election markets have practical applications.

We need a clearer regulatory roadmap that would allow for more, not fewer, prediction markets to contribute to our understanding of emerging events and outcomes.

For example, prediction markets could play a greater role in our pandemic response. A 2005 prediction market correctly predicted the then-current level of seasonal flu activity 71 percent of the time nearly two weeks ahead of clinical data.[3] Such a market would have been invaluable to inform our nation's pandemic response and indeed could still be valuable information given the uncertainty of future waves and variants. Steven Phillips, a medical epidemiologist and the vice president for science and strategy for the Covid Collaborative suggests that "applying a detached prediction market lens approach may produce provocative — and perhaps more accurate — pandemic forecasts than pure evidence-driven approaches."[4]

There are numerous public benefits to the information provided in election prediction markets including helping organizations forecast the political landscape in order to make better strategic decisions. This is true not only for businesses and trade associations, but also philanthropies and non-profits in heavily regulated sectors that need to navigate dynamic policy and political environments.

Election markets also provide important information that entrepreneurs and investors can use when assessing the regulatory and political risk associated with new business ventures. Reducing even a little uncertainty can be the difference in unlocking the capital to support

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[2] "Populace Insights: Private Opinion in America" (Populace), https://populace.org/research.
[3] Philip Polgreen et al., "Use of Prediction Markets to Forecast Infectious Disease Activity" (Clinical Infectious Diseases, January 15, 2007), https://academic.oup.com/cid/article/44/2/272/330878.
[4] Steven Phillips, "Prediction Markets and the Future of Covid-19" (Stat, September 2, 2022), https://www.statnews.com/2022/09/02/prediction-markets-and-the-future-of-covid-19/.

entrepreneurs tackling climate change, improving student education outcomes, or expanding access to healthcare.

Benefits outweigh the risks.

Kalshi's proposal does not pose a risk to the integrity of the U.S. election system. Election trading is a normal procedure in other established, strong democracies like the U.K., Australia, and Ireland. PredictIt and other tests in the United States have proven fruitful for researchers and the public. The valuable insights provided through a regulated election market far outweigh any of the potential risks.

Election markets in particular have proven to be a powerful tool for forecasting elections and are typically more accurate, timely, and complete than alternative methods such as polling. They would provide significant benefits to voters, the media, philanthropies, non-profits, investors, and private business. Approving Kalshi's submission would be a step in the right direction for the Commission and promotes the public interest.

Sincerely,

John Bailey

From: Alex Bouaziz
Organization(s): Deel

Comment No: 70749
Date: 9/23/2022

Comment Text:

To who it may concern,

I'm Alex Bouaziz, the CEO & founder of the Deel, the world's leading payroll and expense management software company. We are writing to support the legalization of election prediction markets in the United States.

As business owners, we are well aware of the impact of government changes on the bottom line of American businesses. Changes in tax law, for instance, do not simply affect the amount one has to pay today. They may affect the viability of a vast number of investments that a business may make as well. In addition, changes in immigration law may harm the ability of a tech startup to attract the best talent from around the world, if those changes limit the accessibility of H-1Bs or other visa categories. Game-changing engineers can be anywhere in the world, and any constraint on a startup's ability to find and hire them could cause a major financial loss. As a result, greater restrictions on immigration would harm Deel and many other companies. In particular, since Deel is a company that helps firms hire the best candidates from all around the world, we are particularly impacted by changes in immigration law. These two examples are far from exhaustive, but constitute two representative substantiations of the broader principle that the economic consequences of federal policy can be very real.

Perhaps the biggest channel by which federal policy transmits to small businesses are changes in the overall business environment. Federal policy regarding automatic stabilizers, fiscal stimulus, the federal debt, and public infrastructure can affect the level of growth in the economy, the national interest rate and the overall level of price growth. Those variables in turn can have enormous impacts on a company like Deel, which provides expense management and payroll services to many fast-growing startups. If the number of startups shrinks due to a hostile business environment, then that would harm our bottom line.

Over the last year, we have seen numerous policy priorities from members of Congress on both sides of the aisle that make those differences stark to even a casual observer. These represent risks to our balance sheet, and to millions of others. A product that would help us reduce our exposure to political changes would thus help manage our risk, and allow us to focus on delivering the best product we can to our customers.

205 Pennsylvania Ave., SE
Washington, DC 2003

September 23, 2022

SUBMITTED VIA CFTC PORTAL

Secretary of the Commission
Office of the Secretariat
U.S. Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, N.W.
Washington, D.C. 20581

Re: Questions on the KalshiEX, LLC "Will <party> be in control of the <chamber of Congress>?" Contracts for Public Comment

Dear Chairman and Commissioners:

Aristotle International, Inc. ("Aristotle"), which acts as clearing house and service provider to Victoria University of Wellington's PredictIt market, supports offering political event contracts on regulated exchanges.

Background

Kalshi cited trade statistics from the PredictIt Market in its application to the CFTC. Aristotle agrees that the history of the operation of the PredictIt Market and its regulatory treatment by the CFTC are relevant to the CFTC's decision to approve or decline Kalshi's proposal.

PredictIt began operating pursuant to a No Action Letter issued to Victoria University by the Division of Market Oversight in 2014.[1] Market statistics have been widely cited in media and among investment analysts often as superior to polling or election models.[2] PredictIt data has

[1] CFTC Letter No. 14-130.

[2] See, e.g., A Betting Man with a Plan for America, *Wall Street Journal* (Sept. 9, 2022) https://www.wsj.com/articles/a-betting-man-with-a-plan-to-save-america-poker-odds-school-choice-war-climate-policy-donor-markets-prediction-invest-11662755750; Bernard Stanford, There's a Glorious Website Where You

been used by students and academics at over 130 universities across a wide range of subjects including microeconomics, political behavior, computer science, and game theory.

In May of 2019 Aristotle submitted a petition, supported by Victoria, urging the Commission to use it's 4(c) authority to develop a tailored regulatory regime for event markets consistent with the Commission's 2008 concept release on event markets.[3] Regrettably from our perspective the 4(c) petition received no formal response from the Commission or staff. In 2021 Aristotle filed an application for recognition as a Designated Contract Market, recognizing that certain questions that historically had been listed on PredictIt were by then permitted on DCMs. The Victoria NAL was withdrawn by the CFTC in August of this year with a direction to stop all trading by February 15, 2023.

Aristotle is contesting the withdrawal of the Victoria NAL and views the precipitous effort to end the Market as unfortunate, unnecessary, and unexplained. The NAL structure did and still can provide room for experimental, educational, and emerging markets and as a potential prelude to more fully regulated activity. At the same time, Aristotle supports efforts to stand up an improved regulatory structure for prediction markets.

Among the lessons bearing on Kalshi's petition that the Commission can draw from PredictIt's experience are:

- Efficiently run political prediction markets are not readily susceptible to manipulation (Commission Question 16) and
- Political prediction contracts are in the public interest (Commission Question 12) as evidenced by the high degree of investor interest, the use of market data by investment analysts and news media, and the use of market data by academic researchers.

In summary, the experience of Victoria and Aristotle with PredictIt shows that there is huge interest among American voters and investors in political prediction markets, that there is tremendous social and economic value in those markets,

Commission Question 1: The Proposed Contracts do not Constitute Gaming as Referenced in Commission Regulations and the Commodity Exchange Act.

Before addressing statutory and regulatory definitions of gaming, there is an obvious and critical distinction between binary prediction markets as operated by PredictIt and Kalshi and

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Can Bet on Politics, and the U.S. Is About to Kill It, Slate (Aug. 14, 2022), https://slate.com/business/2022/08/predictit-cftc-shut-down-politics-forecasting-gambling.html; Victor Reklaitis, Betting Markets Now See Democrats Keeping Their Grip on Senate in Midterm Elections, MarketWatch (Aug. 4, 2022), https://www.marketwatch.com/story/betting-markets-now-see-democrats-keeping-their-grip-on-senate-in-midterm-elections-11659542352; A.G. Gancarki, Donald Trump Retakes 2024 Prediction Market Lead from Ron DeSantis, Florida Politics (July 7, 2022), https://floridapolitics.com/archives/537385-donald-trump-retakes-2024-prediction-market-lead-from-ron-desantis/; UBS Editorial Team, ElectionWatch:Potential Outcomes of the Midterms, UBS Wealth Management USA (Apr. 22, 2022), https://www.ubs.com/us/en/wealth-management/insights/market-news/article.1563885.html.

[3] Concept Release on the Appropriate Regulatory Treatment of Event Contracts, 73 Fed. Reg. 25669 (May 1, 2008)

gaming. Prediction market positions are tradeable. Gaming bets and wagers generally are not. While the final payout structures in gaming and prediction markets are similar -- all to the correct side, and nothing to the incorrect side – the free tradability of prediction market positions prior to close makes the uses and behavior of prediction market positions quite different from gaming. To take one example from PredictIt, in the 2020 Presidential Market, there were 155,534,732 shares purchased. Of that total, 95,183,440, over 61%, were sold before expiration. The typical trader in that market did not buy and hold shares to the payout date for an all or nothing result, but instead made an investment, observed a profit or loss, and exited the market via a trade with a payout of some amount other than the binary $0 or $1. Similar behavior is evident in non-binary futures markets where many traders take and then exit positions before settlement dates.

Free tradability and the ability to exit positions prior to the triggering event is such a fundamental distinction from ordinary gaming that parsing of the meaning of whether a binary prediction contract "relate[s] to" gaming seems unnecessary. But we believe that a correct reading of the statute, especially in light of the development of trade practices since 2012, also leads to the conclusion that binary prediction contracts such as those proposed by Kalshi are not gaming nor do they relate to gaming.

Commission Regulation 40.11(a)(1) prohibits contracts that "involve, relate to, or reference… gaming." In its Nadex order, the Commission rejected the commonsense reading that the underlying commodity behind the contracts needed to be based upon the outcome of a game (such as cards or football) to fall within the prohibition and stated that allowing the contracts would be akin to allowing gambling on elections. Per the Nadex order, elections themselves were not gaming, but the act of investing in the proposed contracts on elections constituted impermissible gaming. This, of course, is the same economically uninformed argument that has been made against commodity markets from their inception. Similar arguments could be made regarding any contract on an event that lacks underlying cash value, but the Commission has approved or allowed hundreds of such contracts.

Consider several contracts that are currently or have recently been hosted on Kalshi. On this exchange, traders can speculate as to the temperature in New York City,[4] the number of major hurricanes in 2022[5], whether a Category 3 hurricane will hit New Jersey in 2022,[6] whether the federal government will shut down,[7] who will win the Oscar Awards[8], and whether certain bills will pass[9], among others. Cantor Exchange also lists similar binary options, including hurricane landfall, rainfall, and snowfall event contracts.

One would struggle to come up with a definition of gaming that excludes questions about future weather events or the Academy Awards but includes the composite outcome of the midterm elections. The Nadex order cited the Unlawful Internet Gambling Enforcement Act to

[4] https://kalshi.com/events/HIGHNY-22SEP16/markets/HIGHNY-22SEP16-T76
[5] https://kalshi.com/events/HURCTOTMAJ-22NOV30/markets/HURCTOTMAJ-22NOV30-T1
[6] https://kalshi.com/events/HURNJ-22NOV30/markets/HURNJ-22NOV30-T3
[7] https://kalshi.com/events/GOVSHUT-22OCT01/markets/GOVSHUT-22OCT01
[8] https://kalshi.com/events/OSCARPIC-22/markets/OSCARPIC-22-PIZZA
[9] https://kalshi.com/events/TECHREG/markets/TECHREG-23JAN03

argue that the terms "bet" and "wager" can be defined as "the staking or risking by any person of something of value upon the outcome of a contest of others.[10]" Even if one accepts that those terms are equivalent to the term "gaming," this definition cannot be read to be consistent with the current regulatory environment. Both the outcome of the Academy Awards and the passage of legislation clearly constitute the outcome of a contest of others.

Event markets are also distinguishable from gaming because event markets serve an economic purpose. Traditional gaming provides a venue for participants to place a bet on the outcome of a sports contest or other event, and its primary and ultimate purpose is to benefit the trading participants and the operator of the venue who is the counterparty to the trade. Gambling casinos, moreover, do not release their trading data or aggregate such data to provide non-participants any benefit from the gambling activity. On the other hand and as discussed further below in response to Commission Question 11, event markets serve as information aggregation vehicles for the benefit of both participants and non-participants.

Commission Question 6: Election Contracts Serve an Economic Function

The Commission asks a series of questions related to hedging with only the fifth of those questions referring to economic utility. As discussed below, we believe that political event contracts have hedging utility. While hedging is the most commonly cited economic purpose of commodities contracts this series of questions suggests an unreasonably narrow view of economic purposes restricted to cash financial exchanges. Economic purposes are found in many non-financial exchanges.[11]

In the case of political prediction markets, the social utility of the market is the information generated on the likelihood of a particular political outcome. Investors, the news media, political actors, and citizens are all intensely interested in advance predictions of election outcomes as evidenced by the great interest in polling and political modeling as well as by extensive media punditry. Some of that interest is directly related to likely economic impacts of election results but much of that interest is related to citizens' stakes in their own government and the Commission should not dismiss that interest simply because it is not hedging activity. Because prediction markets have been shown to produce more accurate forecasts than polling, pundits, or election models, the Commission should recognize that there is an economic purpose in well-functioning election prediction markets regardless of the amount of hedging carried on in those markets generally or in particular products, however designed or marketed.

Consider, for example, that in the lead up to and on election nights, PredictIt receives many times more visitors than the number of users actively trading on elections. There is a great deal of interest among individuals, many of whom find it difficult and confusing to understand partial election returns as they come in, in using event markets to determine which candidates have an

[10] 31 U.S.C. §§ 5361

[11] *See, e.g.,* The Economics of Dating, Institute of Economic Affairs (2019)https://iea.org.uk/wp-content/uploads/2019/07/The-economics-of-dating.pdf

edge at any given time. In this sense, event contracts provide a similar service to that of traditional news media, who offer election night programing featuring data experts explaining the meaning of partial returns.

Political prediction markets do, however, have hedging utility. Commentary on "red" and "blue" stocks is widespread in financial literature.[12] A 2013 paper concluded that 4.35 percent of US companies could be labeled as blue meaning their stocks perform better under a Democratic President. Red firms constitute 5.11 percent of stocks. Red and blue stocks are subject to 48 percent higher volatility than colorless ones in election years. An investment strategy of longing and shorting opposite-colored stocks at the beginning of a new administration was projected to generate an abnormal return of 9.3 percent per year.[13] A projected Alpha of 9.3 percent clearly presents a hedging opportunity to seek returns or protect against losses in advance of changes in administrations.

To give a concrete recent example, President Biden issued an Executive Order revoking the permit for the Keystone XL Pipeline on his first day in office.[14] The fate of the Keystone pipeline was frequently discussed during the campaign, so Biden's EO was not unexpected. Investors in Keystone's operator and related companies clearly could have hedged their positions based on projected outcomes in the Presidential race.

Partisan control of Congress has similarly predictable if less immediate consequences for red stocks (defense sector, fossil fuels) and blue (health care, renewable energy) leading to obvious hedging opportunities. Consider, for example, the policy changes that followed the change in Senate control after the 2020 election. Upon learning that that Democrats had won both Georgia runoff elections and thus had taken control of the chamber, House Speaker Nancy Pelosi said that the results "change the dynamic in the Senate, but also in the country.[15]" Senator Wyden (D-OR), the current Chairman of the Senate finance Committee, said that the change in Senate control "gives us the opportunity to have a very different set of choices.[16]" Among the choices made possible by unified Democratic control of Congress was passage of the American Rescue Plan and the Inflation Reduction Act. This legislation included $1.843 trillion[17][18] in new spending through 2031 along with reductions in spending on prescription drugs and new tax credits for renewable energy and electric vehicle investment.

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[12] *See, e.g.* Do Blue or Red Stocks Perform Better? How Political Polarization Impacts Your Stock Returns, UCI Merage School of Business (October 26, 2021) https://merage.uci.edu/news/2021/10/Do-Blue-or-Red-Stocks-Perform-Better-How-Political-Polarization-Impact-Your-Stock-Returns.html

[13] Red vs. blue stocks: politics and profitability of firms, Yuxing Yan, http://datayyy.com/doc_pdf/red_vs_blue_stocks.pdf

[14] Executive Order on Protecting Public Health and the Environment and Restoring Science to Tackle theClimate Crisis (January 20, 2021) https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/

[15] https://www.politico.com/news/2021/01/06/congress-democratic-takeover-georgia-senate-455333

[16] https://www.politico.com/news/2021/01/08/georgia-senate-democrats-powerful-weapon-budget-456116

[17] https://www.cbo.gov/system/files/2021-03/Estimated_Budgetary_Effects_of_HR_1319_as_passed_0.pdf

[18] https://www.cbo.gov/system/files/2022-08/hr5376_IR_Act_8-3-22.pdf

Markets already anticipate these effects. The iShares Global Clean Energy ETF ($ICLN), an index of equities in the clean energy sector, rallied after Democrats won control of the Senate, increasing by a full 17% between December 31, 2020, and January 8, 2021, far outpacing the Dow Jones Industrial Average which rose by 1.6% during the same period. The Global X Lithium & Battery Tech ETF ($LIT), which tracks companies involved in the production and processing of Lithium, a key element of electric vehicle and other battery production, rose by 14.5% during this same period. Enabling investors to take positions on House and Senate control before elections would allow investors to extend then period and the means with which they could hedge such important policy changes.

Asking whether there are risks that can be hedged only by questions on political control suggests an unreasonably narrow view. If a contract can be used for hedging, it has an economic purpose. The fact that other contracts, alone or in combination, might serve similar hedging purposes does not deprive the congressional control contracts of an economic purpose.

The reality of active hedging related to political outcomes is also demonstrated by the political risk insurance market. There are approximately 60 insurers operating in this market globally offer coverage of up to $1.5 billion per risk.[19] Political risk is also a staple topic at leading business schools including Wharton,[20] Stanford,[21] and Harvard.[22] While political risk insurance has traditionally been offered to US or European-based companies doing business in Africa, Latin America, and parts of Asia, coverage for US-based risks is now under discussion.[23] Insurance clearly is a form of hedging. The large and active political risk insurance market demonstrates incontestably that hedging against political risks has economic value and occurs routinely. Regrettably, political developments in the United States have made the need to hedge against US political risks more pertinent to businesses and investors. Contracts such as those proposed by Kalshi will serve to meet that need both directly and informationally, by informing investors of the likelihood of particular political outcomes.

Commission Question 10: Broader Questions Regarding Contract Design are Suitable for Rulemaking

[19] Political Risk Insurance, NAIC Updated February 25, 2021 https://content.naic.org/cipr-topics/political-risk-insurance. *See, e.g.* https://starrcompanies.com/Insurance/Casualty/Political-Risk; https://www.allianz-trade.com/en_global/news-insights/business-tips-and-trade-advice/what-is-political-risk-and-how-to-protect-against-it.html; https://www.aig.com/business/insurance/political-risk; https://www.lloyds.com/conducting-business/risk-locator/business-guidance/political-risk; https://www.marsh.com/us/services/political-risk/insights/political-risk-map-2021.html; https://www.aon.com/risk-services/crisis-management/political-risks.jsp.

[20] https://knowledge.wharton.upenn.edu/article/companies-can-successfully-navigate-political-risks/.

[21] https://fsi.stanford.edu/publication/political-risk-how-businesses-and-organizations-can-anticipate-global-insecurity.

[22] https://hbr.org/2018/05/managing-21st-century-political-risk.

[23] https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/political-risk-coverage-for-us-may-be-live-issue-after-riots-shake-country-62627872; https://www.policyholderpulse.com/insuring-political-risk-united-states/.

Questions such as whether binary contracts are useful for hedging non-binary economic events may well be suitable for a rulemaking such as the one Aristotle suggested three years ago or a similar undertaking. As we suggested then, there may be aspects of event contract markets that merit different regulatory treatment than existing Commission regimes. That question is not, however, relevant to Kalshi's request for approval of two contracts on non-economic events with binary outcomes. CBOT has been trading options on the Federal Funds rate, a non-binary economic event, since 2006[24] and CME recently initiated trading in event contracts across a wide range of its offerings.[25] While the CME products are technically options on futures, the contracts are economically and operationally identical to binary options. If the Commission has questions about trading activity which has been ongoing for 16 years on the largest market it regulates, it should address those inquiries in a broader proceeding. Such questions are not, however, a valid reason to delay action on Kalshi's request.

Commission Question 11: Event Markets Serve an Information Aggregation Function Equivalent to Price Discovery[26]

As discussed in response to Question 1, many existing event contracts do not have associated commodity or service prices. Elections are not bought and sold and will not be bought and sold if these contracts are allowed. The likelihood of a particular election outcome is, however, as important in its context as projected pricing for traditional commodities. Traders' collective assessments of the likelihood of a particular political outcome have economic and social value that can be captured, distilled, and made available to the public via well-functioning political prediction markets.

Event markets serve an information aggregation function for members of the public—academics, companies, and governments—who use them to further their research, manage their business operations, and set policy. The "price" of the event contract reflects the probability of the specified event or outcome happening. By aggregating individuals' beliefs with respect to an unknown future outcome, event contracts incorporate a wide diversity of thoughts and opinions that serve as a predictive tool for those who use them.

First, researchers use event markets for their studies because the real-time, constantly updating nature of event markets provides a highly refined measure that polls, expert surveys, and other methods of aggregating beliefs cannot easily replicate. For example, when presidential candidate Rick Perry made a gaffe during a 2012 Republican primary debate, an event market contract on his chances of winning the GOP nomination changed within minutes, and the odds of him receiving the nomination "halved within seconds."[27] More recently, PredictIt odds on Brett Kavanaugh's Supreme Court nomination changed dramatically while Christine Blasey Ford was

[24] https://www.cmegroup.com/media-room/press-releases/2006/8/21/cbot_binary_optionsonfomctargetratecontractssetnewvolumerecord.html
[25] https://www.cmegroup.com/activetrader/event-contracts.html
[26] Portions of this response reiterate material from Aristotle's 20194(c) petition.
[27] Catherine Rampell, Rick Perry's Intrade Flash Crash, N.Y. TIMES (Nov. 10, 2011), https://economix.blogs.nytimes.com/2011/11/10/rick-perrys-intrade-flash-crash/.

testifying.[28] Event markets also have a more successful record of forecasting election outcomes than poll aggregators and can provide additional insight into market events. One study found that prediction markets are more accurate and have half the forecast error when compared to polls.[29] Another study used PredictIt data to find that more political amateurs entered congressional races as Donald Trump's nomination for president became more likely, suggesting that his nomination had important consequences that went beyond the presidential race.[30] In the 2018 U.S. midterm elections, PredictIt outperformed FiveThirtyEight, a popular political analysis website focused on reviewing and aggregating public opinion polling, in correctly predicting U.S. Senate races.[31] These types of objective, up-to-the-minute, and accurate forecasting assessments are unique to event markets and prove their value to researchers.[32]

Businesses and government agencies also use event markets to forecast internal and external events, showing the economic and social utility of these markets beyond mere price signals.[33]

Commission Question 12: Proposed Contracts Serve the Public Interest

As outlined in the Background section above, the strong investor, media, and academic interest in political prediction markets demonstrates that these markets are in the public interest. The Commission's statutory test is to determine that proposed markets are not contrary to the public interest. The test is stated as a double negative because of a presumption that the primary purpose of most markets is to serve private interests, which is permissible so long as that activity is not contrary to the public interest. In the case of political prediction markets, however, the public interest served is arguably at least as important as the private interests involved. The public benefits from reliable, accurate, widely available, and transparent information about likely

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[28] *Brett Kavanaugh May Have Fared Better with Senators than Voters*, THE ECONOMIST (Sep. 28, 2018), https://www.economist.com/graphic-detail/2018/09/28/brett-kavanaugh-may-have-fared-better-with-senators-thanvoters.

[29] Erik Snowberg et al., *Partisan Impacts on the Economy: Evidence from Prediction Markets and Close Elections*, NAT'L BUREAU OF ECON. RESEARCH (Jan. 2007), https://www.nber.org/papers/w12073.pdf. *See also* Concept Release, supra note 8, at 25670 ("Indeed, trading data generated by some . . . election contractsarguably have produced better predictive indicators than data obtained from professional polling organizations."); Joyce E. Berg et al., Prediction Market Accuracy in the Long Run, 24 INT'L J. FORECASTING 285, 286 (2008), https://www.sciencedirect.com/science/article/pii/S0169207008000320 (finding that political event markets are more accurate than political polls in forecasting elections in the long-term).

[30] Gavin Riley & Jacob Smith, *The Trump Effect: Filing Deadlines and the Decision to Run in the 2016 Congressional Elections*, J. OF APPLIED RESEARCH IN CONTEMPORARY POLITICS (Aug. 30, 2018), https://doi.org/10.1515/for-2018-0019.

[31] Harry Crane, *Polls, Pundits, or Prediction Markets: An Assessment of Election Forecasting*, RESEARCHERS.ONE (Nov. 9, 2018) (Under Review), https://www.researchers.one/article/2018-11-6.

[32] *See also* Erik Snowberg et al., *Prediction Markets for Economic Forecasting*, BROOKINGS (June 13, 2012), https://www.brookings.edu/wp-content/uploads/2016/06/13-prediction-markets-wolfers.pdf (arguing that prediction markets have a number of attractive features: they quickly incorporate new information, are largely efficient, and impervious to manipulation); Erik Snowberg et al., *How Prediction Markets Can Save Event Studies*, NAT'L BUREAU OF ECON. RESEARCH (Apr. 2011), https://www.nber.org/papers/w16949.pdf. (arguing that "by augmenting event studies with prediction markets, other scholars will no doubt come up with creative ways to address many other unanswered questions").

[33] See, generally, Aristotle 2019 4(c) petition

political developments far more directly than the public generally benefits from similar information about future economic developments. The possibility that the yield curve is inverted, as important as that indicator is, is of intense interest to a limited set of investors but of little note to most Americans. The possibility that party control of Congress is likely to switch is of great interest to most Americans. In the case of these contracts the relatively small proportion of Americans likely to invest will be producing information of great value and great interest to the broader public.

Commission Question 13: The Trading of the Proposed Contracts will not Affect the Integrity of Elections.

In its 2012 order on Nadex's previously proposed political control contracts, the Commission raised concerns that political event contracts had the potential to affect the integrity of elections. Among other concerns, the Commission speculated that positions in prediction markets might give voters a financial incentive to support candidates they otherwise would oppose. The speculation is undermined by the observed behavior of partisans in the PredictIt market. What we see on PredictIt is that individuals bring their political dispositions into the market rather than exporting their profit incentives into their voting behavior. The willingness of partisans to wager in favor of their preferred candidates is a key element of the information gathering function of the market.

Further, the contracts proposed by Kalshi relate to outcomes that are determined by, not merely one election, but hundreds of individual elections that are determined by hundreds of millions of voters. The proposed contracts relate to the composite outcomes of the 2022 House and Senate Midterm Elections. In the 2018 Midterm Elections, over 131 million individuals cast ballots in 435 individual House of Representatives elections and delivered control of the House of Representatives to Democrats.[34] That same year, over 86 million individuals cast ballots in 35 individual Senate elections and reaffirmed Republican control of the Senate. It is self-evident that the individuals who will choose to trade on these contracts will simply not have the ability to significantly affect their overall outcomes. Although the Commission may have reasons to be concerned about contracts that relate to local elections that involve far fewer voters, the size of the federal Senate and House elections makes them impervious to manipulation of the type that concerns the Commission.

Contracts proposed by Kalshi are subject to Kalshi's position limit of $25,000. Compare this position limit to the estimated $5.7 billion spent on the 2018 midterm elections,[35] or the $9 billion that may be spent in the 2022 midterm elections.[36] The numbers involved paint a clear picture: it would be impossible for any individual, or even a consortium of individuals, to influence the midterm elections in a cost-effective manner in support of a $25,000 position.

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[34] https://history.house.gov/Institution/Election-Statistics/Election-Statistics/

[35] https://www.cnn.com/2019/02/07/politics/midterm-election-costs-topped-5-7-billion

[36] https://www.bloomberg.com/news/articles/2022-08-10/political-ad-spending-for-midterms-set-to-hit-record-9-billion

There may be a position size at which manipulation of elections would become a live concern, but Kalshi's $25,000 limit does not remotely approach that level.

Concerns about election manipulation are actually best addressed through appropriate regulation and oversight of political event markets. Offshore markets, to which this activity will continue to flow absent CFTC approval, lack position limits and other anti-manipulation controls.

Commission Question 14: The Proposed Contracts Would Not Facilitate Violations of, or Otherwise Undermine, Federal Campaign Finance Laws or Regulations

The Commission's question about whether the proposed contracts would make it easier for political action committees to sidestep rules limiting or prohibiting coordination with candidate campaign committees appears to be based on a lack of understanding about those rules and how they work in practice. Those rules are concerned with communications between candidates and other political actors, including Super PACs, who run ostensibly independent advertising.[37] If those ads in fact are at the request or suggestion of a candidate or result from substantial discussions with a candidate,[38] they are treated as contributions to the campaign subject to various contribution limits and prohibitions.[39] By their nature then, violations of the Federal Election Commission's coordinated communication rule involve secret, undisclosed communications between a campaign and a PAC or other entity running a campaign ad. A purchase on a prediction market is between one buyer and an unknown counterparty. There is no mechanism by which a PAC or other actor could in purchasing or selling event contracts to an unknown counterparty receive from or exchange with a campaign any information whatsoever.[40] Moreover, the identity of buyers and sellers is known to the clearing house and, if necessary, to regulators, thus the secrecy between parties that is essential to a successful violation of the coordination rules could not be maintained in a regulated market.

Commission Question 15 and 16: Allowing the Proposed Contracts to Trade on Regulated Markets will Reduce Their Susceptibility to Insider Trading and Manipulation.

The Commission is concerned that political event contracts are susceptible to manipulation via insider trading by individuals with access to information that is not readily available to the public. The possibility that individuals or groups may trade on internal, non-public polling data is itself a reason why the Commission should approve these contracts.

The Kalshi Rulebook, in compliance with federal laws and regulations, explicitly prohibits any individual defined as an Insider who is in a position to have material nonpublic information

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[37] 11 CFR § 109, Subpart C.
[38] 11 CFR § 109.21(d).
[39] 11 CFR § 109.21(b).
[40] Further, campaigns already have a very efficient, if controversial, mechanism for sharing informationwith third parties known as "redboxing." *See, e.g., Voters Need to Know: Assessing the Legality of Redboxing in Federal Elections*, Kaveri Sharma, YALE LAW JOURNAL, Volume 130, No.7 (May 2021) https://www.yalelawjournal.org/note/voters-need-to-know

from trading on a contract that relates to said information. (Rule 5.13(s)). There is almost nothing, however, from stopping that same individual from trading a comparable contract on an unregulated exchange. Event markets operating with regulatory supervision are thus in a better position to police the manipulation of markets by insider trading than the unregulated offshore exchanges (such as Polymarket) that currently serve as liquid exchanges that host a significant share of these trades. Bringing these trades onto federally regulated markets would mitigate the issues that the Commission is expressing concern over.

The Commission's question poses a classic insider trading scenario. There is no reason to suppose that insider trading by campaign staff poses any greater threat than insider trading by corporate insiders and the same rules and tools can be applied to prevent such abuses.

The Commission's suggestion that a *per se* ban on investing in control of Congress contracts should be imposed on political entities and persons working for such entities casts an unreasonably broad net. There is no more reason to hold *per se* that an individual working for a single House campaign possesses inside information material to control of the entire House involving approximately 800 general election campaigns[41] than to hold *per se* that an employee of an individual company listed in a broad market index has information material to the direction of the S&P 500 or NASDAQ 1000 indices. Even the 34 Senate races in a typical cycle exceed the number of component stocks in the Dow Jones Industrial Average and no one has suggested that employees of component companies be *per se* prohibited from trading in DJIA Futures.

Commission Question 17: The Commission Should Consider the Widespread Availability of Offshore and Unregulated Political Event Contracts Involving US Elections in Determining that it is in the Public Interest to Encourage Those Transactions to Occur on Regulated Venues.

Despite the Commission's action against Polymarket,[42]multiple unregulated or offshore venues continue to offer political prediction contracts to US investors.[43] MyBookie, for instance, currently lists odds on the 2024 Republican and Democratic Presidential nominations and on the Presidential general election outcome.[44] MyBookie has offered similar US political contracts at least since the 2018 midterm elections.[45] Another event market operating outside regulation, Augur, operates on the Ethereum blockchain and recorded trading of over $2 million in political event contracts on the night of the 2018 midterm elections,[46] more than was traded on the same

[41] Two candidates in most of of 435 House races, excluding uncontested races but adding additional candidates in jurisdictions such as Louisiana and Alaska where multiple candidates appear on the General election ballot.
[42] https://www.cftc.gov/PressRoom/PressReleases/8478-22
[43] While some of these sites use geofencing or geoblocking, those restrictions are evaded easily using any one of several techniques including VPNs, smart DNS services, proxy servers, or the tor network combined with cryptocurrency accounts. *See, e.g.* https://vpncentral.com/geo-fencing-restriction/.
[44] MYBOOKIE, https://mybookie.ag/ (last visited September 21, 2022).
[45] William Cummings, Smart Money is on Republicans Keeping Control of House, Betting Site Odds Say, USA TODAY (Oct. 28, 2018), https://www.usatoday.com/story/news/politics/onpolitics/2018/10/28/midterm-electionsbetting-odds/1800052002/.
[46] *Ethereum dApp Augur Records $2 Million in Bets in US Midterms*, CCN (Nov. 7, 2018),

date on PredictIt. Augur continued their political prediction contracts during the 2020 Presidential campaign.[47] Moreover, large and sophisticated US-based firms are legally able to participate in UK and other markets allowing betting on US elections through non-US subsidiaries or affiliates. One large US investment fund reports having taken a $500 million position on the 2020 US Presidential election outcome.[48] Where individual traders are able easily to participate in offshore or unregulated markets using cryptocurrencies and large entities are able legally to participate in and profit from overseas trading on US election outcomes the public interest clearly supports bringing this activity into a regulated US market.

Respectfully submitted,

John A. Phillips,
Chairman and CEO

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https://www.ccn.com/ethereum-dapp-augur-records-2-million-in-bets-in-us-midterms/. This point is made, and reference cited in our 2019 4(c) petition.

[47] *Augur Users Bet $111,000 on Presidential Elections After Biden, Trump Debate*, Crypto Briefing (September 30, 2020) https://cryptobriefing.com/augur-users-bet-111000-presidential-elections-biden-trump-debate/

[48] A Betting Man with a Plan for America, *Wall Street Journal* (Sept. 9, 2022)

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September 24, 2022

SUBMITTED VIA CFTC PORTAL
Secretary of Commission
Office of the Secretariat
U.S. Commodity Futures Trading Commission
Three Lafayette Center
1155 21st St, NW
Washington, DC 20581

Re: Review of KalshiEx LLC's proposed Congressional Control Contracts pursuant to Commodity Futures Trading Commission Regulation 40.11(c)

Dear Chairman and Commissioners,

I am writing in support of Kalshi's application to run prediction markets on political outcomes. I will argue that prediction markets offer significant public benefits with minimal downsides.

I am a Professor of Economics at Dartmouth, and a significant component of my research agenda involves prediction markets. My work includes both studies of prediction markets themselves and research that uses prediction market prices as an input to an analysis. I attach a bibliography to the end of this letter.

I have found political prediction markets to be particularly useful in tracking the arrival of political news that influences other asset prices, allowing one to understand the economic effects of political outcomes. Examples include prospective analysis of the expected impact of the 2003 Iraq War (Wolfers and Zitzewitz, 2009) and the 2016 Presidential Election (Wolfers and Zitzewitz, 2016 and 2018), as well as retrospective analyses of other Presidential and Congressional elections (Snowberg, Wolfers, and Zitzewitz, 2007a and 2007b). Prediction markets on policy outcomes, such as the corporate tax rate, also informed my analysis of the post-event evolution of beliefs about the consequences of the 2016 election and Brexit vote (Fisman and Zitzewitz, 2019).

In the course of this research, I spoke with numerous financial market participants who find prediction market prices a useful input into their decision making. By aggregating information about political risk, political prediction markets allow investors to focus on other issues, potentially reducing asymmetric information and improving market liquidity. Research on emerging market corporate bond markets have found an analogous role for sovereign bonds (e.g., Dittmar and Yuan, 2008).

In order for markets to be useful, people have to trade in them. If traders are rational and only participate out of a profit motive, unsubsidized markets will unravel, as the less informed investors exit. Traders need to be willing to participate even when they should rationally expect to lose money. Three reasons why they might do so are entertainment, overconfidence, and hedging (Wolfers and Zitzewitz, 2006).

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Markets need to reach a certain scale before they are useful for hedging, and this will likely never happen unless we tolerate markets that are fun and/or on topics about which investors find it easy to be overconfident. Two of the three firms who ran the corporate prediction markets I studied in Cowgill and Zitzewitz (2015) included fun markets. Participants told us that they often started trading for the fun markets, but stayed for the serious ones.

These forces are, or were, clearly also at work at Tradesports, Intrade, Betfair and Predictit. Markets on topics such as sports, or the number of times President Trump tweets, arguably do not provide information on a topic of broad direct economic relevance. Yet they are often the "killer app" that brings traders to the markets that do.

Political prediction markets, however, are the rare combination: they are economically useful, but also fun to trade in and on topics that inspire strong and sometimes overconfident opinion. So the case for allowing Kalshi to run them is two-fold: they will both provide useful information in themselves, as well as likely augment the liquidity of the many other useful markets Kalshi is running, on topics such as COVID, climate change, and air transportation congestion.

Finally, your Question 13 raises concerns about politically motivated manipulation of the prices in the markets. As Hanson and Oprea (2009) correctly argue, manipulation encourages entry to trade against it. In the long run, this improves liquidity and the accuracy of prices. Moreover, the long run often arrives sooner than one might expect, as past suspected episodes of manipulation have involved relatively quick reversion of prices (see e.g., Rhode and Strumpf, 2008), consistent with the lab experiments of Hanson, Oprea, and Porter (2006).

In summary, I strongly support Kalshi's proposal, and hope it, and other proposals like it, are approved.

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September 23, 2022

Mr. Christopher Kirkpatrick
Secretary of the Commission
Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, NW
Washington, DC 20581

Via Electronic Submission

Re: CFTC Review of Public Comment Period of KalshiEx Proposed Congressional Control Under CFTC Regulation 40.11 (Industry Filing 22-002)

Dear Mr. Kirkpatrick:

We thank the Commodity Futures Trading Commission (CFTC) for the chance to submit our perspectives. The Center for Effective Altruism's Long Term Future Fund, which supports our research, aims to influence the long-term trajectory of civilization by making grants that address global catastrophic risks. An important way that we can make progress on problems affecting the future is by making and gaining better access to accurate predictions. The Fund has made grants to a number of emerging prediction platforms that aggregate and refine predictions about future events, including Metaculus and Foretold, with the aim of systematically improving our ability to disseminate good judgments about the future.

Prediction markets in general—and the proposed contracts specifically—have unique hedging and price basing functions, allowing nonprofits to efficiently allocate resources and manage political risks associated with Future Impact projects. Additionally, we see prediction markets as an advanced forecasting and social consensus building mechanism still in its nascency. With time and space to mature, they can help humanity navigate an uncertain future.

Anticipating that the CFTC would solicit comments on this issue, we have, since June 2022, reviewed literature and interviewed a wide array of experts and stakeholders in the political prediction market space, including current and former CFTC staff, lawyers, forecasters, academics, industry leaders, platform operators and traders.

Our core finding is that the proposed election contracts specifically and prediction markets generally can serve the public interest under a reasonable regulatory regime. We hope the CFTC will develop efficient, fair and transparent regulations of event contracts that manage risks

associated with these markets while allowing a competitive industry for prediction markets to develop that serves the public good.

We are available to support, discuss and clarify any of the content in our comments with the CFTC.

Signed,
Pratik Chougule, Principal, Chougule Strategies; Contributor, Star Spangled Gamblers; Consultant, Insight Prediction
Solomon Sia

With
Ozzie Gooen, President, Quantified Uncertainty Research Institute
Nuño Sempere, Researcher, Quantified Uncertainty Research Institute; Forecaster, Samotsvety Forecasting
Flip Pidot, founder and managing director, Sharp Square Capital, LLC
James Grugett, Cofounder & CEO, Manifold Markets
Stephen Grugett, Cofounder, Manifold Markets
Austin Chen, Cofounder, Manifold Markets
Linchuan Zhang, Research Manager, Rethink Priorities

1-4 Do the Contracts Involve Gaming

1. Do these contracts involve, relate to, or reference gaming as described in Commission regulation 40.11(a)(1) and section 5c(c)(5)(C) of the Commodity Exchange Act, or in the alternative, involve, relate to, or reference an activity that is similar to gaming as described in regulation 40.11(a)(2) or section 5c(c)(5)(C) of the Commodity Exchange Act?

2. Should the Commission consider whether similar offerings are available in traditional gaming venues such as casinos or sports books and/or whether taking a position on elections or congressional control is defined as gaming under state or federal law?

3. Do these contracts involve, relate to, or reference "an activity that is unlawful under any State or Federal law" as described in Commission regulation 40.11(a)(1) and section 5c(c)(5)(C) of the Commodity Exchange Act?

4. In determining whether any of these contracts involves an activity that is unlawful under any State or Federal law, should the Commission be influenced by whether state laws permit betting on the outcome of elections or other political outcomes and/or by the prohibition of interstate betting under Federal law?

Meaningfully distinct from pure gaming

During the 40.11 rulemaking comment period, the Commission agreed that the term "gaming" "requires further clarification and that the term is not susceptible to easy definition."[1]

We believe the proposed contracts have important characteristics that distinguish them from clear cases of gaming.

First, skill and knowledge predominate over chance in predicting party control of Congress over the long-run, which indicates that these contracts are distinct from games of pure chance. We know this through our long association, collaboration, and interviews with leading forecasters in existing political prediction markets—in some cases dating back to the Intrade markets. Academic models of prediction markets, such as *Learning Performance of Prediction Markets with Kelly Bettors*[2] also support that prediction markets will differentially reward participants with the most accurate hypotheses.

Second, election markets differ meaningfully from skill based gaming markets such as poker or sports betting because of their economic purpose, either as a hedge or for price basing. These arguments are discussed below in responses to questions 6 through 11.

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[1] 76 Fed. Reg. at 44785.

[2] Alina Beygelzimer, John Langford, and David M. Pennock. Learning performance of prediction markets with Kelly bettors. In International Conference on Autonomous Agents and Multiagent Systems, pages 1317–1318, 2012.

Third, unlike most traditional gaming markets, election markets provide benefits to the public interest even to non market participants. These include: improved forecasting capacity, trust, aggregation, and information dissemination effects, which are discussed below in responses to questions 12 and 17.

Notably, the proposed contracts are similar to offerings that exist in traditional gaming venues in other countries today. For example, online gambling sites Betfair.com (in mainland Europe) and Smarkets (in the United Kingdom) currently offer political betting that is similar to Kalshi's proposal.[3] The presence of similar offerings does not negate that political betting is meaningfully distinct from traditional gaming—for the reasons discussed above—and should not be a factor in the Commission's decision.

Instead, we believe speculators, disinterested gamblers and retail interests are part of a normal and healthy market. The speculation that exists on political event platforms today serves as liquidity provisioning that enables a hedging and price basing platform.

Exempt from state and federal gaming laws

Under an expansive reading of state and federal laws, most if not all financial instruments and event contracts currently allowed on Designated Contract Markets (DCMs) would be considered unlawful gaming activity. However, we believe that these political event contracts are not unlawful. We support former commissioner Dan Berkovitz's statement that "contracts involving gaming should be permitted to be traded on a DCM if they have an economic purpose."[4]

As discussed in a paper by ex-CFTC attorneys Dave Aron and Matt Jones, "The UIGEA Exclusions in a federal gambling statute appears to indicate that Congress recognized that sports bets bear more than a passing resemblance to financial products that are regulated by the CFTC … and sought to ensure the preeminence of the CFTC regulatory scheme for derivatives over other federal and state regulation, even when that scheme called for an exclusion or exemption."[5]

The Unlawful Internet Gaming Enforcement Act, which would ordinarily define political event contracts as an unlawful bet or wager, specifically excludes from its definition any transaction conducted on or subject to the rules of a registered entity or exempt board of trade under the Commodity Exchange Act; or any transaction that is exempt from State gaming or bucket shop

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[3] See e.g. betfair.com - political betting on majority control of U.S. House and Senate: https://www.betfair.com/exchange/plus/politics/market/1.179673535

[4] Statement of Commissioner Dan M. Berkovitz related to Review of ErisX Certification of NFL Future Contracts, Commodity Futures Trading Commission (April 7, 2021), https://www.cftc.gov/PressRoom/SpeechesTestimony/berkovitzstatement040721

[5] Dave Aron & Matt Jones, States' Big Gamble on Sports Betting, 12 UNLV GAMING L.J. 53 (2021).

laws under section 12(e) of the Commodity Exchange Act or section 28(a) of the Securities Exchange Act of 1934.[6]

Therefore, we do not believe that the contracts, taken as a whole, involve, relate to, or reference "an activity that is unlawful under any State."

Plain reading of the regulation

In a dissenting statement, Commissioner Pham put forth an argument whereby, based on plain reading of the regulation: buying or selling the contracts may be gaming, but the contracts, which are defined around control of the House and Senate, do not involve, relate to or reference gaming nor are similar to gaming.[7]

An alternate interpretation was used in the 2012 Nadex decision where the contracts and activity on the contracts were considered as a whole,[8] based on Congressional intent,[9] to grant the CFTC the power to restrict gaming that does not have an economic purpose.

Congressional intent is measured in several ways, the most important being the words of the statute. The words of the statute are unambiguous and the 2012 Nadex interpretation is potentially valid only given the legislative history represented by the colloquy, which is generally less probative.

Given the change in legal, economic, and social landscape since the colloquy and the 2012 decision—as detailed in the response to question 5–we prefer Commissioner Pham's proposed interpretation.

5. Historical Precedent

5. Are the contracts substantively different from Nadex's previously proposed contracts such that the Commission's analysis should be different? For reference, please see "CFTC Order Prohibiting North American Derivatives Exchange's Political Event Derivatives Contracts" (Apr. 2, 2012) available at https://www.cftc.gov/PressRoom/PressReleases/6224-12.

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[6] 31 U.S.C. § 5362(1)(E).

[7] Statement of Commissioner Dan M. Berkovitz related to Review of ErisX Certification of NFL Future Contracts, Commodity Futures Trading Commission (April 7, 2021), https://www.cftc.gov/PressRoom/SpeechesTestimony/phamstatement082622

[8] Statement of Commissioner Dan M. Berkovitz related to Review of ErisX Certification of NFL Future Contracts

[9] https://www.cftc.gov/sites/default/files/stellent/groups/public/@rulesandproducts/documents/ifdocs/nadexorder040212.pdf "WHEREAS, the legislative history of CEA Section 5c(c)(5)(C) indicates that the relevant question for the Commission in determining whether a contract involves one of the activities enumerated in CEA Section 5c(c)(5)(C)(i) is whether the contract, considered as a whole, involves one of those activities"

Although prior decisions and congressional intent are natural starting points for analysis, we believe that the CFTC should also remain flexible as circumstances change. This is necessary to fulfill the CFTC's mandate to protect customers and encourage a well regulated market.

The contracts put forward by Kalshi are not substantively different from Nadex's previously proposed contracts. However, the legal, social and technological context has changed since the Nadex decision in three major ways that, independently or collectively, should encourage a reassessment of the 2012 decision.

A transformed legal, social and economic landscape

The legal landscape regarding gambling has changed since the Nadex decision. As former Commissioner Berkovitz noted in 2021, the sports betting landscape today is "dramatically different from when Congress enacted the gaming provision and the Commission promulgated Regulation 40.11" due, among other things, to rapid expansion as well as increase in the dollar amounts being wagered.

The CFTC should base their interpretation of Congress's intent in the context of the new legal and economic landscape, where many forms of gaming are no longer illegal under the PASPA, and therefore have a different analysis than the Nadex decision.

Public perception of gaming has changed since the Nadex decision. A 2020 Gallup poll, found that 71 percent of Americans consider gambling to be morally acceptable, the highest level of registered since Gallup started polling the question in 2003. News media regarding prediction markets specifically has also shifted towards a more positive tone, highlighting prediction markets' value as a source of truth.[10]

Additionally, the forecasting industry and community has grown and matured significantly since the Nadex decision. Although blogs such as overcomingbias.com, marginalrevolution.com and lesswrong.com have existed since the 2000s, the rationalist community has grown since 2012 alongside increased attention to the value of prediction aggregators. Metaculus.com, a reputation based prediction platform hosting over a million forecasts, was founded in 2015. Replication Markets, a research replication prediction market, was founded in 2019. Google created an

[10] See e.g. Holman Jenkins, "A Betting Man With a Plan for America," *Wall Street Journal*, 9 September 2022, https://www.wsj.com/articles/a-betting-man-with-a-plan-to-save-america-poker-odds-school-choice-war-climate-policy-donor-markets-prediction-invest-11662755750; Harry Crane and Koleman Strumpf, "Political prediction markets are an antidote to degraded public discourse", 6 September 2022, https://www.chicagotribune.com/opinion/commentary/ct-opinion-political-prediction-markets-public-discourse-20220906-lfuvziy3fnfkfgw33lzhsno4h4-story.html; Rational Animations, *Prediction markets: can betting be good for the world*>. YouTube. https://www.youtube.com/watch?v=xA27x7GRMZQ&ab_channel=RationalAnimations

internal prediction market in 2022.[11] Nonprofit organizations interested in maximizing their long term impact such as Rethink Priorities, Open Philanthropy, and Effective Altruism Funds—none of which existed prior to 2017—are today collectively managing multibillion dollar budgets.

Mainstream acceptance of gaming coupled with increased awareness of the value of prediction markets increases the likelihood that the hedging, price basing and other positive social benefits of the proposed contracts will be realized. The CFTC should consider whether the proposed contracts pass the economic purpose test or are contrary to the public interest in the context of this new social landscape.

Finally, a variety of election markets have proliferated since the Nadex decision, creating a new regulatory landscape with unique dilemmas. PredictIt started operating with the benefit of a No Action letter after the Nadex decision in 2014. Congressional control markets on the site provide a highly relevant test case for considering theoretical concerns as well as the public interest implications of Kalshi's request.

Due to blockchain and other decentralized technologies, traders are using offshore and unregulated exchanges that feature election contracts with significant liquidity. An example of such a market is Augur which open sourced their code and whose decentralized design may allow it to sidestep regulatory difficulties. Soon after the platform launched, users had created death pools — or assassination markets — on famous people. Retail traders are leveraging VPNs with little evident fear of legal consequences. The extent to which these markets can be and will be regulated with meaningful sanctions and enforcement remains uncertain.

We feel strongly that the public would benefit from having these products traded on a well-regulated exchange. The lack of a regulated exchange will not prevent the risks posed by political event contracts; rather, it will push users towards less well regulated markets where it is harder to safeguard their interests. Prediction markets may, as a consequence, lose their value as a trust and aggregation.

The CFTC should consider whether these proposed contracts pass the economic purpose test or are contrary to the public interest against the backdrop of proliferating unregulated prediction markets. This analysis, in our view, points to different conclusions from the Nadex decision.

6-10 Hedging

6. Do the contracts serve a hedging function? Are the economic consequences of congressional control predictable enough for a contract based on that control to serve a hedging function?

[11] Dan Schwarz and Lindsay Taylor, "Creating a prediction market on Google Cloud", Google Cloud, https://cloud.google.com/blog/topics/solutions-how-tos/design-patterns-in-googles-prediction-market-on-google-cloud

Please provide tangible examples of commercial activity that can be hedged directly by the contracts or economic analysis that demonstrates the hedging utility of the contracts.

7. Are there unique economic risks tied to the outcome of congressional control that cannot be hedged via derivative products on equities, debt, interest rates, tax rates, asset values, and other commodity prices?

8. What standard should the Commission use in reviewing the contract's hedging function? Is it sufficient that a contract could theoretically be used for hedging or, should an exchange provide evidence of demonstrated need by likely hedgers in the market? How often must a contract be used for hedging or what percentage of market participants or open interest must represent hedging use?

9. Should the Commission consider contract and position sizes and the exchange's intended customer base to help assess whether a product is likely to be used for hedging in at least some cases? Are very small dollar value contracts targeted at individual retail customers likely to have hedging utility for such customers when the contracts offer positions on macro level national political events? Does whether contracts are margined or fully collateralized affect this analysis?

10. Should the Commission consider the contract design and payout when trying to assess the economic utility of the contract? For example, are binary contracts useful for hedging nonbinary economic events?

Reasonable expectation of hedging on a more than occasional basis

There is significant unhedged political risk today, and political event contracts can reasonably be expected to serve as a broad economic hedge against economic consequences on more than an occasional basis. A hedging function is sufficient, but not necessary for the proposed contracts to pass the economic purpose test. Price basing, as covered in the response to question 11, is also sufficient to pass the economic purpose test.

We favor a standard that the election contracts could theoretically be used for hedging. Based on the wording of the economic purpose test, either theoretical use for hedging or proven prior use for hedging is sufficient. We also believe that the theoretical standard best fits the standard the CFTC has used on similar proposals in the past.

The comments the CFTC has already received speak to the hedging utility of these political event contracts. In previous event contracts submissions such as ErisX sports betting and MDEX box office futures, prominent industry leaders explicitly declared that they would not use these

markets for hedging to any meaningful degree,[12] which influenced CFTC decision-making. However, the proposed contracts serve as a broad economic hedge for so many conceivable interests that it is unlikely that a similar hedging boycott is plausible. On the contrary, the comments file contains a variety of industry and retail interests coming forward to declare their intent to use the proposed contracts as an economic hedge.

In addition to the possibility that election contracts may provide a more correlated hedge for an umbrella of risks than traditional derivative products, election contracts may over time democratize hedging by making available a method more intuitive to retail and other classes of traders who cannot easily open spread accounts.

We believe retail customers are currently not well-educated on the hedging utility of election contracts, which helps account for why hedging in these markets is relatively rare. However, should the Commission approve these contracts on the condition that hedging (or price basing) will be demonstrated on a more than occasional basis, we believe Kalshi would embark on an educational campaign regarding the hedging utility of election contracts for an array of market entrants, including retail customers. Given the amount of unhedged economic risk today, such an educational effort could lead to a notable increase in hedging using election contracts.

Theoretical hedging - broad based economic risks

The Center for Effective Altruism (CEA) makes grants that seek to address global catastrophic risks through technical research, policy analysis, advocacy, and/or demonstration projects. Congressional control contracts are among the most predictable ways to hedge such risks because of the large number of relevant issues that are sources of partisan division. Examples include policy approaches to divisive issues related to pandemics, nuclear safety, and climate change.

If a party with an unfavorable stance from the perspective of global risk reduction should gain congressional control, it would have unique, tangible and predictable economic implications to CEA. More funding for research, analysis, advocacy and/or demonstration projects would be necessary to counteract these political headwinds. The proposed contracts would allow for the construction of a hedge against such political risks.

Even when issues are not front and center in a political campaign, Congressional control markets are a way of hedging myriad factors such as who will serve on relevant committees where

[12] See e.g. Shaun Raviv, "Box Office Bomb: The Short Life of Popcorn Prediction Markets", *The Ringer*, 15 November 2018, https://www.theringer.com/movies/2018/11/15/18091620/box-office-futures-dodd-frank-mpaa-recession; AGA Comment Letter at 2, available at https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=64800&SearchText=

political agendas are set, hearings are convened, and millions of dollars in appropriations can be allocated.

Theoretical hedging - policy analysis and advocacy

CEA grants include policy analysis and advocacy. The effectiveness of these individual grants and the value of the fund's overall grant portfolio are uniquely, tangibly and predictably tied to the economic event of congressional control. If the fund is overexposed with respect to its advocacy grants towards a specific political party, the proposed contracts would allow for the construction of a hedge against such political risks.

Many of the economic risks that concern CEA are tied far more directly to the outcome of congressional control than any derivative products on equities, debt, interest rates, tax rates, asset values, and other commodity prices.

Examples of hedging on prediction markets

We conducted a review of hedging on existing prediction markets. Few prediction markets today have high enough volume and liquidity (several million) to allow for meaningful hedging. Even relatively unregulated election markets in the UK appear not to be used to a significant degree for hedging, in part because these markets tend not to draw enough liquidity.

We did, however, identify notable exceptions. FTX recently saw an individual actor placing programmatic bets summing to more than $100K on a $931K volume prediction market on the Tokyo Olympics[13]—behavior consistent with a large actor hedging against the risk of the Tokyo Olympics being canceled.[14] UK markets on Brexit drew enough liquidity to attract participation indicative of hedging, albeit less so than currency markets. Finally, Star Spangled Gamblers, a political betting podcast, has featured retail investors using Kalshi to hedge their student loan payments.[15]

Impact of contract size and design

Contract and position sizes will have a significant impact on whether a product is likely to be used for hedging. The proposed contracts have artificially low position limits that will constrain the hedging use case. In comparison, traditional commodity futures have minimal contract sizes that are multiples of the maximum of the proposed contracts, for example, hundreds of thousands of dollars on fund futures.

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[13] See snapshot of FTX Tokyo Olympics market with volume traded of $931K: https://twitter.com/5egKS9lUrwVOqWX/status/1402456266321002499

[14] See https://twitter.com/brianluidog/status/1374555912828985348, which details the bot's behavior of persistently making 'no' hedges and keeping the probability of the Olympics at 75% despite strong evidence from superforecasters and other prediction markets that the probability of the olympics was higher.

[15] https://twitter.com/SSGamblers/status/1530217569348636675

Very small dollar value contracts targeted at individual retail customers are unlikely to have practical hedging utility for all but a small minority of customers when the contracts offer positions on macro level national political events. Even if such hedging were to occur, the economic benefit would be minimal. This is an inherent mismatch, and we recommend higher position limits so hedging becomes feasible on an institutional scale.

In the same vein, we recommend margined contracts which naturally allow for greater hedging potential. We expect margined contracts and possibly even interest generating contracts[16] will provide institutional users greater liquidity with which to hedge their political risk exposure.

We do not find issues with the proposed contract design. The economic event - whether <party> will control the <house or senate> - can be modeled as a binary event, so the binary contract design matches the binary economic event and is not an impediment to hedging.

More generally, contract design and payout are not major impediments to hedging. For example, a sufficient spread of binary contracts may be used to create a basis for hedging nonbinary economic events. Furthermore, subsequent proposed event contracts need not be binary, and there will be appropriate nonbinary event contracts to hedge nonbinary economic events.

11 Price Basing

11. Do the contracts serve a price-basing function? For example, could they form the basis of pricing a commercial transaction in a physical commodity, financial asset, or service?

The political event contracts can reasonably be expected to serve a price-basing function on a more than occasional basis. Furthermore, we understand that serving a price-basing function is sufficient but not necessary for the political event contracts to pass the economic purpose test.

Contrary to the CFTC's findings in the 2012 Nadex Ruling, we believe from our experience with post-2012 prediction market platforms such as PredictIt, Polymarket, Insight Prediction, and Manifold Markets that there are reasonable situations in which the proposed contracts' prices could form the basis for the pricing of a commercial transaction involving a physical commodity, financial asset or service.

Prediction markets provide value by forecasting the future

Election markets are a valuable source of insight when operating alongside current forecasting platforms. The core social value proposition of efficient prediction markets is the production of

[16] See e.g. https://manifold.markets/home which gives interest payoffs to users holding long term positions to grant forecasters liquidity to maintain long term predictions, or the "no loss" contracts pioneered by Hedgehog Markets (https://hedgehog.markets/no-loss/).

accurate, calibrated and useful probabilities. The CEA acknowledges the potential for prediction markets to disseminate insight with trust, aggregation and clarity.[17]

In 2008, a group of 22 academics called for loosened regulations in an open letter to *Science*, describing a "virtually limitless" range of applications for government policy, business and public health. Four Nobel laureates were among the signatories, including 2013 economics co-winner Robert Shiller. Since the Nadex prohibition in 2012, play money and reputation-based prediction markets such as Metaculus and Replication Markets have tested and proven prediction markets' potential for actionable insight in a wide range of applications.

Prediction markets provide strong incentives for accuracy and timeliness by working according to the efficient market hypothesis. They incentivize participants to seek information that would give them an edge and aggregate insights from other forecasters. Market participants are also incentivized to integrate news quickly into a prediction market, leading to timely predictions. In addition, because prediction markets have a resolution date set in stone beforehand, dynamics where "the market stays irrational longer than you can stay solvent" arise to a much lesser degree, since a correct contrarian can simply buy the correct side and hold it until resolution.

In a review of corporate prediction markets Misha Yagudin, Nuño Sempere, and Eli Lifland noted that Google, Yandex, and Goldman Sachs, among others, had previously or currently run prediction markets.[18] The outcome of these prediction markets were used by the companies to estimate the price of investments, broker acquisitions and set strategic direction. Ultimately the research found lower levels of corporate uptake, which the researchers hypothesized may have been due to the significant investments in effort and employee hours required to run an internal prediction market. Nevertheless, there are strong theoretical reasons why public prediction markets would be more cost effective in delivering forecasting value, as the information would be more relevant to a larger population of users. This is perhaps why Google has invested anew in their own internal prediction market, which has seen "over 175,000 predictions from over 10,000 Google employees"[19].

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[17] See 2008 Event Contract Concept Release, supra note 40, at 25,672 ("As demonstrated by the [Iowa Electronic Markets ("IEM")], innovative event markets have the capacity to facilitate the discovery of information, and thereby provide potential benefits to the public.").

[18] Nuño Sempere, Misha Yagudin, and Eli Lifland, "Prediction Markets in the Corporate Setting", Effective Altruism Forum, 31 December 20201, https://forum.effectivealtruism.org/posts/dQhjwHA7LhfE8YpYF/prediction-markets-in-the-corporate-setting#Value_proposition

[19] https://cloud.google.com/blog/topics/solutions-how-tos/design-patterns-in-googles-prediction-market-on-google-cloud

Political event contracts have a price basing function

Efficient and well run markets on political event contracts provide many signals upon which to base prices for services. Examples of valuable signals include the likelihood of either parties' control of the House and Senate, the extent of that control, and the implied volatility of the outcome. These outcomes materially affect the strategic decisions of companies whose outcomes depend on these events.

Political prediction markets have become an important part of the political risk industry guiding private sector decision-making. Rethink Priorities CEO Peter Wildeford told us that political event contracts on Betfair and Predictit are the first thing his organization checks to forecast outcomes of elections—information used to steer the strategic direction of the nonprofit. The strong incentives to integrate accurate and timely information makes the markets, in his view, a unique resource.

Besides setting strategic direction, the signals also have a direct price basing function for physical commodities, financial assets or services. We will use for illustration the price basing function on investments for public good. As public good fund managers become more politically conscious, they increasingly consider two factors in their investing strategy. First, the impact that political parties have on investments; second, the expected return of direct investment in political parties.

An example is the impact that Democrat/Republican control of the House or Senate has on pandemic preparedness funding initiatives.[20] In addition to investments in forecasting, CEA also considers investments in pandemic preparedness. Republican/Democrat control of the House or Senate will directly influence the impact of the Biden administration's proposed Pandemic Preparedness bill, which in turn influences the relative value of funding provided for independent pandemic preparedness initiatives.

As another example, the Center For Election Science advocates for use of approval voting, instead of the "first-past-the-post" system implemented in most of the US right now. Approval voting would favor more centrist candidates which have appeal across party lines, and would avoid problems such as "spoiler" candidates. Because their advocacy might see differential success depending on which party is in power, funders deciding whether to donate to the Center for Election Science can use forecasts of election outcomes as an input into their decision-making.

Additionally, as institutions and individuals consider directly investing in political causes for the public good, signals from political event contracts influence the price they should pay for

[20] "Pandemic preparedness", Effective Altruism Forum, https://forum.effectivealtruism.org/topics/pandemic-preparedness

services such as lobbying and campaign management. Sam Bankman-Fried, for example, cited the risk of Trump winning the 2020 election as a direct influence on his political spending decisions.[21]

Current examples of price basing

Below are select practical examples of other prediction markets being used as price basing for physical commodities, financial assets and services today.

We considered the effectiveness of effort and money invested in developing a public comment to the CFTC. As part of our considerations, we reviewed an event contract by Insight Prediction structured around the likelihood of Kalshi offering U.S. election markets by October 25th.[22] As the numbers leaned towards 50%, the expectation that such a public comment could influence the outcome increased, which forms a price basis for services to craft that letter. Based on the implied probabilities from that prediction market, which was 30% at the time of writing, we based the price we were willing to pay for expert and legal services to help us draft this comment letter.

Other prediction markets that exist today can reasonably be expected to have a price basing function. For example, a market on Manifold Markets at the time of writing estimates the probability that Elon Musk will buy Twitter this year at 28%.[23] This can easily be used as a price basing function for Twitter stock, which is a financial asset.

As another example, effective forecasts on the coronavirus pandemic such as those at the prediction platform pandemic.metaculus.com have a price basing function across a wide range of physical commodities, financial assets and services related to healthcare, tourism and commercial activity.

Finally, price basing for physical commodities may be more directly served by a future on the physical commodity rather than an event contract. However, the implied probabilities from an event contract may nevertheless be used as a basis for the price of such commodities. A theoretical example is a prediction market structured around Democrat or Senate control of Congress having a price basing function on corn or wheat.[24]

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[21] Elena Schneider, "How the newest megadonor wants to change Washington", *Politico*, 4 August 2022, https://www.politico.com/news/2022/08/04/democratic-megadonor-sam-bankman-fried-00049048

[22] https://insightprediction.com/m/18609/will-kalshi-offer-a-us-election-market-by-october-25th

[23] https://manifold.markets/SG/will-elon-musk-buy-twitter-this-year

[24] See e.g. David Rogers, "Senate Passes Democrat-Backed Bill To Raise Target Commodities Prices", 14 February 2022, https://www.wsj.com/articles/SB10136253673511564440

13-16 Election Integrity

13. Could the trading of these or other political control or election-based contracts affect the integrity of elections or elections within the chamber of Congress? Could it affect the perception of the integrity of elections within the chamber of Congress?

We analyzed the historical and theoretical adverse effects of prediction systems on election integrity. We also interviewed traders and platform operators of existing election-based markets to understand election manipulation risks specific to election markets.

Our response considers the following integrity risks:

1. Prediction markets may serve as a mechanism to sway election outcomes through self-fulfilling (or self-defeating prophecies). This includes manipulating markets to sway voter sentiment and hence election outcomes and vote buying.
2. Prediction markets may serve as a direct financial incentive to manipulate elections (by means other than prediction markets).
3. Prediction markets may be subject to manipulation for profit, e.g. via the publication of false polls, which manipulates election outcomes as a byproduct.
4. Prediction markets may affect the perception of election integrity.
5. Prediction markets may facilitate violations of campaign finance laws.
6. Election insiders may manipulate outcomes to create profits on the market or trade on insider information.

Ultimately we believe the risk of election-based contracts on election integrity is negligible relative to the risks that already exist. Further, these risks are mitigated by effective regulatory oversight of these markets, and small relative to the economic and social utility of these contracts.

Self-fulfilling prophecies

One category of risk is the self fulfilling prophecy—or its inverse, the self defeating prophecy—where knowledge of the prediction affects the result.[25] The 2016 US presidential election offers plausible evidence for the self-defeating theory, where overconfident win predictions for Hillary Clinton, including in the prediction markets, may have lowered turnout enough to tip the election.[26]

[25] Herbert Simon, Bandwagon and Underdog Effects and the Possibility of Election Predictions, *Public Opinion Quarterly*, Volume 18, Issue 3, Fall 1954, Pages 245–253, https://doi.org/10.1086/266513

[26] Nuño Sempere, "Real-Life Examples of Prediction Systems Interfering with the Real World (Predict-O-Matic Problems), LessWrong, 3 December 2020, https://www.lesswrong.com/posts/6bSjRezJDxR2omHKE/real-life-examples-of-prediction-systems-interfering-with

On the eve of the election, a letter from FBI director James Comey telling Congress he had reopened an investigation into Clinton's emails shook up the race with just days left in the campaign. Comey later acknowledged that his assumption that Clinton was going to win was a factor in his decision to send the letter.[27]

The converse risk is the self-fulfilling prophecy. One could imagine a hypothetical scenario in 2016 where overconfident win projections for Hillary Clinton lowered turnout for Republican voters sufficiently to tip the election in her favor.

The arguments here speak more to the integrity risks of faulty prediction systems generally rather than the proposed contracts specifically. The incentives for prediction markets to seek and disseminate truth is greater than the majority of the more commonly referenced predictions in mainstream discourse such as pundit predictions. Because of their active mechanisms to combat overconfidence, we consider one of the primary benefits of election markets to be a decrease of unrealistic projections, thereby reducing the potential for incorrect electoral modeling to affect election integrity.

The CFTC should not ban political event contracts on the basis that they are better predictors of election outcomes or it may run into First Amendment concerns around political discourse (see response to question 12 & 17).

Deliberately swaying election outcomes

We searched for historical attempts to use political event contracts to manipulate the outcome of elections. We did not find any instances of manipulation in Congressional control markets but did discover examples in other markets. An aide on a presidential campaign in the 2016 primaries informed one of us on background that he and his colleagues placed bets on their candidate on PredictIt as part of the campaign's strategy. They did so both in order to respond to media coverage that their candidate's price was slipping in the markets as well as to garner favorable news coverage about the supposed prospects of their campaign. The betting limits and relatively low liquidity on PredictIt made this a relatively inexpensive decision in the short-term, but it proved impractical as their campaign failed to gain traction and traders became increasingly bearish on its prospects. Another likely instance of attempted manipulation occurred recently in the UK in markets in the London mayor race. Anecdotal evidence suggests that an obscure candidate may have facilitated bets in the market to pump his price, and therefore, support notions that he may be a viable candidate. The gambit failed when media and political observers treated the candidate's briefly inflated price as noise.

[27] Zeynep Tufekci, "Can We Finally Agree to Ignore Election Forecasts", *New York Times*, 1 November 2020, https://www.nytimes.com/2020/11/01/opinion/election-forecasts-modeling-flaws.html

The relatively inconsequential cases of manipulation we found in our research are consistent with the academic literature on this topic. Studies on the so-called "Romney whale" in the 2012 Intrade markets, a single pro-John Kerry manipulator in the 2004 TradeSports market, as well as surveys of earlier political stock markets indicate that manipulation can be detected by traders, media, and researchers, and that systematic manipulation is difficult beyond short time periods.[28] As the efficient market hypothesis indicates, given sufficient interest and liquidity, traders can be expected to bring the market price to a more efficient level relatively quickly.

We expect the proposed contracts on a regulated exchange would be less prone to manipulation than on PredictIt. Due to higher position limits, the markets will be more liquid. Moreover, Congressional control contracts hinge less on the fate of any one or handful of individuals than other types of markets that have been historical targets of attempted manipulation.

Our prediction in this respect is informed by our conversations with UK-based colleagues, who have monitored Congressional control markets with large amounts of liquidity over many decades. They reported no clear, consequential cases of manipulation in these markets. They observed, moreover, that while allegations of manipulation in sports betting in the UK have led to the creation of a nationwide integrity unit, nothing comparable exists in politics and there appears to be no meaningful demand for one even by the most vocal advocacy groups.

We believe that the existing evidence of failed manipulation is reason for cautious optimism. It suggests that prediction markets are considerably less likely to mislead the public than the less transparent mechanisms already available today such as push polling, reporting based on background sources, election analysis platforms, and proprietary models. Lying in a market that has an active mechanism to counter noise and fake news is a dubious strategy when considering the alternatives.

Even if cases were to arise of market manipulation, calls for outlawing election contracts on this rationale should be weighed against the benefits that isolated attempts at manipulation have from an academic/research perspective. They would further knowledge on when and under what circumstances traders seek to manipulate election markets and how consequential these efforts are.

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[28] Rothschild, David M. and Sethi, Rajiv, Trading Strategies and Market Microstructure: Evidence from a Prediction Market (November 22, 2015). The Journal of Prediction Markets 10 (1), 1-29, 2016, Available at SSRN: https://ssrn.com/abstract=2322420 or http://dx.doi.org/10.2139/ssrn.2322420; Rajiv Sethi, "The Romney Whale" 26 September 2013, http://rajivsethi.blogspot.com/2013/09/the-romney-whale.html; Rhode, P.W., Strumpf, K.S.: Manipulating political stock markets: A field experiment and a century of observational data. Working Paper (2008), https://users.wfu.edu/strumpks/papers/ManipIHT_June2008(KS).pdf

Using event contracts to 'buy votes'

In the Nadex Ruling, the CFTC declared that "Political Event Contracts can potentially be used in ways that would have an adverse effect on the integrity of elections, for example by creating monetary incentives to vote for particular candidates even when such a vote may be contrary to the voter's political views of such candidates." A related argument is that, if the political event contracts truly worked as an efficient economic or emotional hedge, a voter could theoretically put enough money on one side or another such that they became wholly ambivalent to the outcome and abstain from voting.

This is not a well formulated integrity concern. It is in the nature of democratic elections that voters have the prerogative to weigh myriad personal incentives—including financial ones—in their choice of candidate. In an era in which the government has a profound impact on individuals' financial future through tax, spending, and regulatory policy, the relatively small amounts of money at stake in an election market can be expected to be a secondary concern at most. The CFTC's Nadex statement suggests that voters might voluntarily shape their own preferences and "steal votes from themselves", which does not constitute an election integrity risk.

These concerns, moreover, are speculative, abstract, and almost entirely absent from our experience with political prediction markets. In large part due to the difficulty of generating high profits in election markets relative to other types of betting markets with more frequent and consistent events, traders tend to participate in election markets because of their preexisting interest in politics. While traders routinely acknowledge that they are trading against candidates who they personally support, we are unaware of traders who consciously base their personal political activities on their investments in the market. Indeed, discussions in the political prediction community are replete with traders who disengage from election markets when they have a strong opinion about one of the involved parties and do not trust themselves to place an objective bet.

A more coherent example of the CFTC's concerns is as follows: a manipulator who wants people to vote Democrat could put a lot of money on Republicans winning, with the expectation of losing that money. Republican voters would see the easy money, and start betting on a Democratic victory, and thereby become incentivised to vote Democrat. Ultimately the Democrats win, and the manipulator has lost a lot of money on the prediction market but has effectively 'bought votes' and hurt the election integrity as a result.

This mechanism may appear dangerous, not least because it is indistinguishable from hedging behavior by an actor who hopes for a Democrat win but is hedging against a Republican win. However, this method of 'vote purchasing' is extremely impractical because there is no way to make the right amount of money go to the right people. A single individual, or even a

dispassionate corporate entity that has no voting power could take all the money without providing any return on investment. Again, there exist far more direct and reliable ways to sway election outcomes today.

Direct financial incentive to manipulate elections

Another integrity risk is that election-based contracts, by introducing a profit motive, may incentivize individuals with a stake in those markets to alter election outcomes in order to make money on the markets. If an entity has a large position on an outcome, it has a financial incentive to make that outcome come to pass.[29]

This concern does not make sense given the size of the event contract positions ($25K position limit per individual) relative to the incentives already at stake. Individuals and organizations already have strong reasons to sway an election and the policy outcomes at stake far outweigh any market gains available in the proposed contracts. We do not see direct financial incentives as an issue even at several multiples of the current proposed limit.

The CFTC may have recognized in 2012 that the election integrity fears based on additional incentives created by political event contracts were frivolous as it did not elect to mention them in the Nadex Ruling.

Nevertheless, we sought historical examples of individuals attempting to manipulate elections to make money on prediction markets. The closest one we found were death threats against Andrew Yang during his presidential campaign from an anonymous trader who was attempting to manipulate PredictIt's briefly operating market on how many times Yang would tweet. PredictIt's decision to offer the market in the first place went against advice from veteran political prediction market traders who reasoned, correctly, that this type of niche market was on dubious regulatory grounds and was more likely to incentivize foul play than the election contracts proposed by Kalshi.[30]

Perception of the integrity of elections

We considered how the proposed contracts might affect perceptions of election integrity. As a meta point, considerations pertaining to the perception of election integrity hold much less weight than considerations of actual election integrity risk. Given logical analysis and reasoning, perception will approach reality—that is, that the proposed contracts have an insignificant impact on election integrity.

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[29] A literary example is the Jules Verne novel 'Around the World in 80 Days', in which, as a bet, Phileas Fogg travels the world in 80 days by train and ship.

[30] https://twitter.com/Domahhhh/status/1555320074524770304?s=20&t=8lPVPLjCs2ec5326j6n45w

Nevertheless, we do not take it on faith that the public will automatically take the same reasoned analysis and come to the same conclusions we have described above. We discuss some reasons why prediction markets might be perceived as threats to election integrity.

First, the financial incentives caused by prediction markets are more direct than conventional political incentives, as there is a direct payout in response to one side or another winning. This direct mechanism could be perceived as higher risk relative to its actual risk.

Second, although public perception of gambling has improved in general and prediction markets are meaningfully distinct from gambling, a minority may take offense at a financial incentive mechanism they consider to be gambling. In this case there is a focus on the mechanism of election integrity violation rather than the likelihood of the actual violation.

Third, there is a natural inherent distrust of any new potential mechanisms of abuse, regardless of its risks relative to the mechanisms already available.

Fourth, by adding 'skin in the game' for market participants, the proposed contracts increase the emotional and financial investment in the outcome. When the outcome does not go according to their wishes or expectations, it increases the emotional response, which leads to stronger, albeit unfounded perceptions that the election integrity has been compromised. For example, in the 2020 elections, millions of Americans went to the polls believing that their preferred candidates would win by a comfortable margin. When the results defied their expectations, many "blue wave" traders lost money on PredictIt while suspicions about election fraud gained traction. Conspiracy-oriented traders flooded political prediction markets with bets on Republican candidates, only to suffer losses as more sophisticated traders took the other side of their bets.

Conversely, there are strong reasons to believe prediction markets will be a net positive to both election integrity and perceived election integrity, as follows.

First, because prediction markets are inherently non-partisan, aggregate perspectives democratically and have strong incentives towards accuracy, they are less likely to be demonized by one side or another. This is coupled with the insight and social consensus building incentives of prediction markets, as laid out in the response to questions 12 and 17. Doubts about the integrity of U.S. elections have risen in the past few years for reasons that have little if anything to do with political prediction markets. Because of the transparency of prediction markets and its active mechanisms to combat falsehood, we consider one of the primary benefits of a political prediction market to be the reduction of incentives and effectiveness of current methods to interfere with election integrity

Second, mainstream understanding and acceptance of gaming and the benefits of forecasting have improved since the 2012 Nadex contracts, as discussed in the response to question 5. Prediction market platforms such as Kalshi and influencers within the forecasting and rationalist community are strongly incentivized to educate the public. Once election-based contracts are effectively regulated, we intend to undertake a follow up project to educate the public on prediction markets.

Third, the opportunity to trade on election outcomes in the context of PredictIt has created powerful incentives for the public to become informed about the political process and be more cognizant of one's own ignorance and biases. This is easily observed in discussions in the political prediction market community, which are often far more sophisticated than those in the mainstream or even professional discourse. This creates financial incentives for market participants to be rational, which in turn moves their perceptions of election integrity closer to reality. We would expect the Kalshi contracts to continue to produce a new generation of citizens whose interest in political prediction markets leads them to engage constructively in the political process and to have reasoned opinions about election integrity.

Fourth, prediction markets themselves give signals on election integrity. In 2020, at a time when the president of the United States and a major political party were seriously entertaining the possibility that the election was "stolen", that Trump would serve a second term, and that key Senate race calls would be reversed, market prices indicated that traders understood better than many members of Congress that the election was conducted without a meaningful amount of fraud and that the United States would see a transfer of power to Joe Biden. Reflecting widespread concerns about election integrity among the electorate, candidates since Trump have decried election fraud after losing their congressional races, but election markets on PredictIt and elsewhere have hardly moved on this news. At the same time, Congressional markets are among the most valuable sources available today to assess whether and how federal and state inquiries into election integrity will proceed.

Although political prediction markets play a limited role currently in shaping perceptions of election integrity, recent history shows that they are more likely to increase rather than decrease confidence in U.S. elections when the public at large sees that the "smart money" is betting on the assumption of fair elections.

14. Could the contracts facilitate violations of, or otherwise undermine, federal campaign finance laws or regulations? For example, could the contracts make it easier to sidestep prohibitions governing coordination between candidate campaign committees and political action committees?

Facilitate or violate campaign finance laws

Over the course of extensive interviews with historians, practitioners, and industry leaders in both the United States and the United Kingdom, we did not come across any evidence that political prediction markets have been or are being used to facilitate violations of, or otherwise undermine, federal campaign finance laws or regulations to any meaningful degree.

Relative to the existing mechanisms and loopholes by which parties may sidestep prohibitions governing coordination between candidate campaign committees and political action committees, the contracts do not offer a feasible mechanism to facilitate violations of, or otherwise undermine, federal campaign finance laws or regulations.

Insofar as election markets carry the risk of undermining campaign finance laws, however, law enforcement officials are more likely to determine if this is occurring on a regulated exchange with a responsible stakeholder like Kalshi rather than a decentralized or offshore site with less incentive to police its site in line with American legal and political norms.

15. Do the contracts present any special considerations with respect to susceptibility to manipulation or surveillance requirements? For example, could candidate campaign committees or political action committees manipulate the contracts by trading on internal, non-public polling data?

16. Should campaign committees, political action committees, candidates for the House and Senate, and other entities involved in political fundraising and expenditures or likely to hold non-public information, or subject to Federal Election Commission oversight, be prohibited from participating in the contracts? Would such a prohibition help address federal campaign law or manipulation and surveillance concerns? How would such restrictions impact the Commission's determination of whether the contracts are contrary to the public interest?

Market manipulation for profit

As part of our research for this comment, we sought examples of manipulation by insiders on existing prediction platforms.

A form of manipulation is the creation of fake polls by traders to move betting markets. Our British colleagues were not aware of fake polling being used to manipulate UK-based markets, but the phenomenon appears to be more common on PredictIt. FiveThirtyEight's report "Fake Polls Are A Real Problem" notes, as an example, that the price for one share — which is equivalent to a bet that Senator Debbie Stabenow will be re-elected — fell from 78 cents to as low as 63 cents due to a fake poll before finishing the day at 70 cents. Market motivations may have been secondary to the trolling factor, but the mere fact that the markets can be so easily

manipulated is arguably noteworthy.[31] The paper "Fake Polls, Real Consequences: The Rise of Fake Polls and the Case for Criminal Liability" contains many more examples.[32]

Ultimately, the phenomenon of manipulation via fake polls is of some concern to certain types of political prediction markets with limited information, few public polls, and low liquidity. Even in such markets, the incentives for market correction and exposure tend to override any attempts to manipulate the market.

The proposed markets would be even more difficult to manipulate through fake polls due to the abundance of information available to market participants, frequent polling by reputable firms, and the high liquidity they draw.

Manipulation is also possible through sound polling. We interviewed one PredictIt trader who commissioned a real poll to move the markets. The trader told us that the poll was real with a sound methodology, and was commissioned to correct what he believed to be an inefficient market. Ultimately the trader financially benefited from the process of discovering truth via his poll and taking a position before releasing the polling results. We take this example as evidence that prediction markets may also reward truth seeking and truth dissemination by financially motivating the commissioning of accurate polls.

Rules against insider trading

Prediction markets may incentivize insiders to put money on an unlikely outcome and make the outcome occur. For example, a frontrunner candidate may bet against themselves and then intentionally lose the election to reap a profit. We have not found any historical examples of candidates throwing an election in order to make a profit from prediction markets.

Prediction markets may also enable insider trading of non-public information. We learned of several instances of campaign aides in the 2016 primaries trading on PredictIt while working for presidential candidates. Often, aides were simply trying to profit personally, calculating (often incorrectly as it turned out) that their experience on the campaigns would give them an edge.

Insofar as we are interested in political prediction markets that express efficient pricing, we would oppose prohibitions on any entity's participation in these markets given that they may have valuable information. A promise of election markets is that they will elicit knowledge from many market participants that wouldn't have otherwise been shared and that this knowledge will be used to make better decisions.

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[31] Harry Eten, "Fake Polls Are A Real Problem," *FiveThirtyEight*, 22 August 2017; https://fivethirtyeight.com/features/fake-polls-are-a-real-problem/

[32] Yeargain, T. (2020): "Fake Polls, Real Consequences: The Rise of Fake Polls and the Case for Criminal Liability," Missouri Law Review, 85,140-150

If, however, the Commission determines that such a prohibition would alleviate concerns among regulators and/or the public regarding campaign finance law, manipulation, and surveillance, it may be worth enacting such a policy. This prohibition, in combination with Know Your Customer laws, may not completely prevent insider trading, but it would give regulators advantages in monitoring and taking action against the practice that they would not necessarily enjoy on unregulated exchanges.

12, 17 Public Interest

12. Are the proposed contracts contrary to the public interest? Why or why not?
17. What other factors should the Commission consider in determining whether these contracts are "contrary to the public interest?"

In the 2019 ErisX case, Berkovitz stated that the Commission has interpreted the "public interest" test in the CEA gaming provision as a restoration of the "economic purpose" test that was eliminated in the Commodity Futures Modernization Act of 2000 (CFMA), and that the Commission also has concluded it has "discretion to consider other factors in addition to the economic purpose test in determining whether an event contract is contrary to the public interest."[33]

From Berkovitz's statement, we also understand that the gaming component alone is not necessarily contrary to the public interest, as "contracts involving gaming should be permitted to be traded on a DCM if they have an economic purpose"[34]

We understand the difficulty the Commission may have in selecting additional factors to consider. In his book *Go East, Young Man*, Justice Douglas opined, "I also realized that Congress defaulted when it left it up to an agency to do what the 'public interest' indicated should be done. 'Public interest' is too vague a standard to be left to free-wheeling administrators. They should be more closely confined to specific ends or goals."[35]

More so perhaps, than any other regulatory body, the Commission is well-positioned to undertake a holistic review of what election markets might mean for the public interest. The Commission has received and considered thoughtful public comments on the topic since the early days of the Iowa Electronic Markets and has been at the forefront of managing practical regulatory considerations in these nascent markets.

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[33] Statement of Commissioner Dan M. Berkovitz related to Review of ErisX Certification of NFL Future Contracts
[34] *Ibid*
[35] W. Douglas, *Go East, Young Man*, 216–217 (1974)

Valuable source of insight and aggregation

The proposed contracts serve as a valuable source of insight to the public, even if they do not participate in the contracts market directly. The arguments are described in the response to question 11 on price basing.

Social consensus building mechanism

The Commission should consider the divided nature of American politics today. Individuals and groups with poor prediction records and limited accountability are contributing to a status quo in which millions of Americans operate on different sets of facts, consume "fake news", and live in different bubbles.

Institutions and modalities that Americans have traditionally been trusted to forecast elections such as experts and polls have seen drops in confidence in recent years. We urge the Commission to consider recent research demonstrating that political prediction markets in recent elections have outperformed polls, widely-covered election models based on polling aggregation, and pundit forecasts.[36]

Election contracts can help build social consensus in three ways.

First, the market price can create at least a semblance of a reality that all sides recognize is a byproduct of bettors with a financial "skin in the game" and clear incentives for honest contributions. At their best, the market mechanism aggregates more information than what could fit in the working memory of any one individual. They form a natural waterline which can be taken as a readout of what market participants think about a certain topic.

Second, as discussed in the sections on election integrity, efficient prediction markets help drive consensus because they are more transparent and less likely to be manipulated than public opinion polls. Insights from prediction markets spill over and improve the overall discourse. Third, prediction markets are inherently more engaging than polls and forecasts as they invite active participation from a broad audience. The financial incentives for prediction markets reward knowledge seeking and accurate perceptions rather than partisanship, leading to a more educated population. As pundits choose to trade or not trade on a prediction market they signal to viewers their true degree of conviction.[37]

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[36] H. Crane and D. Vinson. (2022). Models vs. Markets: Forecasting the 2020 U.S. election. Researchers.One, https://researchers.one/articles/20.10.00004

[37] Alex Tabarrok, "A Bet Is a Tax on Bullshit", *Marginal Revolution*, 2 November 2012, https://marginalrevolution.com/marginalrevolution/2012/11/a-bet-is-a-tax-on-bullshit.html

Build forecasting and decision-making infrastructure

The political event contracts proposed by Kalshi benefit the forecasting community by training and identifying forecasters. Forecasters in the Rethink Priorities community participate in and monitor trends in prediction markets to calibrate their long term forecasting skills. Success in prediction markets also creates a demonstrable track record that distinguishes forecasters, making them coveted candidates for recruitment and partnerships.

Forecasting researcher Nuño Sempere described the value of prediction markets as a way to incentivize forecasters. Relative to other platforms, prediction markets provide forecasters with a strong monetary incentive to make good judgments and are much more scalable. For example, a good forecast on a complex topic might take tens to hundreds of hours of research, which may only be enabled by the rewards available in prediction markets. Outside of prediction markets, the average forecaster is comparatively poorly compensated and the current supply of known-to-be-good forecasters is limited. For example, the Good Judgment Project pays $50-100 an hour, and the process of attaining Superforecaster™ status is onerous—an aspiring forecaster must first do a year of free predictions. Assuming high liquidity, efficient prediction markets, forecasters are better paid and are incentivized to provide their insights as a public good.

Finally, because prediction markets serve as a platform and a source of sustained interest for predictions, markets can be created quickly in response to new events, attract forecaster interest, and disseminate insights to the public. An example is pandemic.metaculus.com which drew upon the existing forecasting community at metaculus.com to respond to the need for COVID forecasting.

Academic and research value

Election markets generate unique data that can produce cutting-edge academic research and serve as a pedagogical tool to encourage new methods of education and political engagement. Data made available through PredictIt is a case in point.[38] We encourage the CFTC to establish a regulatory regime that allows, to the maximum extent, academics to use election market data for research purposes. We believe that Kalshi would be more amenable to making its data available than the offshore books that will benefit from a Commission decision to deny Kalshi's contracts.

An example of prediction market and research partnerships is Manifold Markets' partnership with the Center for the Study of Partisanship and Ideology and the Salem Center of the University of Texas at Austin to identify top forecasters on economic, social, and political issues.

As a meta point, we view prediction markets as a new technology with public interest benefits that have yet to be fully realized or even discovered. We believe a bet on prediction markets is a

[38] Lukas Berg & John Chambers (2019) Bet Out the Vote: Prediction Markets as a Tool to Promote Undergraduate Political Engagement, Journal of Political Science Education, 15:1, 2-16, DOI: 10.1080/15512169.2018.1446342

bet on the future with considerable upside. Prediction markets have significant potential to blossom into trusted forecasting and consensus building instruments with benefits that are not apparent at their current level of maturity and adoption.

For example, prediction markets may be used directly for decision making. Robin Hanson developed a proposal for governance called futarchy, where prediction markets are used for estimating the net benefit of strategic decisions, then the decision that leads to the highest welfare is chosen.[39] Prediction markets are already used by the rationalist community to make decisions today. An example is the partnership between Manifold Markets and Clearer Thinking Regrants, where forecasters help regrantors decide which projects to fund.[40]

By approving Kalshi's request, the Commission would be advancing its mandate of promoting responsible innovation by giving markets the space to experiment with election contracts as a hedging, price basing, forecasting, social consensus building and decision making instrument.

Injunctions against gaming do not apply to the proposed contracts

We believe the classic ethical, moral and religious injunctions against gaming are relatively inapplicable to the proposed contracts.

A common moral argument against gaming is that gaming is not constructive, is zero sum, and gives dishonest rewards. As discussed above, election markets are constructive, positive sum, and reward honest effort and skill, and on those merits do not meet the moral injunctions against gaming.

Another moral argument is that gambling is predatory and exploits human weakness. With classical gambling, there is an immediacy and instant gratification that leads to addiction. However, the proposed markets diminish the instant gratification component by focusing efforts on long term predictions leading to election day, thereby reducing the potential for addiction.

Political prediction markets in the UK tell an encouraging story on the relation between problem gambling and election markets. Sites such as Smarkets offer election lines and devote resources to marketing them even though they are nowhere near as profitable as contracts in sports and other areas. At the same time, they do not offer products such as casino games. Driven by a combination of reputational risk and company values, they have concluded that they have a long-term interest in contributing to the public interest, aggressively self-regulating to stay within the limits of gaming laws, and deterring problem gamblers from damaging their brands.

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[39] Hanson, Robin. "Shall we vote on values, but bet on beliefs?." Journal of Political Philosophy 21, no. 2 (2013): 151-178.

[40] https://manifold.markets/group/clearer-thinking-regrants

We believe that the economic purpose and broad public interest benefits of the proposed contracts outweigh concerns related to problem gambling. At the same time, we recommend properly structuring prediction markets to reduce potential predatory and exploitative behavior.

First Amendment

Restrictions on political prediction markets may violate the First Amendment. When traders bet on parties and candidates, they are engaging in an expression of political and commercial speech. In a recent podcast episode on "new frontiers in the First Amendment", Nico Perrino, Vice President of the Foundation for Individual Rights and Expression, raises the possibility that because political prediction markets "create information benefits for the public", regulations on these markets would deny Americans access to potentially truthful political information and would therefore violate the First Amendment. Renowned First Amendment scholar at UCLA law school Eugene Volock responded by acknowledging that there were "plausible arguments for protection" of speech in these markets.[41]

If the Commission fails to allow the proposed contracts, it may invite constitutional challenges that could lead the courts to undermine the Commission's jurisdiction over the prediction markets space. A ruling to protect the expression inherent in political prediction markets under the First Amendment—contemplated by legal academics well over a decade ago[42]—would be consistent with the expansion of First Amendment rights by the Supreme Court since the Nadex decision.

[41] "Eugene Volokh and new frontiers in the First Amendment", So to Speak: The Free Speech Podcast, https://podcasts.apple.com/nz/podcast/eugene-volokh-and-new-frontiers-in-the-first-amendment/id1108027131?i=1000385548198

[42] Cherry, Miriam A. and Rogers, Robert L., Prediction Markets and the First Amendment. University of Illinois Law Review, Vol. 2008, No. 3, 2008, Available at SSRN: https://ssrn.com/abstract=1130644

Postscript - Transparent, effective and fair regulation

Despite prediction markets' theoretical appeal, lack of regulatory clarity has discouraged new entrants in the market. For example, Manifold Markets, created December 2021, elected to be a play money market due to regulatory uncertainty, as discussed in its Seed Round Memo. Insight Prediction, another promising company in the space, has been stymied in its ability to accept American accounts amid regulatory uncertainty.

We hope that the Commission will generalize its response to the proposed Kalshi contracts as an opportunity to establish a clear, transparent, and simple process that other companies can follow. We agree with Commissioner Pham's opinion that the Commission must apply principles of free competition and fair treatment to similar contract markets. We respectfully disagree with Commissioner Pham's implication that each political event contract submission should be evaluated independently, as that undermines the goal of promoting fair treatment to similar contract markets. We respectfully disagree with Commissioner Pham's implication that engaging in 36 meetings over nearly a year should influence the Commission's decision positively towards Kalshi. Instead, we should have consistent regulation across similar political event contracts, regardless of the number of meetings the party may have had with the Commission.

The Commission may find inspiration in the way the UK has approached the regulation of election contracts. Many of the concerns that animate the Commission's deliberations today weighed on British regulators in the mid-20th century in the context of political betting shops. The UK's thriving election markets, which have enriched British public life without threatening the integrity of the country's institutions, speaks to their potential in the United States.

With transparent regulation, enough prediction markets operating freely will increase the efficiency, usability and public awareness of these platforms, which in turn incentivizes the positive social value their insights can provide.

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September 23, 2022

SUBMITTED VIA CFTC PORTAL
Secretary of the Commission
Office of the Secretariat
U.S. Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, N.W. Washington, D.C. 20581

Dear Chairman and Commissioners of the Commodity Futures Trading Commission:

I am writing in support of the Commodity Futures Trading Commission approving Kalshi's proposal for electoral prediction markets.

There are essentially two approaches to predicting the future. One is *model-based*, and relies on sound scientific understanding of the data generating process. The other is *crowd-sourced*, and relies on the aggregation of decentralized information and beliefs.

The first approach works well for predicting regularly occurring events that are well understood, such as solar eclipses. But it is much less useful for predicting rare events that have a complex set of determinants, such as global pandemics or financial crises.[1] For example, different research teams have produced widely varying forecasts of Covid-19 cases over the past two years, and even ensemble forecasts that average these predictions "have not reliably predicted rapid changes in the trends of reported cases, hospitalizations, and deaths" over time.[2] In this latter set of cases, decentralized approaches to forecasting that harness the wisdom of crowds can provide useful information.

Electoral outcomes lie somewhere between these two extremes. They arise with regularity, so that forecasting models can be developed and estimated.[3] But they also depend on idiosyncratic factors that are unique to each cycle, such as candidate quality or recent court decisions. Ever since the launch of the pioneering Iowa Electronic Markets in 1998 (operating

[1] Danielle Allen, Rajiv Sethi, and Glen Weyl, "Prediction and policy in a complex system." *Transmission T-007*, Santa Fe Institute, 2021.
[2] Centers for Disease Control and Prevention, Covid-19 Forecasts: Cases, March 13, 2022.
[3] Merlin Heidemanns, Andrew Gelman, and G. Elliott Morris, "An updated dynamic Bayesian forecasting model for the US presidential election." *Harvard Data Science Review*, 2020.

under a no-action letter by the CFTC), prediction markets have been part of the forecasting landscape for elections. The forecasting performance of such markets has matched that of poll aggregates, and is competitive with the best available models.[4]

Prediction market contacts are extremely simple—they have binary payoffs with a fixed resolution date. In addition, the set of traders is relatively stable over short periods of time, and activity is sufficiently frequent to allow researchers to identify trading strategies. As long as the (suitably anonymized) trading data is made available these markets can serve as experimental laboratories that help us understand precisely how information comes to be absorbed by financial market prices.[5]

Electoral prediction markets reference positive feedback events—beliefs about the success of a campaign can affect the actual probability of success by influencing donations, volunteer effort, turnout, and other factors. Campaigns routinely try to manage these beliefs, for example by selectively disclosing internal polls. Prediction market data can help uncover this process of attempted belief manipulation. For instance, in the process of examining trading strategies using prediction market data, David Rothschild and I found that a single trader had placed a sequence of several thousand orders over the course of two years leading up to the 2012 election, with non-negligible price effects, a finding that was covered by several media sources.[6]

We are living in an age that is characterized by both ideological and affective polarization—people in different political camps don't just disagree on issues, they despise each other and rarely communicate.[7] Some of this can be attributed to online echo chambers and filter bubbles, although more traditional media such as cable television are also implicated.[8] Under these conditions, prediction markets play an interesting role. They are among the very few online forums that create strong incentives for people who disagree fundamentally about statements of fact to interact with each other. A prediction market in which only one perspective is represented with attract people who disagree, since they will consider contracts to be mispriced and will see

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[4] Joyce Berg et al. "Results from a dozen years of election futures markets research." *Handbook of Experimental Economics Results*, 2008; Rajiv Sethi et al. "Models, Markets, and Prediction Performance." Available at SSRN: https://ssrn.com/abstract=3767544, 2022.

[5] David Rothschild and Rajiv Sethi. "Trading strategies and market microstructure: Evidence from a prediction market." *Journal of Prediction Markets*, 2016.

[6] Neil King, "One Big Trader Lost Millions Betting on Romney, Study Finds," *Wall Street Journal*, 2013; Lucy McCalmont, "Study: Bettor lost $4M on Romney," *Politico*, 2013; Abby Ohlheiser, "Why One Trader May Have Bet Millions on a Romney," *The Atlantic*, 2013.

[7] Iyengar, Shanto, and Sean J. Westwood. "Fear and loathing across party lines: New evidence on group polarization." *American Journal of Political Science*, 2015.

[8] Flaxman, Seth, Sharad Goel, and Justin M. Rao. "Filter bubbles, echo chambers, and online news consumption." *Public Opinion Quarterly*, 2016; Boxell, Levi, Matthew Gentzkow, and Jesse M. Shapiro. "Greater Internet use is not associated with faster growth in political polarization among US demographic groups." *Proceedings of the National Academy of Sciences*, 2017.

a profitable trading opportunity.[9] And trading losses can cause even the most stubborn individuals to reconsider their beliefs.

In order to leverage the power of prediction markets, however, the CFTC should allow for a large range of contracts, including those that reference individual races and not just national outcomes such as congressional control. This will allow people with very specific local knowledge to transmit their beliefs, even if they don't understand the broader implications of what they know. In addition, it is important to have competition—multiple exchanges that offer similar contracts so that fees can be kept low and the implications of differences in market design can be investigated.

Thank you for the opportunity to comment.

Sincerely,

Rajiv Sethi
Professor of Economics
Barnard College, Columbia University
& External Professor, Santa Fe Institute

[9] Rajiv Sethi, "Prediction Markets in a Polarized Society." Imperfect Information, 2020.

From: Oprea Ryan
Organization(s):
University of California, Santa Barbara
Comment No: 69739
Date: 9/22/2022

Comment Text:

My name is Ryan Oprea. I am the Maxwell C. and Mary Pellish Chair of Economics and the Director of the Laboratory for the Integration of Theory and Experiments at the University of California, Santa Barbara. I have published research on prediction markets and, in particular, on the manipulation of prediction markets. In my view, election prediction markets fundamentally serve the public interest by facilitating price discovery, improving social and economic decision-making and providing a rich source of important data to scientists. I am confident that they should be legalized in the United States and, indeed, encouraged.

MANIPULATION

In question 15, the CFTC asks about the risk of manipulation. They write,

"Do the contracts present any special considerations with respect to susceptibility to manipulation or surveillance requirements? For example, could candidate campaign committees or political action committees manipulate the contracts by trading on internal, non-public polling data?"

I have published several pieces of research on the manipulation of prediction markets and so I may be able to help provide some useful perspective. It is first worth distinguishing between roughly three different kinds of market manipulation: (i) misinformation-price manipulation, (ii) momentum-price manipulation, and (iii) pure outcome manipulation.

In “misinformation-price manipulation,” a trader first buys a position in the market, artificially raises the price through unethical means, and then exits that position for a profit. For instance, a manipulator might publish a fake Georgia Senate poll to raise the odds that the Democrats win the Senate, before exiting the market.

In my view, the likelihood of this kind of manipulation occurring is extremely remote. First, it is extremely difficult to reliably manipulate public opinion: the

market is already flooded with polls, statistical models, consultant reports and other coverage of elections and it is unlikely that a trader could shift public opinion enough to make a meaningful difference in a prediction market price. Traders in these markets have strong incentives to respond only to high quality information because they have money on the line. The quantity of existing high-quality information makes it extremely unlikely that a manipulator would be successful at convincing traders that an unvetted poll or piece of data is credible enough to trade on.

What's more, this concern is in no way special to prediction markets. The same strategy could be easily executed in any other already existing futures market (e.g. publishing an erroneous report about crop yields) and is equally unlikely to succeed for the same reasons. And if a manipulator wanted to manipulate specifically public opinions about an election outcome, they could make far more money trading on in traditional markets: bonds, currencies, commodities, and the stock market all respond to beliefs about election outcomes too. The manipulator would make far greater returns trading in such traditional markets than on a prediction market (like this one) with position limits of only $25,000. On this basis, I conclude that this election market almost certainly produces no additional manipulation risk relative to those produced by already existing markets.

The second form of manipulation is "momentum-price manipulation" in which a trader takes a large position in the market to increase the price of a candidate, hoping to induce other traders to join them and move the price higher still. By exiting this cascade before it breaks, the manipulator can earn money on the momentum (a variation on a "pump and dump" scheme). If this price is publicized it may generate positive press for that candidate, influencing opinions. The latter concern is not possible for a Congressional control market like the one proposed, where the market is not on individual candidates. But nevertheless, it is useful to examine whether or not this kind of manipulation is likely to be effective even when possible. Many economists and political scientists have studied this question. As I wrote in a paper ("A Manipulator Can Aid Prediction Market Accuracy," Economica, 2009) that I co-authored with George Mason's Robin Hanson,

"Many others, however, have reported failed attempts to manipulate prices with trades, historically (Strumpf and Rhode 2004), in the field (Camerer 1998) and in the laboratory (Hanson et al. 2006; Oprea et al. 2007). A recent review article concludes that, 'none of these attempts at manipulation had much of a

discernible effect on prices, except during a short transition phase' (Wolfers and Zitzewitz 2004)."

In our own paper, we sought to understand why this kind of manipulation is so difficult. We argued that such attempted manipulation is likely to increase price accuracy, by increasing returns to being an informed trader. In particular, we show that a momentum manipulator functions as a kind of "noise trader" whom a smart, informed trader can profit by trading heavily against. As a result, even if such manipulation were to be attempted, it would likely incentivize sophisticated traders to enter the market and incentivize other traders to become more informed. As we write, "[B]y inducing more traders to become better informed, an increase in noise trading indirectly improves the accuracy of market prices (Kyle 1989; Spiegel and Subrahmanyam 1992). If the presence of manipulative traders similarly induced more effort by informed traders, this could help explain the typical failure of manipulation attempts." In additional joint work with Robin Hanson and David Porter ("Information Aggregation and Manipulation in an Experimental Market," Journal of Economic Behavior and Organization, 2006) we directly show that even when we pay participants directly to attempt to manipulate prediction markets, they are unsuccessful at doing so. The reason? Other traders get wind of the attempts and trade in such a way as to counteract the manipulation efforts. There are thus good theoretical and empirical reasons to believe this type of manipulation would be ineffective.

The third form of manipulation is pure outcome manipulation. In this scenario, a bad faith actor attempts to directly sway the election itself in order to make a profit off of the prediction market. There are many reasons to believe this fear is outlandish and should not be treated as a serious objection to the market being listed. First, billions of dollars are spent every cycle on elections (2020 saw over $14 billion spent). Influencing and changing someone's vote is an incredibly expensive affair. Many donors individually spend more than nine figures each to even try to move the odds of their preferred party winning by a percentage point or two. The notion that anyone would attempt to manipulate the election in order to earn less than $25,000 (the limit on this market), let alone do so successfully, strikes me as extremely far-fetched. Second, people already have large financial stakes in elections, sometimes many orders of magnitude more than the $25,000 limits. These markets do not uniquely give people an economic stake in elections – the stake they give is in fact quite small. Third, if someone truly wanted to manipulate our elections for financial gain, they could (again) easily make far more money using traditional commodity, equity and bond markets.

In conclusion, the CFTC should not use fears about manipulation as a reason to prohibit this market from being listed. These markets simply do not create significant new incentives or means to manipulate election outcomes or the markets predicting them.

This response also answers two other questions that the CFTC posed, specifically questions 13 and 14. As far as I can tell, there is no way these kinds of markets can be used to sidestep campaign finance laws and I am deeply confused about where this concern comes from. Prediction markets provide no means by which traders can communicate with a candidate. The money from a position taken for a candidate does not go to the candidate him or herself. The proposed market also relates to overall Congressional control, not to individual candidates making these objections completely irrelevant. This also answers the question regarding the integrity or perceived integrity of the election. It is worth remembering that Britain has had markets on elections for decades without any resulting questions about election integrity.

PRICING

The CFTC asks in question 11 the following question:

"Do the contracts serve a price-basing function? For example, could they form the basis of pricing a commercial transaction in a physical commodity, financial asset, or service?"

The weight of the academic literature suggests the answer to this question is yes, and it is not difficult to see why. Suppose someone is attempting to price the stock of a solar power company on January 2, 2021, the day before the Georgia runoff elections would decide the partisan composition of the Senate. If the Democrats win, the odds of a major green energy bill are certainly higher than the counterfactual where one Republican wins (giving the Republicans 51 votes). Suppose the stock is worth $10 if both Democrats win, and $9 otherwise. The actual price you are willing to pay for the stock is thus $9 + the probability that both Democrats win office. If Democrats have a 50% chance of sweeping, then the fair price you would be willing to pay is $9.50. If the probability is 25%, that fair price is $9.25. This simple example illustrates the key intuition: insofar as the government has clear impacts on specific firms through its policy choices, the fair price for equities of those firms should depend on the probability of one party or another gaining control.

The price on the prediction market/event contract becomes a means by which one can price those financial assets accurately. It is not sufficient to use polls alone, as those are slow to react to major developments and have been shown to be less accurate than prediction market prices in many studies. Adding a prediction market would thus facilitate more accurate price discovery, and represents a clear public interest that the CFTC should be eager to promote.

PUBLIC INTEREST

The CFTC asks whether or not these markets promote the public interest. I think the clear answer is “yes.” Let me highlight three clear public interest benefits.

First, I would argue that the improvements in pricing (just discussed) directly promote the public interest. Making market prices more accurate has wide-ranging benefits to the public at large, preventing resources from being wasted and channeled to wasted use and producing more accurate information on the economy to its participants.

Second, and more generally, these types of predictions markets are likely to improve decision-making across society. Prediction markets produce valuable, public information that is highly relevant to the choices people make both in the economy and beyond. A company trying to decide whether or not to build a new factory, for instance, benefits by knowing whether the tax breaks they are relying on to build that factory will persist into the future. And since there are clear partisan differences on many important policy issues, knowing who will control Congress in the next two years is extremely valuable in forming these kinds of forecasts and making good decisions in the face of them. This illustrates one of the key benefits of markets: the information their prices produce do not benefit only those who trade in them. Every person in America whose decisions depend in part on who controls government can use these probabilities to make better decisions in advance.

Third, the prices from prediction markets are extremely valuable for researchers trying to understand how public beliefs evolve, what they respond to and how those beliefs influence major decisions. In the last decade or so, important research has demonstrated how useful prediction markets can be as a way of measuring these beliefs in a fine-grained way. Markets on political outcomes are especially valuable for this kind of academic research. To give one example, my colleague at UCSB, Kyle Meng used prediction market prices (from Intrade) for on the likelihood of a major piece of climate legislation passing to answer some

fundamental questions about the abatement costs of climate change policy. This important and influential research ("Using a Free Permit Rule to Forecast the Marginal Abatement Cost of Proposed Climate Policy," American Economic Review, 2017) used these prediction market prices to infer market beliefs and thereby to back out accurate measurements of abatement costs. This kind of important research – with direct relevance to climate policy -- would have been impossible without a then-running political prediction market. Other research has followed similar strategies but their continuation depend crucially on the CFTC allowing these kinds of markets to operate. I view this as a major public interest benefit of these types of markets.

CONCLUSION

These markets serve the public interest by promoting accurate price discovery, improving decision-making and providing valuable data to academic researchers on important policy topics. Concerns about manipulation–either of the market, or of the election– are poorly founded and do not form a reasonable basis for rejection. In my view, the Commission should clearly allow these prediction markets to legally operate in the United States.

We are academic researchers who study prediction markets for both the value they provide in understanding the real-world events that they predict, and what they teach us about market design and usage that is widely applicable to numerous fields. We are writing in favor of allowing Kalshi (or any similar entity) to offer a broad range of political and policy event futures, including the election outcomes they are currently proposing.

Prediction markets work because they ask the right questions of the right people, who are properly incentivized both to answer them honestly and come back and update their positions when new information becomes available to them. Statistical models work very well in situations where there is high repetition along with stable and available data (for example: frequently companies can predict daily sales numbers in stable industries very well from historical sales data), but are untenable if the outcome or necessary data is idiosyncratic (for example: predicting the sales for one day at random pop-up stores or creating predictions of sales when the sales data is captured differently by store). Polling works very well at getting a snapshot of the people available to answer a given poll, but it is not a prediction of what will happen in a larger target population (for example: a poll cannot take into account unreachable populations or expected changes between now and the outcome of the event). Further, while polling was relatively stable for decades from the 1950's to 1990's, dramatic shifts in how pollsters try to reach people due to shifting technology, lower response rates, and increasing correlation with non-response and outcomes of interest have raised additional concerns about the quality and consistency of polling in recent years. Prediction markets take advantage of both models and input data like polling, but they also motivate experts to aggregate that available information along with dispersed information, and intuition about how idiosyncratic information will affect outcomes as the events unfold. And, by aggregating many independent experts together, using their marginal willingness to pay to help weigh them, prediction markets do a great job in making predictions in idiosyncratic situations, such as found in political and policy events.

Authors of this letter have written extensively in the academic and popular press about prediction markets.[1] We have documented how prediction markets-based predictions outperform other key predictions in: accuracy, latency, and time-granularity.[2] As a result, market-based predictions are uniquely impactful in event studies, such as politics and policy. Further, prediction markets are nimble and transparent, culminating with a pricing event, making them particularly attractive for research on how market design affects trading on various conditions.[3] These learnings help improve the efficiency of a wide range of markets.

Prediction market prices in political and policy events would help facilitate price discovery in a wide-range of asset markets, affecting the entire economy (note that pricing is freely available to non-traders). Political and policy events matter: they expose a wide-variety of businesses to risk that traditional financial markets have trouble pricing. A robust set of markets for political and policy events

[1] Authors of this letter are author(s) on all of the papers referenced, which represent a small percentage of their body of work on the prediction markets.
[2] See research examples: Rothschild (2009), Rothschild (2015), Crane (2019), Crane and Vinson (2022), Strumpf and Rhode (2004).
[3] See research examples: Rothschild and Pennock (2014), Rothschild and Sethi (2016), Schmitz and Rothschild (2019)

could price that risk, and, if they were allowed to flourish, could eventually grow to provide hedges where uncertainty is particularly acute.

Concerns that these types of markets could cause manipulations in the outcome, or be manipulated, are misplaced. First, the market caps are many magnitudes smaller than the amount of money influenced by these political and policy events: stakeholders with the ability to affect events will not be incentivized by the relatively small amount of money they could make investing against their public interests. Second, manipulating prediction market prices has proved to be very hard, transparent, and relatively short lived.[4] With a transparent order book it is very easy to see if someone is attempting to manipulate a market, immediately mitigating the impact of any short-lived price manipulation. Thus, manipulations have had little impact on the derived underlying probability of the event, by those who follow the prices.

Signed,
Harry Crane, Professor, Department of Statistics, Rutgers University
David M. Pennock, Director, DIMACS Center, and Professor, Department of Computer Science, Rutgers University
David Rothschild, Economist, Microsoft Research, and Fellow, CSS Lab, University of Pennsylvania
Koleman Strumpf, Burchfield Presidential Chair of Political Economy, Department of Economics,Wake Forest University

[4] See research example: Strumpf and Rhode (2008)

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September 22, 2022

Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, NW
Washington, DC 20581

Re: Industry Filing 22-002: KalshiEX request for approval of political futures contracts

Dear CFTC:

In summary:

- The KalshiEX contracts are in the public interest and should be approved without delay.
- The current CFTC should have the courage to correct the decade old Nadex mistake from a previous set of commissioners and approve these contracts.
- Elections have economic consequences. The contracts can be used by those exposed to energy and tax policy to hedge.

[1] All opinions are strictly my own and do not necessarily represent those of Georgetown University, FINRA, or anyone else. I am the Academic Director for the FINRA Certified Regulatory and Compliance Professional (CRCP®) program at Georgetown. Over the years I have served as a Visiting Academic Fellow at the NASD (later part of FINRA), served on the boards of the EDGX and EDGA stock exchanges, served as Chair of the Nasdaq Economic Advisory Board, and performed consulting work for brokerage firms, stock exchanges, market makers, issuers, and law firms. I've also visited over 80 stock and derivative exchanges around the world. As a finance professor, I practice what I preach in terms of diversification and own modest and well-diversified holdings in most public companies, including brokers, asset managers, market makers, and exchanges.

- The contracts serve a public purpose of information production and are likely to be better than polls.
- The contracts pose no risk of undermining election integrity.
- The long-standing existence of academic prediction markets with zero criminal sanctions is a *de facto* demonstration that such markets are legal.
- Even if one could construe this as gaming, The CFTC should use its exemptive authority to approve the contracts because they are in the public interest.
- The CFTC should approve these contracts immediately and not wait until October.

Background

Many years ago, a previous set of CFTC commissioners incorrectly said NO to a Nadex request to trade election futures contracts on the grounds that such contracts were gaming and thus illegal.[2] Now Kalshi is seeking to trade contracts that would allow users to speculate on or hedge on the results of elections. The CFTC is requesting comment on various questions related to these contracts, mostly related to whether or not the proposed contracts are related to gaming.[3]

The Supreme Court is not hung up on *stare decisis* and the CFTC should not be either.

As the recent overturning of *Roe v Wade* indicates, the Supreme Court is willing to overturn precedents when a majority of the justices feel a mistake has been made. Today's commissioners of the CFTC should also have the courage to undo the previous mistake that was made in denying election-based contracts. Yes, the doctrine of *stare decisis* does provide important predictability and stability in law and rulemaking. However, with a decade of additional consideration, it is now clearer that it is in the public interest to allow these contracts to exist. The current CFTC commissioners should not feel bound by an incorrect precedent made by a previous generation of commissioners.

Elections have consequences, and election contracts can provide a means to hedge them.

We live in a politically polarized world. The two major parties have very different policy objectives. Election outcomes can have a huge impact on the economic success or failure of an enterprise. For example, one party wants to promote clean energy and the other party wants to promote carbon-based fuels. Those with exposure to fossil fuels or to green energy companies might want to hedge their exposure with the proposed contracts. The different parties also have very different ideas on tax policy, and once again individuals and corporations might want to hedge with these contracts. It is in the public interest to provide these hedging tools.

[2] https://www.cftc.gov/PressRoom/PressReleases/6224-12

[3] https://www.cftc.gov/filings/documents/2022/orgkexpublicquestions220829.pdf

It remains to be seen how much liquidity these contracts will have, which will affect their fitness of purpose for hedging. Even if the contracts are not big enough for Exxon to use for hedging, they will still have serious utility for smaller investors. The CFTC should let it up to the DCMs to design and self-certify the contracts, and restrain from the urge to micromanage contract design. The DCMs have the incentive to get it right, and the CFTC should allow them to experiment in each election cycle.

Better information about likely election outcomes is in the public interest.

It is no secret that public opinion polls have become less trusted in recent years as people are less likely to answer the phone.[4] Nevertheless, there is a large hunger for information about what voters are likely to do. Better information can help candidates and parties better allocate their campaign resources. Better information can also help voters make voting and donating decisions. Better information can allow the media to make more informed decisions about how to cover candidates. For example, access to the platform of a political debate has been based on poll numbers.[5]

With better information from prediction markets, better decisions can be made. The information that an election is close can increase voter interest and turnout, thus increasing voter engagement in the election process. Similarly, the real-time nature of prediction markets can give voters and candidates nearly instant information about the impact of various events on a campaign. Such an improvement in information is in the public interest.

Markets can do a better job than pollsters because of their inherent financial incentives.

Potential voters have no incentive to answer a call from a pollster or even tell the truth about their voting intentions. This adds a large amount of uncertainty to poll results. Markets, on the other hand, provide a strong financial incentive for people to put their money where their information is. Profit-driven players will use all of the information at their disposal to make good trading decisions, and this allows markets to aggregate all of the information that is available. This means that election markets are likely to provide more accurate forecasts than polls.

Better information can improve election integrity.

Conspiracy theories often fly when election results differ from pre-election polls. Voters rightly ask "How did my candidate lose when they were leading in the polls?" With better forecasts of likely outcomes, voters are more likely to accept the final election results. As the election markets aggregate all

[4] See https://www.scientificamerican.com/article/why-polls-were-mostly-wrong/.

[5] See https://www.debates.org/about-cpd/overview/

of the available information, they are likely to provide more accurate forecasts of the final results and thus help to assure voters of the integrity of the election process.

There is no financial incentive to manipulate a regulated prediction market to change the election outcome.

One concern is whether bad actors might attempt to manipulate a prediction market in order to create "momentum" for their candidate and influence the election. That would be a stupid thing for anyone to do, given the highly regulated nature of CFTC-regulated exchanges. The existence of a high-quality audit trail makes it very easy to identify any such manipulation. It would be far more cost effective for a manipulator to hire an army of social media bots than to attempt to manipulate an election via a prediction market.

The longstanding existence of various election prediction markets is *de facto* evidence that such markets are not illegal gaming.

Prediction markets have existed for many years that harness market forces to predict election outcomes. For example, the Iowa Electronic Markets have been in operation for over 30 years.[6] The long-standing operation of such election prediction markets is strong evidence that election-based prediction markets are not illegal under state of federal law.

Elections are not chance events.

Gambling typically involves some outcome that is essentially random, and upon which the rules of probability apply. Examples include the spin of a roulette wheel, the roll of dice, or the drawing of a card from a well-shuffled deck. Such random activities provide little, if any, economic benefit beyond entertainment. Due to the damage that compulsive gamblers do to themselves and others, gambling is highly restricted or regulated in most jurisdictions.

Elections, on the other hand, are not based on random draws.[7] They are the bedrock of our political process and have an important economic purpose. Elections select the leaders who will be making the important policy decisions that affect the economy.

[6] See https://iemweb.biz.uiowa.edu/. Another example is predictit.org.

[7] One exception is in the extremely rare case of a tie. In some jurisdictions, a random process can be used to break the tie. For an example, see https://www.wglt.org/news/2021-04-26/hats-off-to-new-danvers-trustee-after-election-tiebreaker

Uncertainty is not the same as gambling.

The outcomes of political elections, like future weather patterns, future crop prices, and future metal prices, are highly uncertain. The mere fact that an outcome is uncertain does not mean that an economic transaction tied to that uncertain outcome is illegal gaming. If that were the case, then all futures contracts would be connected to gaming and hence illegal.

Even if these contracts could be construed as gaming, the CFTC should use its exemptive authority to approve these contracts as in the public interest.

While these contracts are certainly not the type of gaming Congress envisioned in writing the prohibition in section §5c(c)(5)(C) of the CEA, one can see how some might think so. Fortunately, Congress has given the CFTC pretty broad exemptive authority to act in the public interest.[8] It is highly unlikely that a serious court challenge would occur if the CFTC approves these contracts. It is in the public interest to approve these contracts, and the CFTC should do so without delay. Given the rapidly approaching elections, the CFTC should approve the contracts immediately and not wait until October.

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Respectfully submitted,

James J. Angel, Ph.D., CFP®, CFA
Georgetown University

[8] See 17 CFR § 140.99 - Requests for exemptive, no-action and interpretative letters.

Comment No. 72467 Christopher Greenwood, N/A 2023 Contract

From: Adam Ozimek
Organization(s):

Comment No: 69731
Date: 9/22/2022

Comment Text:

I would like to submit a brief comment in support of allowing KalshiEX to provide contracts on which political party will be in control of congress, as well as more broadly in support of allowing political outcomes to be on their platform.

In support I am submitting a paper I have written on the value to society and the economy of allowing political betting markets. In this, I provide an overview of how we learn from prediction markets, the benefits they generate, their advantages compared to other forecasts.

In particular, I would point to the following sections, however the entire paper is of relevance.

2.1. The Informational Value of Prediction Markets
2.2. Prediction Markets' Successful Record of Forecasting
2.3. The Advantages of Prediction Markets
2.4. Criticisms and Opponents of Prediction Markets

Thank you for your consideration,

Adam Ozimek

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WORKING PAPER

THE REGULATION AND VALUE OF PREDICTION MARKETS

by Adam Ozimek

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Abstract

Prediction markets are important information-aggregation tools for researchers, businesses, individuals, and governments. This paper provides an overview of why prediction markets matter, how they are regulated, and how the regulation can be improved. The value of prediction markets is illustrated with discussions of their forecasting ability and the characteristics these markets possess which give them advantages over other means of forecasting and information aggregation. The past, current, and future regulatory environment is surveyed.

JEL codes: D7, D8, C53, K2, G14, G13

Keywords: prediction markets, regulation, futures markets, forecasting

The Regulation and Value of Prediction Markets

Adam Ozimek

Prediction markets are exchanges where individuals trade what are sometimes called "event contracts." Broadly speaking, these contracts specify some future event with different possible outcomes, define a payment structure based on those outcomes, and state a date when the contract expires. An example would be a contract that specifies "Barack Obama wins the US presidential election in 2012" and that pays out $10 after the election if that outcome occurs or $0 if it does not occur. The direct purpose of such markets is to allow individuals to bet on uncertain future events; however, these markets also produce prices that can provide valuable information. In fact, these markets are sometimes specifically created to gather the information that their prices reveal, rather than for the utility of trading to market participants.

Prediction market prices have informational value because they aggregate the beliefs of market participants and reveal what the market overall forecasts are the odds of the event at hand occurring. For example, if the aforementioned contract is selling at a price of $5.50, it means that the market thinks the odds of Obama getting reelected are 55 percent. In the run-up to the election, the media and anyone interested in a market-based measure of the odds of Obama's reelection could watch the prevailing prices in this market.

Prediction markets have generated forecasts for a wide variety of purposes beyond elections: who will win the Academy Awards, sales of a particular product, and how bad the flu season will be. This information is useful not only to traders wishing to profit from their forecasting and information-gathering abilities, but to researchers, businesses, governments, and others. Yet, despite the variety of ways that these markets have proven valuable, the regulatory

environment for prediction markets in the United States has been more skeptical than supportive. In particular, the recent blocking of movie box-office and political prediction markets indicates a worsening regulatory environment.

This paper provides an overview of how we learn from prediction markets, the benefits they generate, their advantages compared to other forecasts, and the regulatory environment. It then makes suggestions for regulatory reform.

1. How We Learn from Prediction Markets

1.1. Winner-Take-All Contracts

There are many types of prediction market contracts, each of which reveals different information. The most prominent by far is the "winner-take-all" contract.[1] The example of a contract for President Obama's reelection represents such a contract. These contracts are similar to what in finance are known as "binary options." In both, there is some event that will or will not occur. If it occurs, there is a specified payout to the contract holder, and if it does not occur, then the contract holder receives nothing. Other specific examples of these markets include the following:

- magnitude 9.0 earthquake to occur anywhere before midnight ET, Dec. 31, 2012
- successor to Pope Benedict XVI to be from Italy (expires on March 31, 2013)
- Arctic sea ice extent for September 2012 to be less than 4.3 million square kilometers
- any country currently using the euro to announce intention to drop it before midnight ET, Dec. 31, 2012
- Argo to win best picture at the 85th annual Academy Awards

[1] This section will follow the nomenclature defined in Wolfers and Zitzewitz (2004).

- The US debt limit to be raised before midnight ET Dec. 31, 2012
- Higgs boson particle to be observed on/before Dec. 31, 2012[2]

If any of these events occurred within the stated time limit, the contracts paid out $10; if the events did not occur, then the contracts paid nothing.

In some markets, whether the event has occurred or not is clear. For example, Argo clearly won best picture at the 85th annual Academy Awards.[3] Other contracts require more specificity about what constitutes the event occurring. For example, the contract for the market on whether any country would leave the euro specified the following rules:

> The market will be settled using official statements from the EU and Euro-member states, as reported in three independent and reliable media sources.
>
> The market will be settled when an announcement is made—the Euro does not actually have to be dropped as a national currency by the date specified in the contract. For example, if there is an announcement on December 1st 2013 that the Euro will be dropped in June 2014 the market will be settled at $10.00 on the date of the announcement (December 1st 2013) and not the date the Euro will no longer be used (June 2014).[4]

The contract rules also state that if a country is kicked out of the eurozone, the contract holder receives the payout. The level of detail required in the contract rules depends on the potential for disagreement about what outcome has occurred. As the euro example shows, the details of the contract rule can also significantly affect the information that contract prices reveal. If the rules specified that the euro would have to be dropped by the end of the contract date, or if a country being kicked out of the eurozone did not count, then the information gleaned from this market would be substantially different.

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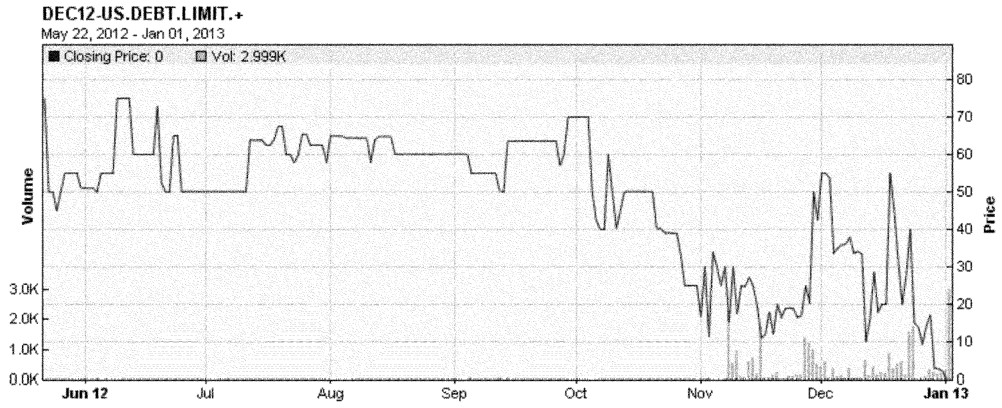
[2] Each example is an actual expired contract from Intrade.

[3] Even for this contract, there is a small chance of uncertainty due to the possibility of a tie, which has occurred six times in the history of the Academy Awards.

[4] See Intrade, "Any country currently using the Euro to announce intention to drop it before midnight ET 31 Dec 2012," http://www.intrade.com/v4/markets/contract/?contractId=713737.

The main informational value of a prediction market comes from examining its prices. For winner-take-all contracts, given some basic assumptions about the markets,[5] the price equals the market's expectation of the probability of the outcome occurring. For a contract paying $10 if an event occurs, if the current price is $9, then the market believes the probability of the event occurring is 90 percent. By watching how these prices change over time, participants and observers can see how the market's aggregate expectation of an event's probability changes. For example, figure 1 shows the daily closing price for the contract on whether the US debt limit would be raised by the end of 2012. The numbers suggest that the probability the government would raise the debt limit appeared strong from June 2012 until early October, when prices began to decline, likely due to speculation starting in early October that the debt ceiling would not be reached until January 2013.[6]

Figure 1. Daily Closing Price of Intrade Contract: "The US debt limit to be raised before midnight ET 31 Dec 2012"



Source: www.intrade.com.

[5] The required assumptions are that markets are efficient and that the market performs as a risk-neutral representative trader. While these assumptions may be strong, the observed divergences are likely to be small enough that the conclusions are approximately true. Furthermore, the predictions made under these assumptions perform well. See Snowberg, Wolfers, and Zitzewitz (2012).

[6] See, for example, Damian Paletta, "U.S. Appears Set to Hit Debt Ceiling in January," *Washington Wire*, October 15, 2012, http://blogs.wsj.com/washwire/2012/10/15/u-s-appears-set-hit-debt-ceiling-in-january/.

In addition to the mean, one can utilize winner-take-all prices to estimate a complete forecast distribution of a variable. For instance, one could have a contract that pays off if the official unemployment rate is between 5.00 percent and 5.25 percent by a certain date, another contract that pays off if the rate is between 5.25 percent and 5.5 percent, another for 5.75 percent to 6.00 percent, and so on. By looking at the prices of each contract, the participants in the prediction market estimate the probability that the value will fall within a particular range, and with enough contracts, we can estimate the full probability distribution of an outcome variable (Wolfers and Zitzewitz 2004).

1.2. Alternative Contract Structures

Other types of prediction market structures include index and spread contracts (Wolfers and Zitzewitz 2004). For index contracts, the amount paid is a function of the level of some outcome variable. For example, the Iowa Electronic Markets are prediction markets that offer vote share contracts that pay out based on a political party's share of the popular vote in the presidential election. If Democrats win 45 percent of the popular vote, then the contract pays out 45 cents to whoever holds contracts for the Democratic share. These prices reveal the market's belief of the variable's expected value, or mean.

Index contracts can also be structured to reveal other market beliefs about the distribution of the measure at hand. For example, an index contract could pay out based on the squared value of the Democratic vote share. This would reveal $E[d^2]$ where d is the Democrats' share of the popular vote. Combining this estimate with a basic index for this variable would allow the estimation of the variance using $Var(d) = E[d^2] - E[d]^2$. Traders may be interested in such markets if, for example, they have beliefs about the market's volatility. These types of markets

would be useful, for example, to firms looking to understand the uncertainty of forecast revenue. If market designers prefer a particular structure like this for informational purposes, but traders have insufficient demand for these types of contracts, then participation subsidies can be used to generate trading.

A third type of contract is a spread, in which the payout and cost are fixed, as say $2 and $1. The going price of the contract specifies the minimum value that the outcome must take in order to receive the payout, and varies until there are an equal number of buyers and sellers. This type of bet is common, and it includes point spreads in sports gambling. These contracts allow the discovery of market beliefs of percentiles. For instance, if the payout is $2 and the cost is $1, then the prevailing market price will be the median. If the payout is $4 and the cost is $3, then the market price will be in the 75th percentile (Wolfers and Zitzewitz 2004).

Other more complex market structures can also be used that allow the recovery of the full joint probability distribution over many variables, meaning that one could measure how the probabilities of two events are related. For example, one might be interested in how the odds of the following two outcomes are related: (1) whether a particular candidate will be elected president, and (2) whether GDP will grow by 4 percent or more that year. Measuring the joint probability would tell you the probability of (1) occurring, contingent on particular probabilities of (2), and vice versa. For example, if the candidate is expected to enact economic policies that lead to the specified economic growth rate, and the probability of the candidate being elected is 80 percent, the joint probability might tell you that there is a 60 percent chance that GDP will grow by at least 4 percent, while if the odds of the candidate being elected are 10 percent, the probability of this fast economic growth might be more like 25 percent. These markets work by allowing participants to specify combinations of outcomes and use scoring functions to determine payout (Hanson 2003).

Many other modifications and types of prediction market designs exist. For example, various prediction market modifications have been proposed that would allow interested parties to subsidize participation, and others have been designed to work with "play money" and prizes (Abramowicz 2008). Alternative index structures are useful to consider both because traders may desire different betting structures and because prediction market designers may wish to extract different information.

2. The Benefits of Prediction Markets

2.1. The Informational Value of Prediction Markets

In most cases, the beneficiaries of speculative markets are those seeking to trade in them: firms that wish to sell stock to raise capital, bond traders who wish to buy and sell bonds for profit. For futures and options markets, the closest financial instruments to prediction markets, their hedging value to traders is commonly cited as the primary economic benefit. For example, farmers use futures markets in their crops to hedge against the possibility of lower crop prices in the future, and airlines use futures markets for oil to hedge against the risk of higher fuel prices. While speculative markets have the added benefit of inducing people to gather information and aggregating it into prices, until recently this benefit has not been a primary justification for those markets. For prediction markets, in contrast, the informational value of prices can be the primary benefit rather than the utility to the market participants (Hanson 2008).

Furthermore, even in cases when hedging or speculation is the primary reason that prediction markets exist, the value of the information these markets generate can be substantial. To see how prediction markets can generate positive benefits beyond those accruing to traders, consider the example of historical presidential betting markets.

Markets to bet on the outcomes of future events have existed for a long time, and elections in particular have a long history as the subject of betting markets. As Rhode and Strumpf's (2004) analysis of historical presidential betting markets shows, public and open political betting dates back to George Washington's election, and organized election-betting markets have existed since the 1860s.[7] These markets became so popular that by the 1900s, the amount of money bet in them was at times larger than amount invested in stocks and bonds. In 1916, the $165 million exchanged in election-betting markets was more than double what was spent on election campaigns that year.

The popularity of these markets meant the current odds reflected the aggregation of a wide and diverse pool of knowledge and information. An added benefit of their popularity was that the current odds were made widely available. From 1896 to 1924, the *New York Times*, *Sun*, and *World* provided price quotes almost daily, giving newspaper readers up-to-date information that was otherwise largely unavailable in an age when polling was scarce and unscientific. With these odds, those interested in the election could catch up quickly on its status using the aggregated beliefs of dispersed market participants to see who had the lead and by how much.

We can see this wider utility of prices in Andrew Carnegie's comments at a press conference after returning from a trip to Scotland in 1904: "From what I see of the betting . . . I do not think that Mr. Roosevelt will need my vote. I am sure of his election."

A similar indication of the high confidence people placed in the market odds as representing accurate forecasts comes from the *New York Times*, which reported that "the Wall Street odds represent the consensus of a large body of extremely impartial opinion that talks with money and approaches Coolidge and Davis as dispassionately as it pronounces judgment on Anaconda and Bethlehem Steel."

[7] The historical facts and quotes in this section come from Rhode and Strumpf (2004).

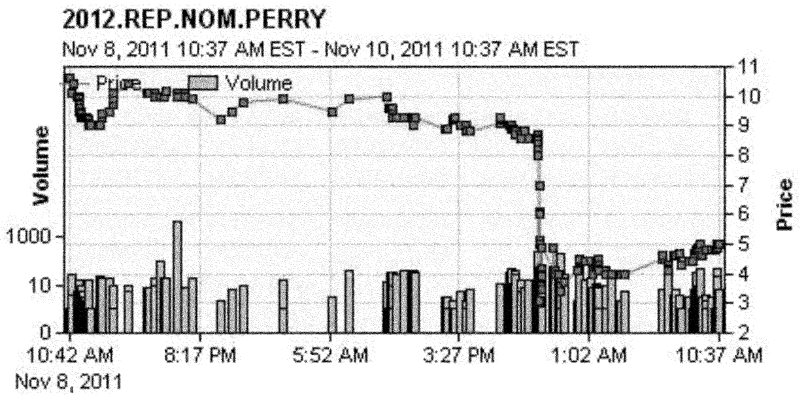
The confidence was well placed: historical presidential betting markets almost always predicted the correct winner, and well in advance of the election, despite the lack of scientific polling to inform the betting (Rhode and Strumpf 2004). In fact, Erikson and Wlezien (2009) find that these markets predicted better in the era before scientific polling (election years 1880–1932) than in the era with scientific polling (1936–2008), and that these early markets performed at least as well as later polling would.[8]

History thus shows that prediction markets are capable of producing valuable information and, as a result, are capable of being closely watched indicators. However, their usefulness is not only a historical artifact. Starting in the early 2000s, political and other prediction markets once again became a popular source of information. Their resurgence in popularity reflects both their good forecasting record and their ability to produce fine-grained data that polls, expert surveys, or other methods of aggregating beliefs cannot replicate.

Consider, for example, a story appearing on the website of the *New York Times* about a gaffe by presidential candidate Rick Perry during the 2012 GOP primary debate. The article showed how the prices on an Intrade contract that paid off if Governor Perry won the GOP nomination changed in the minutes and hours following his gaffe. The results, shown in figure 2, implied that his odds of receiving the nomination fell by around half. The ability to produce objective, up-to-the-minute assessments like this is unique to prediction markets, and thus part of why they are valuable sources of information.

[8] This result is paradoxical given that scientific polling should have provided betting markets with more information and thus increased their accuracy. However, part of the explanation may be that in the earlier era, betting markets were much thicker. Rhode and Strumpf (2004) report that the peak betting volume in the earlier era was 200 times what is wagered on today's Iowa Electronic Markets.

Figure 2. Change in Price of Intrade Contract for Gov. Rick Perry's Possible GOP Nomination



Source: www.intrade.com.

The resurgent popularity of prediction markets as informational sources has not been limited to elections. Stories in the *New York Times* in the last few years have cited Intrade prices on a wide range of topics, including whether the Higgs boson particle would be discovered;[9] whether the Patient Protection and Affordable Care Act (Obamacare) would pass[10]—and then whether the Supreme Court would strike down its individual mandate;[11] whether Lebron James would sign to play for the New York Knicks;[12] whether Ben Bernanke would be reconfirmed as Fed chair;[13] whether Treasury Secretary Geithner was going to be fired;[14] and whether Sonia Sotomayor would be confirmed to the Supreme Court.[15] In each of these examples, the author found prediction markets to be the best available source of information for summarizing the odds of the event occurring. The objectivity of prediction markets compared to an individual expert's subjective, and perhaps politically partisan or

[9] Dennis Overby, "New Data on Elusive Particle Is Shrouded in Secrecy," *New York Times*, June 19, 2012.
[10] Paul Krugman, "Health Care Resurrection," *New York Times*, March 9, 2010.
[11] Eduardo Porter, "Self-Interest Meets Mandate," *New York Times*, June 19, 2012.
[12] J. David Goodman, "King James and Other Small Things," *New York Times*, July 8, 2010.
[13] Catherine Rampell, "The Betting on Bernanke," *New York Times*, January 22, 2010.
[14] Dealbook, "Betting on Geithner's Exit," *New York Times*, March 18, 2009.
[15] Kate Phillips, "Grassley to Vote against Sotomayor," *New York Times*, July 27, 2009.

otherwise biased, assessment makes prediction markets particularly valuable to journalists , for whom the appearance of objectivity is essential.

As Perry's gaffe showed, the real-time, constantly updating nature of prediction markets means they provide a highly refined measure that polls, expert surveys, and other methods of aggregating beliefs cannot easily replicate. However, this information is not just useful to individuals who want up-to-date information, but also to academics and other researchers. The following examples of academic studies using prediction-market data show the variety of questions these markets can address:

- how Democrat versus Republican presidential victories affect the stock market (Snowberg, Wolfers, and Zitzewitz 2007)
- how a cap-and-trade bill would affect various industries (Meng 2013)
- the impact of health care reform (before such legislation had been enacted) on health care industry stocks (Al-Ississ and Miller 2010)
- whether star actors increase revenue for movies (Elberse 2007)
- how the Iraq War was expected to affect oil prices and the stock market (Wolfers and Zitzewitz 2009)

We can see the optimism for the potential value of prediction -market data to researchers in the paper "How Prediction Markets Can Save Event Studies ," wherein Snowberg, Wolfers, and Zitzewitz (2012) argue that "by augmenting event studies with prediction markets , other scholars will no doubt come up with creative ways to address many other unanswered questions. "

Overall, the historical record and modern usage by the media and academics show the usefulness of prediction markets as a source of information. In many instances, individuals

choose prediction markets' probabilities over their next-best informational option, which illustrates that they are economically valuable to nontraders.

2.2. Prediction Markets' Successful Record of Forecasting

An important reason that political prediction markets are useful is that despite the availability of scientific polling, poll aggregators, and a wide variety of forecasts and expert opinions, prediction markets have a track record of successfully forecasting election outcomes. Since 1988, the Iowa Electronic Markets have provided a platform for prediction markets for elections. In addition, in elections from 2006 through 2012, prediction markets on Intrade remained closely watched and much discussed. Again, the focus on these markets' prices as forecasts is well placed: compared to polls, prediction markets are more accurate and have half the forecast error (Snowberg, Wolfers, and Zitzowitz 2012).

While prediction markets undoubtedly outperform individual polls, a variety of sophisticated poll aggregators are now available that remove known biases in polls and therefore raise the question of whether prediction markets add anything to these results. However, in competitions between debiased polls and debiased prediction markets, prediction markets forecast better. Rothschild (2009) compares the forecasting ability of Nate Silver's FiveThirtyEight forecast based on debiased polls to the political prediction markets on Intrade for the 2008 election. While FiveThirtyEight forecast slightly better than raw prediction markets within 30 days of the election and forecast worse before that point, prediction markets corrected for the known long-shot bias forecast better than either at any time period.

Perhaps more important than the head-to-head forecasting ability of prediction markets versus polls or fundamentals is whether the prediction markets provide different information than

the alternatives. If prediction markets are merely aggregating and debiasing polls, then their value is limited given the availability of other poll aggregators. However, forecasts that combine aggregated polls, prediction markets, and fundamentals-based forecasts together outperform all three individually (Rothschild 2013). This finding indicates that there is unique information in political prediction markets that improves election forecasts beyond what polling and fundamentals can do.

The forecasting success of political prediction markets is perhaps the most well-known example, but the broad utility of markets as information sources goes far beyond forecasting elections, and the ability of markets to forecast better than alternatives can be found in a variety of places. For example, researchers have shown that orange juice futures markets improve on US National Weather Service forecasts (Roll 1984) and that horse race betting markets outperform professional handicappers (Figlewski 1979).

Prediction markets designed for information revelation, in particular, have been successfully utilized to improve forecasts. Prediction markets forecast Google's IPO price better than Google did with its auction mechanisms (Berg, Neumann, and Reitz 2009). In the health field, such markets have provided forecasts of seasonal influenza activity two to four weeks in advance that performed better than historically-based forecasts (Polgreen, Nelson, and Neumann 2007) and have accurately forecast the number of dengue fever outbreaks (Franco et al. 2010). Prediction markets tied to macroeconomic indicator data releases also outperformed a survey of professional forecasters. These markets were better able to forecast payrolls, unemployment claims, retail sales, business confidence, and other measures of macroeconomic performance, reducing forecast error by 5 percent on average (Gurkaynak and Wolfers 2006).

We can see the information-revelation benefits of these markets in the examples of firms that have successfully used internal prediction markets for forecasting. Hewlett-Packard used

internal prediction markets to forecast sales of printers and found that the markets outperformed the company's official forecasts (Chen and Plott 2002). HP also reported that prediction markets for the price of computer memory three and six months ahead were 70 percent more accurate than the firm's traditional forecasts.[16] Siemens used an internal prediction market to correctly forecast that a product would not be delivered on time despite the firm's traditional planning tools suggesting otherwise (Ortner 1998). Best Buy has used prediction markets for a wide variety of purposes, including the demand for digital set-top boxes, store opening dates, and whether new services will be introduced on time.[17]

While many prediction markets are likely run without public knowledge, known examples of companies that have used prediction markets include Abbott Labs, Arcelor Mittal, Best Buy, Chrysler, Corning, Electronic Arts, Eli Lilly, Frito Lay, General Electric, GE Healthcare, General Mills, Intel, InterContinental Hotels, Masterfoods, Microsoft, Motorola, Nokia, Pfizer, Qualcomm, Swisscomm, and TNT (Cowgill et al. 2009).[18] The extent of these private markets is a good indicator that the information they reveal is valuable.

2.3. The Advantages of Prediction Markets

Prediction markets have a variety of characteristics that give them advantages over other forms of forecasts: (1) they efficiently aggregate a variety of information and beliefs, (2) they create financial incentives for truthful revelations, (3) they provide incentives for gathering relevant information, (4) they incorporate new information quickly, and (5) they are difficult to manipulate.

[16] Steve Lohr, "Betting to Improve the Odds," *New York Times*, April 9, 2008.
[17] Ibid.
[18] Ibid.

The problem that prediction markets address is that individuals have different sets of information and different beliefs, and therefore arrive at different expectations of the probabilities of uncertain future outcomes. Given this disagreement, what is the best way to aggregate probability beliefs to forecast outcomes? One alternative is to give everyone's beliefs equal weight. Another is to create some rule that provides weights based on past prediction performance. What prediction markets provide is a market-based aggregation of beliefs.

In essence, the prediction market method of aggregation assumes that more weight should be placed on the opinions of individuals who are willing to bet more money on their beliefs. One advantage of this weighting is that individuals are more likely to be truthful about what they believe, and how strongly they believe it, when they have an economic incentive to do so. Experimental evidence has shown that when you ask individuals political questions with factual answers, like whether inflation went up, down, or was unchanged while George W. Bush was president, there is an obvious partisan bias in their answers. However, when individuals are paid for getting the answer correct, this bias diminishes (Bullock et al. 2013). This incentive for truthful revelation is an immediate positive effect of the economic incentives prediction markets provide.

Prediction markets also lead to a positive participant-selection mechanism. Because false beliefs must be paid for in the long run, individuals who continually lose money by making bad predictions will be incentivized to stop participating in the market. Those who make good predictions, in contrast, will be rewarded and have the incentive to continue participating. In essence, the market selects for good predictors rather than presuming that anyone who wishes to make a prediction is equally capable, or designing a centralized system for selecting the best predictors.

In addition, when prediction markets are open to the public and their contracts are widely traded, individuals who may have useful information have an incentive to come forward to trade on that information, thereby revealing it to the market. Rather than requiring an a priori selection of who has the most relevant information, as with polling a panel of experts based on criteria used by the person doing the selecting, prediction markets create an incentive for those with information to come forward and participate. This process is similar to the selection of unbiased predictors, but it brings new information to the market rather than just getting better predictions from existing information.

Prediction markets not only bring new information to markets, they tend to incorporate this information quickly. Snowberg, Wolfers, and Zitzewitz (2012) provide an illustrative example in the death Osama bin Laden. On May 1, 2011, at 10:25 p.m. ET, Donald Rumsfeld's former chief of staff Keith Urbahn announced the following on Twitter: "So I'm told by a reputable person they have killed Osama Bin Laden. Hot Damn." Intrade prediction markets on bin Laden's death quickly rose, going from 7 percent to 99 percent within 25 minutes. In contrast, the media did not announce the story until 33 minutes after Urbahn's announcement. The point here is not to suggest that prediction markets can or should supplant breaking news services, but that market prices incorporate new information rapidly. For many forecasts, like the probability of outbreaks of deadly disease, the speed at which new information is incorporated is critical.

Finally, prediction markets are useful aggregators because they are difficult to manipulate. There have been some attempts to manipulate these markets, most notably by individuals wishing to generate media attention by suggesting that the chance of a particular candidate winning an election is higher than it is (Snowberg, Wolfers, and Zitzewitz 2012). However, when multiple prediction markets exist, it creates an arbitrage opportunity when

divergences based on manipulation occur. If one market says a candidate 's odds are 5 percent and another says they are 10 percent, then this leaves free money on the table for traders. Manipulation attempts will generate profit for other traders and help make markets more accurate (Hanson and Oprea 2009). Indeed, most evidence suggests that attempts at manipulation are unsuccessful and generate little media attention (Snowberg, Wolfers, and Zitzewitz 2012).

Given the success of markets and prices for making use of the "dispersed bits of incomplete and frequently contradictory knowledge which all the separate individuals possess" (Hayek 1945), it is not surprising that they would prove useful in directly aggregating dispersed information, as the empirical evidence presented in this section has shown.

2.4. Criticisms and Opponents of Prediction Markets

Despite the evidence of prediction markets' success, there are several common criticisms that are worth addressing. First is the criticism that prediction markets merely reflect conventional wisdom and that traders do not have any new information. While in many cases it is true that the markets are unlikely to reflect information that is not already widely dispersed, this criticism ignores the value in the objective aggregation of conventional wisdom. The history of the Policy Analysis Market (PAM) provides a particularly important example of how such criticism is misplaced. The United States' Defense Advanced Research Projects Agency (DARPA) created this prediction market, which was to debut in 2003, but it was shut down before it began due to widespread criticism. Nobel Prize winner Joseph Stiglitz brought the "no new information" critique of PAM:

> But what was [DARPA's John M. Poindexter] thinking? Did he believe there is widespread information about terrorist activity not currently being either captured or

> appropriately analyzed by the "experts" in the FBI and the CIA? Did he believe that the 1,000 people "selected" for the new futures program would have this information? If so, shouldn't these people be investigated rather than rewarded?[19]

However, as Abramowicz (2008) argues, PAM's goal was not to bring forth private information about terrorism that traders held, but to create an objective aggregation of assessments. As PAM architect Robin Hanson (2007) noted, "Successful intelligence requires not only the collection and interpretation of pieces of information, but also that the information be combined into consensus forecasts and passed up the chain of command." This kind of consensus forecast may be especially useful in government and business bureaucracies, where group decisions and disagreements might otherwise be adjudicated by deliberation. In contrast to prediction markets, deliberation can be hampered by social sanction for disagreement, which can lead to group biases that exaggerate rather than ameliorate individual cognitive biases (Sunstein 2007).

In other contexts, however, the benefit of bringing forth new, relevant information may fail to occur. Moreover, some markets may not generate enough interest to draw a significant pool of traders so that even the belief-aggregation mechanism fails. As Hanson argues, such criticisms are not identifying a market failure, but instead point to an efficient market outcome:

> When you offer to pay a certain price for info, an efficient info exchange mechanism will typically induce some supply of that info, but only up to the point where the marginal cost of supplying info reaches the price you have offered to pay. It is no failure of an exchange mechanism when buyers cannot always buy everything they want at as low a price as they want.[20]

Nevertheless, regardless of whether one calls this a "failure" of prediction markets or an efficient outcome, it remains true that in some contexts prediction markets will not function without subsidies to traders.

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[19] Joseph Stiglitz, "Terrorism: There's No Futures in It," *Los Angeles Times*, July 31, 2003.
[20] Robin Hanson, "Prediction Markets 'Fail' to Moo ch," *Overcoming Bias*, July 19, 2012, http://www.overcoming bias.com/2012/07/prediction -markets-fail-to-mooch.html.

A related criticism is that prediction-market forecasts are often incorrect. However, few prediction-market proponents would claim that prediction markets are infallible. Events that prediction markets target are inherently uncertain, and the best that any forecast can do is make the most of the available information. Therefore, when a market does not predict the outcome, this result can reflect a failure of reality to be predictable rather than a failure of the market to optimally aggregate information. Furthermore, this criticism misunderstands the nature of probability: even events that have a 95 percent chance of occurring will not occur 5 percent of the time. While it is true that prediction markets cannot forecast with certainty the necessarily uncertain, it would be unreasonable to expect this outcome of any means of forecasting.

Another criticism points to divergences that can emerge between different prediction markets and to cases where individuals have been alleged to manipulate markets as evidence of market inefficiency. While there is some evidence that differences in market prices can arise due to single participants attempting to manipulate the market (Rothschild and Sethi 2013), the ability of these individuals to do so is partly a function of the number of traders willing to bet against them. Overall, there is no reason to believe that prediction markets are inherently any more manipulable or subject to arbitrage limits than the stock market. As prediction market skeptic Barry Ritholz has argued, the difference between the bond market and existing futures markets "is in the size, scale, and liquidity."[21] What's more, as section 2.3 of this paper argues, these attempts at manipulation create profit opportunities for other traders, and as a result should become more difficult in the long run as more trades occur. As a result, to the extent that market inefficiencies have occurred in modern prediction markets, it is difficult to disentangle these

[21] Barry Ritholz, "A Few Words on Prediction Markets," *The Big Picture*, May 26, 2005, http://www.ritholtz.com /blog/2005/05/a-few-words-on-prediction-markets/.

outcomes from the limitations on these markets created by the restrictive legal environment they have operated in.

For example, since 2005, Intrade has been required to only allow US participants with verified assets of at least $5 million. It seems likely that even if Intrade ignored this regulation, the threat of legal action reduced participation even when Intrade was at its most popular. In addition to explicit regulation, uncertainty about regulation in the industry creates a chilling effect that has likely further reduced trader participation even at these markets' peak liquidity.

A final criticism questions why prediction markets have failed to be adopted more frequently as a social institution. PAM's failure shows two important drivers of prediction market resistance: misunderstanding and moral objections. We can see clearly the importance of misunderstanding in the comments of Stiglitz, who despite a Nobel Prize for informational economics fails to understand the value of assessment aggregation. Moving beyond anecdotal misunderstanding, econometric analysis of over 500 media articles about PAM showed that the less informed the author was about the issue, the less favorable he or she was toward PAM (Hanson 2005).

The words critics use in moral objections to prediction markets include "repugnant," "shocking," "sick," "turn the stomach," "absurd," "bizarre," and "lunacy" (Hanson 2007). While moral arguments are outside the scope of economics, it can at least be noted that this charge may be inconsistent given the variety of explicit and implicit betting on life and death that occurs in other fully legal and nonstigmatized contexts. Life insurance, for example, bets where beneficiaries on the margin will explicitly realize an economic profit from death.[22] In fact, in the

[22] Graeme Wood, "Death at the Summit," *Pacific Standard*, November 4, 2013, http://www.psmag.com/business-economics/death-summit-67326/.

past, life insurance was seen as immoral because it was "gambling on human life."[23] As Hanson has pointed out, "Nearly all financial instruments we use today were at one point or another considered illegal and immoral."[24] Just as the social stigma against life insurance eventually dissipated in the face of the product's economic benefits, it seems plausible that the same could happen for prediction markets. Similarly, the government intelligence agents who are skilled at predicting terrorist attacks outside prediction markets benefit economically from doing so in the form of promotions. In any case, most people would not find it repugnant to learn that an intelligence agent was promoted for predicting a terrorist attack, nor that said agent acted knowing that a promotion would follow.

In addition to moral objections to contracts that specifically appear repugnant, prediction markets also suffer social stigma related to their similarities with gambling. Sidestepping the debate over whether gambling is desirable, there are significant differences between gambling and prediction markets.

Three elements typically delineate an activity as gambling under US law: prize, chance, and consideration. Prediction markets for real money contain the element of prizes in the payoffs for winning predictions. However, US law designates chance as occurring "*only if skill offers no edge in determining who comes out ahead in an exchange*" (Bell 2011). Given the litany of forecasters, pundits, and consultants that are regularly hired to make predictions about the events that prediction markets are commonly the subject of, it seems unlikely that skill offers no advantage in generating predictions. Unlike picking lottery numbers, there is a large market for those making political, socioeconomic, and even entertainment predictions for for-profit

[23] Ibid.
[24] Ibid.

entities.[25] If individuals and firms can sell their abilities to formulate predictions in a competitive market, then it strongly suggests that skill provides an economically substantial advantage.

Another distinction is that while the primary, and in some cases only, purpose of gambling is for the entertainment of those placing the bets, one of the main purposes of prediction markets is to create prices that are useful to a wide variety of parties. In fact, it is easy to argue that this generation of prices has been the primary purpose for most prediction markets. Most media coverage of Intrade markets, for example, has not been to inform readers of a place where they can bet on uncertain events, but to report on the information contained in the prices.

Regardless of the coherence of the moral arguments against prediction markets, the legalization of Internet gambling in New Jersey, Nevada, and Delaware, and the interest in legalization from other states, suggests that public opinion, or at least the median voter, may be turning in favor of online gambling. In New Jersey, opposition to legalizing online gambling fell from 67 percent to 46 percent from 2011 to 2013.[26] By extension, the prediction markets that are accused of being a form of online gambling should benefit from reduced stigma as well.

Overall, it is undeniable that prediction markets will not always correctly forecast the future, and that in some instances they may fail to bring new information or even traders. However, popular opposition to these markets can be driven more by misunderstanding than by concerns that the markets are being utilized ineffectively or for negative results. In addition, even when specific failures of prediction markets are identified, it is difficult to argue that these failures reflect an inherent problem with the mechanism rather than a result of the limitations

[25] For example, consider the firm MPG, which charges up to $20,000 to predict for movie st udios whether a script will be successful. See Brooks Barnes, "Solving Equa tion of a Hit Film Script, With Data," *New York Times*, May 5, 2013, http://www.nytimes.com/2013/05/06/business/media/solving -equation-of-a-hit-film-script-with-data.html.
[26] Associated Press, "Opposition to Internet Gambling Lessening in N. J.," *Daily Finance*, March 20, 2013, http:// www.dailyfinance.com/2013/03/20/internet -gambling-opposition-lessening-nj-christie/.

resulting from the regulatory climate. If prediction markets were allowed to grow and flourish as an industry, it is likely that their performance would increase and inefficiencies would diminish.

3. The Regulation of Prediction Markets

3.1. The Past and Current Regulatory Environment of Public Prediction Markets

Prediction markets have long operated under a restrictive legal environment as a result of both explicit regulation and legal uncertainty. To understand this legal context, a natural first question is: why do these markets raise any legal issues to begin with? In fact, as long as there is no cash or prize offered, a prediction market would likely raise no legal issues. As a noncommercial means of reporting on opinions, it would likely be protected by the First Amendment as free expression rather than free enterprise (Bell 2011). The regulation of real-money prediction markets, on the other hand, is complicated because they resemble, but are not equivalent to, two other highly regulated goods: commodity futures and gambling. As a result, prediction markets have historically been affected by laws and regulatory bodies targeted at these industries.

As the primary regulator of commodity futures and options, the Commodity Futures Trading Commission (CFTC) has broadly defined what constitutes a commodity under its regulatory purview as "all commodities, goods, articles, services, rights, and interests which are or may be the subject of futures contracts" (CFTC 2010). In short, nearly anything that could possibly be the subject of a futures market is a commodity potentially within the CFTC's jurisdiction.

One of the earliest CFTC decisions regarding prediction markets was the issuance of two nonaction statements in the early 1990s for the Iowa Electronic Markets (IEM), a well-known and currently operating academic prediction market run by the University of Iowa's Tippie College of Business. The market's stated purpose is for research and educational purposes, but participants

are engaging in real money bets. In two nonaction statements, the CFTC declined to establish jurisdiction over the markets. However, those letters still place restrictions on the IEM. First, while anyone may purchase contracts in IEM's political prediction markets, nonpolitical markets are only open to "academic traders." In addition, individuals are limited to a maximum investment of $500 dollars, and submarkets are limited to 1,000–2,000 traders. Finally, the CFTC premised its nonaction on the IEM's academic purpose and nonprofit operation (Bell 2011).

With the exception of IEM, the rest of the early prediction-market industry operated under a cloud of regulatory uncertainty owing largely to gambling laws. As section 2 noted, the presence of skill in prediction markets would appear to differentiate them from gambling under US law. However, US laws targeting gambling have had important impacts on the functioning of prediction markets.

One important source of uncertainty for prediction markets has been the Wire Act of 1961, which prohibited the transmission of bets over telecommunications systems. Despite a 2002 Fifth Circuit Court of Appeals interpretation as only applying to sports betting, the Department of Justice early in the first decade of the 21st century held that the act applied to all forms of gambling. The result was the prediction market industry operating in a "gray zone" of legality (Chiang 2007). At that time, even legal scholars who believed some prediction markets would be legal saw the chilling effect of the uncertainty, where the possibility of "even ill-considered and ultimately futile claims" could mean judicial exoneration came only after "a bruising legal battle" (Bell 2006).

The uncertain application of gambling law and the CFTC's nonaction letter on IEM was the primary legal context for prediction markets from the founding of IEM in 1989 until the middle of the first decade of the 21st century. Then in October 2005, the CFTC filed charges

against Intrade for allowing US citizens to trade in options for the following commodities that fell under its purview:

- gold futures
- daily crude oil
- light sweet crude oil futures
- the intraday euro versus US dollar rate
- the US dollar versus yen exchange rate

Intrade agreed to pay a fine and comply with several conditions going forward, including warning US customers via website pop-ups about contracts they were banned from trading. Then in November 2005, the CFTC granted Intrade the status of an exempt board of trade. While this status allowed Intrade to operate legally, it could only allow "eligible contract participants" with assets of more than $5 million to $10 million (Bell 2005).[27] Complying with this rule would have significantly reduced the liquidity of Intrade markets at a time when US residents represented as much as 40 percent of its customer base (CFTC 2005).

Another large regulatory setback for prediction markets came shortly after in 2006, when President Bush signed the Unlawful Internet Gambling Enforcement Act (UIGEA). Among other things, this law empowered the Treasury Department to create rules preventing US banks and credit card companies from engaging in financial transactions with "gambling" sites abroad. Specifically, the act targets "unlawful Internet gambling," which it defines as any bets that violate federal or state law. The "gray zone" uncertainty created by the Wire Act was not clarified, but instead magnified (Chiang 2007).

[27] Tom W. Bell, "TEN's Plans for a Legal U.S. Prediction Market," *Agoraphilia*, December 7, 2005, http://agoraphilia.blogspot.com/2005/12/tens-plans-for-legal-us-prediction.html. Individuals with $5 million in assets were eligible if they entered the "transaction to manage the risk associated with an asset owned or a liability incurred, or reasonably likely to be owned or incurred." Otherwise assets were required to be over $10 million.

Despite the continuing legal uncertainty, the UIGEA effectively disrupted prediction markets. Even before the Treasury Department could write the rules, some banks began refusing to transfer money. Intrade users received the following notice:

> Most US-based members will find it difficult to fund their accounts by credit card. It is very likely that any attempted credit card transfer will not be authorised by your bank. Please note that this is the policy of the bank and not that of the Exchange.

By the time the regulations were written, Intrade was not accepting credit cards, only check and wire payments (Goldberg 2010, n. 29).

Despite the 2006 passage of the UIGEA and a general environment of regulatory uncertainty, there was a growing interest in prediction markets leading up to the 2008 election. As a result of the heightened interest, the CFTC announced it was reviewing the applicability of the Commodity Exchange Act (CEA) to event contracts and released a request for comments.[28] While it did not issue a comprehensive response to the comments, in 2010 the CFTC allowed the operation of two prediction markets for box-office futures. The commission found that movie revenues constituted "a non-price-based measure of an economic activity, commercial activity or environmental event" that was similar to other commodities for which the CFTC has approved futures or options contracts (CFTC 2010). The commission's statement clarified its stance on prediction markets by explicitly arguing that "event contracts" were potentially commodities within the CFTC's jurisdiction:

> The term "event" contract has no meaning under the Act. More than 500 contracts have already been submitted to the Commission that are based on some type of event or activity with economic consequences. The statutory definition of "commodity" does not suggest that an "event" cannot underlie a futures or options contract. Thus, that a contract is based on an event does not preclude it from being a commodity under section 1(a)(4). (CFTC 2010)

[28] From the CFTC request for public comments: "Since 2005 , the Commission's staff has received a substantial number of requests for guidance on the propriety of offering and trading financial agreements that may primar ily function as information aggregation vehicles."

The commission also offered support for the economic value of box-office prediction markets. Until 2000, the CEA required an "economic purpose test," which specified that a futures or option contract had to have utility as a hedging or price-basing tool (CFTC 2010). While the Commodity Futures Modernization Act of 2000 repealed this requirement, the commission's statement on box-office futures made clear it believed box-office futures markets passed the economic purpose test and could serve both hedging and price-discovery purposes.

The exemption for box-office futures markets was short lived, as the Dodd-Frank Act modified the CEA to explicitly define box-office revenues as not a commodity, and thereby effectively banned box-office futures (Anderson 2011). In addition, Dodd-Frank provided explicit rules requiring the CFTC to prevent the listing or trading of "event contracts" if they are determined to be "contrary to the public interest," which is defined as involving

1. activity that is unlawful under any federal or state law,
2. terrorism,
3. assassination,
4. war,
5. gaming, or
6. other similar activity determined by the Commission, by rule or regulation, to be contrary to the public interest (Stawick 2012).

The sixth criterion in particular potentially grants a large degree of discretion to regulators. What constitutes "contrary to the public interest" and the CFTC's general view of prediction markets post–Dodd-Frank can be seen in a 2012 ruling against the North American Derivatives Exchange (NADEX) political futures market. To determine whether a contract was contrary to the public interest, the CFTC argued it should utilize the same "economic purpose

test" that was part of the CEA until 2000 and required hedging or pricing utility. In the ruling against NADEX, the CFTC argued that political futures had no hedging or pricing purpose due to "the unpredictability of the specific economic consequences of an election" (Stawick 2012).

The commission also has discretion to consider other factors in addition to the "economic purpose test" in determining public interest. In the NADEX ruling, it argued that political prediction markets were against the public interest because they "can potentially be used in ways that would have an adverse effect on the integrity of elections, for example by creating monetary incentives to vote for particular candidates even when such a vote may be contrary to the voter's political views of such candidates" (Stawick 2012).

An additional move to limit prediction markets came in November 2012 when the CFTC sued Intrade for violating the conditions of the 2005 order it had consented to and the terms required of it as an exempt board of trade. Intrade had allowed US customers to trade prohibited contracts. In particular, the CFTC alleged that Intrade was offering binary options in the following markets:

- gold: "February 2011 gold futures to close on or above 1,000 on 30 Dec 2011"
- currencies: "euro/US dollar to close on or above 1.0000 on 30 Dec 2011"
- US economic numbers: "United States will go into recession during 2011"
- banking: "75 or more US banks to fail during 2011"
- war: "United States to conduct overt military action against North Korea before midnight ET on 31 Dec 2011" (Banar and Slovick 2012)

In addition, the CFTC alleged that Intrade failed to warn US customers via website pop-ups that they were not allowed to trade these options, and it alleged that Intrade was not verifying that US customers were "eligible contract participants" with assets exceeding $5 million to $10 million.

The suit asked a federal judge to file an injunction against Intrade and fine it for violating federal commodity law.[29] As a result of the CFTC complaint, Intrade ceased allowing US customers to trade and instructed them to empty their accounts.[30] Volume on Intrade collapsed, and the following March, all trading was shut down, with the company citing "financial irregularities."[31]

The modern regulatory history of prediction markets has generally been a move from uncertainty and legal gray areas to gradually more restrictive laws and enforcement. The legal space carved out for the Iowa Electronic Markets has proved to be an exception.

Traders in private markets face greater liability under insider trading laws than those in public markets. These laws forbid insiders from trading a company's securities "on the basis of material, nonpublic information" Normally, these laws apply to executives and not to average employees or independent contractors. However, if they participate in private prediction markets that give them material nonpublic information, these low-level employees or contractors can become "remote temporary insiders" for whom insider trading laws apply. Even if the corporation takes the necessary precautions and sees a minimal chance of insider trading occurring, the added risks can discourage prediction markets simply because "no corporation would welcome the heavy evidentiary burdens imposed by investigations into illegal trading of its shares" (Bell 2008).

3.3. Regulatory Reforms

Lawmakers and regulators could take a variety of steps to foster the existence of prediction markets. This section will propose actions that the executive, legislative, and judicial branches

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[29] David Ingram, "Commodities Regulator Sues Intrade over Trading in U.S.," *Reuters*, November 26, 2012, http://www.reuters.com/article/2012/11/26/us-cftc-intrade-idUSBRE8AP0P220121126.
[30] Matt Egan, "Intrade Tells U.S. Customers to Empty Accounts after CFTC Suit," *Fox Business*, November 26, 2012, http://www.foxbusiness.com/industries/2012/11/26/intrade-tells-us-customers-to-empty-accounts-after-cftc-suit/.
[31] Joe Weisenthal, "Betting Site InTrade Is Completely Shutting Down Trading," *Business Insider*, March 10, 2013, http://www.businessinsider.com/intrade-shutting-down-2013-3#ixzz2vf0vQjwB.

could take. While it is unclear what the optimal regulation of these markets is, the extant research does not support the current restrictive regulatory environment.

A key question is whether these markets should remain under the CFTC's purview. An important benefit of CFTC jurisdiction is the preemption of state laws, including state-level antigambling laws (Bell 2008). While Bell has argued that antigambling laws would not likely apply to many prediction markets,[32] the chilling effects could still be substantial.

If prediction markets remain under CFTC regulation, a key change that lawmakers should make is to remove the provision of the Dodd-Frank Act that banned box-office futures. The aforementioned CFTC approval of these markets as passing the "economic purpose test" indicates a lack of economic justification for this ban. In addition, legislation should undo Dodd-Frank's alteration of the CEA that banned prediction markets on terrorism and war, which, as section 2 argued, provide valuable information.

With or without these suggested legislative changes, an important regulatory improvement would be for the CFTC to act within its existing authority to approve prediction markets. One rationale for such approval is the CFTC's "economic purpose test," which requires that prediction markets have a hedging or price-setting purpose. While the primary benefit of prediction markets lies in the informational value they generate, if the regulatory environment allowed prediction markets to grow and evolve, they could become liquid enough to support hedging. The CFTC recognized this value in its statement approving Media Derivaties, Inc. (MDEX), the box-office futures market:

> The Commission found that the contracts can perform hedging and price discovery purposes. Industry profit and losses have a clear and direct relationship to box office revenues. A contract based on those revenues could be used to hedge related risks. . . .

[32] Bell (2006) argues that "real-money prediction market in claims about science and technology should run little risk of violating the various prohibitions that U.S. law imposes on unlicensed gambling transactions."

> Information provided through staff discussions with industry sources, as well as through written comments and statements by several participants at the May 19, 2010, hearing, revealed that there are various risks associated with film production that could be hedged with risk management tools. (CFTC 2010)

The potential for economically beneficial hedging is not limited to box-office futures. As 19 of the leading academics studying prediction markets argued in a joint statement to the CFTC, even political prediction markets have a potential to serve a hedging function (Zitzewitz et al. 2012).[33] The potential for prediction markets to evolve into highly liquid markets with the possibility for hedging and the participation of institutional investors suggests the CFTC could use its current authority to approve prediction markets to operate under the basis of the "economic purpose test." With the removal of the Dodd-Frank changes to the CEA, the CFTC's scope for approval would be even greater.

In addition, the CFTC should recognize that a major economic benefit of prediction markets lies in the value of the information they generate. If a large percentage of the value of prediction markets is in a long thick tail of topics where interest would be among a smaller number of individuals, then the regulatory barriers should be as low as possible. The CFTC could accommodate such markets by carving out a space to allow information-motivated prediction markets to function with low barriers in contrast to the costly regulations applied to risk-hedging-motivated markets (Hanson 2008). One solution would be for the CFTC to create an "exit option" for prediction markets that see the CFTC's regulation as overly burdensome. This option could be accomplished by clearly defining a limit to the CFTC's jurisdiction. Bell et al. (2008) give three examples of limiting principles: (1) the prediction market only offers trading to members of a particular firm, (2) the market offers no significant hedging benefits, or

[33] Evidence for possible hedging motivations can be seen in, for example, Snowberg, Wolfers, and Zitzewitz (2007), which shows that Republican presidential wins are associated with higher equity valuations and bond yields.

(3) the market only offers spot trading in negotiable conditional notes.[34] These criteria would provide some legal protection for private prediction markets.

Another way to allow a low regulatory bar would be for the CFTC to return to the approach taken with IEM and issue nonaction letters (Bell 2008). However, in recognition of the benefits of allowing these markets flourish, the restrictions placed on "no action" markets should be more flexible than the limits on participation in IEM. For example, participation should not be limited to academics, and total contribution limits should be more than $500. The letter to the CFTC from 19 prediction-market academics advised that a higher limit of $5,000 would effectively prevent hedging (Zitzewitz et al. 2012).

There are also actions the judicial system could take to improve the regulatory environment for prediction markets. Legal scholars Cherry and Rogers (2008) have argued that the First Amendment should protect prediction markets as free speech. They state that such markets constitute expression by individual participants, and that "the market itself may be a speaker." In addition, prediction markets further truth-seeking and should be protected similarly to how courts have protected computer code. By protecting prediction markets under the First Amendment, the courts could effectively remove CFTC jurisdiction over them.

Another important step would be for legislative or executive action to remove the chilling effect of the UIGEA on prediction markets by specifying that prediction-market sites do not constitute gambling so that banks are free to allow their customers to transmit money to these sites. While a 2011 Justice Department decision clarified that the Wire Act only made online sports betting illegal, and thus subject to the UIGEA, the historical uncertainty of online

[34] The third exit option defines the trades as notes rather than futures contracts. The difference is that futures contracts offer future delivery of unconditional rights (e.g., "1 oz. of gold will be delivered on January 1, 2015") versus current delivery of conditional rights (e.g., "this note can be redeemed for $X if Y comes true").

gambling laws has likely created a chilling effect that will stifle innovation in this market without proactive legislation that clarifies the rules. We can see evidence of this chilling effect in banks' unwillingness to process payments for online gambling transactions even in the states where it has been legalized. Reflecting this unwillingness, the vice president of compliance for the American Bankers Association has stated, "There's still the uncertainty over Internet gambling and the liability that could fall on a bank."[35] Without specific federal legislation or regulation clarifying the legality of prediction markets with respect to the UIGEA, this and other chilling effects would likely be a problem for this industry as well.

An additional and more exhaustive legislative step would be to pass a law specifically protecting prediction markets. Bell (2006) offers a draft of legislation aimed at protecting prediction markets for scientific claims; however, this legislation could be expanded to protect all prediction markets. The legislation's goal would be to prevent the application of any state or federal laws to prediction markets except those laws that regulate general commerce. Such legislation would preempt state gambling, bucket-shop, insurance, and similar laws. It would remove prediction markets from the CFTC's purview while still offering protection from state-by-state litigation. As with the proposed regulatory approaches, this law could distinguish between prediction markets that are designed for significant hedging and those that are not, and leave the former under CFTC purview. It would not remove all legal authority from these markets, but would leave their regulation to state contract, tort, and property law. In addition, the law could be designed to allow laws that apply to general commercial transactions, such as the FTC's unfair trade practices laws.

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[35] Christopher Palmeri and Elizabeth Dexhe imer, "Online Casinos Hobbled as Credit -Card Issuers Reject Bets," *Bloomberg Businessweek* , November 15, 2013, http://www.businessweek.com/news/2013 -11-15/web-gaming -curbed-as-paypal-to-bank-of-america-refuse-bets-tech#p1.

Overall, there remains room for executive, judicial, and legislative action to provide a better regulatory environment for prediction markets. While it is unclear which regulatory approach is optimal, the significant benefits and economic value of prediction markets are at odds with the current highly restrictive regulatory environment.

4. Conclusion

Prediction markets are important information-aggregation tools for researchers, businesses, individuals, and governments. Even given the restricted regulatory environment they have functioned in, prediction markets have shown promising applications in fields from demand forecasting to public health. Regulators should allow these markets to grow and evolve.

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SUBMITTED VIA CFTC PORTAL
Secretary of the Commission
Office of the Secretariat
U.S. Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, N.W.
Washington, D.C. 20581

Re: Review of KalshiEx LLC's proposed Congressional Control Contracts pursuant to Commodity Futures Trading Commission Regulation 40.11(c).

Dear Chairman and Commissioners:

My name is Max Raskin and I am an adjunct professor of law at New York University and a fellow at the school's Institute of Judicial Administration. I also teach at the Stern School of Business. Two of my areas of legal research are financial law and cryptocurrency. I have written about prediction markets previously in the *Wall Street Journal*. Kalshi's proposed contracts are valuable hedging tool and would be a benefit to the American economy — they should be permitted to be listed for trading in the United States.

Political uncertainty is a fact of life that exposes millions of Americans to changing financial realities based on changing federal policy. Examples include energy firms that contend with changes in subsidies or construction firms that contend with changes in infrastructure spending.

The CFTC asks whether policy outcomes stemming from elections are sufficiently predictable to be used for hedging. The answer is yes, for three reasons. First congressional leaders make genuine attempts to enact the agendas they lobby for. In 2020, for instance, Democratic Senate leaders ran on $2,000 stimulus checks and a large COVID-19 bailout for states. Soon after the Democrats gained a majority in the Senate, they passed a bill that granted the final $1,400 to fulfill their promises and gave hundreds of billions of dollars to state governments. Second, people do not need absolute certainty to hedge. Consider

a bread company worried about an increase in the price of wheat. They also have issued a large quantity of bonds to finance the purchase of a new distribution plant. It is possible that a spike in the price of wheat–if it is exclusively caused by broad-based inflation–might not harm the company on net, because that will also decrease the real value of the bonds they have issued. There remains uncertainty. But insofar as an increase in the price of wheat increases the risk the company faces, it is totally normal and common to purchase a large number of financial instruments that hedge against that risk. Again, they purchase those instruments despite not having 100% certainty that the event, i.e., the increase in the price of wheat, will actually manifest in net harm for the company. An election is the same way. It is totally legitimate for a small business or family to purchase a hedge against an election outcome even though they do not have 100% certainty that the event (the election outcome) will actually manifest in net harm for them. But the increase in risk is sufficient.

Third, there are already more than two dozen comments in the CFTC portal from small businesses and individuals attesting to their desire to use the contract for hedging. In a free, liberal society, adults should be allowed to make these determinations for themselves.

The CFTC has an independent line of questioning regarding election integrity. As I wrote in a *Wall Street Journal* op-ed,

> "As a historical and comparative matter, the U.S. allowed such markets for many years and the U.K. still does. No one questions the legitimacy of Margaret Thatcher or Tony Blair because people bet money on the outcome."

The fact is that switching one's vote does not make sense given the odds of being the deciding vote. Attempting to get enough others to switch their votes would be prohibitively expensive and campaigns already spend billions attempting to do so (with far larger incentives than $25,000). Indeed, the 2020 cycle saw $14.1 billion in total spending. It is implausible that anyone with a $25,000 incentive could somehow then flip an election through concerted effort. After all, people already have vast financial stakes in election outcomes that are far greater than $25,000 (sometimes by several orders of magnitude), and the combination of US norms, laws and enforcement regimes are more than sufficient to prevent these harms from coming to fruition.

I urge the Commission to approve Kalshi's product. This is an exciting time for innovation in financial markets. New technology has make it possible for people to bring more certainty to an uncertain world. It

is my firm belief that in a free country, barring any extremely compelling reason, adults should be allowed to arrange their economic affairs as they see fit.

✶Studio

Dear CFTC,

My name is Valentin Perez, and I am the co-founder of Studio. Studio.com is an online platform to help democratize access to creativity, by giving regular people access to the step-by-step creative processes of some of the brightest minds in their field. I am writing to petition the CFTC to permit election event contracts to be allowed to trade in the United States.

Like any business owner, I am deeply impacted by a wide variety of public policies. For example, a sudden hike in the tax rate might cost me or my company tens of thousands of dollars. Changes in immigration policy might impact my ability to attract and hire the top talent in the world. From a balance sheet perspective, these risks look like any other we might face. As a result, it would be beneficial to be able to purchase a financial product that would allow me to hedge and manage my risk, so that my financial well-being is more stable and less sensitive to changes in the winds of political fortune.

The structure of these contracts are well-suited to the interests of startups, small businesses and families. The position limits are well-within reason for hedging (I don't have any need to hedge a $10 million risk), and the binary structure seems well-tailored for the nature of the risk (namely, a Democrat or a Republican taking power is a binary event, so a binary structure makes sense).
In addition, these contracts help business owners like myself make the best decision possible. The price of the contract maps directly to a probability of the Democrats retaining control of Congress, a split Congress, or the Republicans taking control. As a result, business decisions that rely in part on what federal policy will look like in a few years can now rely on hard data, instead of rough guesswork about what it will look like. Those small edges in business intelligence can yield great benefits years down the line.

Business owners are not the only people who benefit from the information encoded in the contract's pricing. An employee joining a startup, for instance, could use the embedded probabilities to decide whether or not to take more of their compensation in the form of equity or salary, since one party or another might have different intentions regarding the appropriate level of taxation on capital gains versus labor income.

These contracts would benefit me personally, and the country as a whole. I would thus humbly request that the CFTC allow them to trade in the United States.

Thank you,

Valentin Perez
Co-Founder, Studio

From: Matanya Horowitz
Organization(s): AMP Robotics

Comment No: 69724
Date: 9/21/2022

Comment Text:

To Whom It May Concern at the CFTC:

I am Matanya Horowitz, founder and CEO of AMP Robotics, a company dedicated to transforming the economics of recycling. We use artificial intelligence and automation to identify and sort recyclable material at scale to help ensure that it is recycled and its value fully captured, instead of being lost to incineration or landfill.

As the CEO of AMP Robotics, I have seen first-hand the effects of federal policy on my business. The EPA has its own National Recycling Strategy that influences corporate demand for recycling, and thus indirectly our business, as do various Congressional bills to support recycling infrastructure, federal regulations that encourage the use of recyclable materials and more. There are a number of state initiatives ongoing as well. Naturally, the probability that these bills or regulations pass is directly downstream of which legislators are elected and party control of Congress. To hedge this risk, I would be able to better plan for the business if I were able to hedge for the possibility of positive or negative legislation related to promoting recycling infrastructure. For instance, a significant piece of recycling legislation and a more aggressive National Recycling Strategy may allow AMP to expand in the future. But if such legislation fails to pass, a hedged contract may allow AMP to adapt to a less favorable policy environment. This is only one example among many of how congressional directional can impact our business. At a higher level, impact on the environment affects all businesses and families in America, and changes in Congressional control substantially impact the probability of meaningful federal regulatory or legislative action being taken.

Notably, individual event contracts to hedge individual policy changes are not necessarily a viable alternative to a market on Congressional control. Many of these policy changes are relatively niche– while they affect a vast number of people, they are unlikely to attract sufficient volume to be able to provide enough liquidity for those most affected to hedge. Moreover, a specific policy event contract requires knowing precise details in advance, which may not be true several years out. But most importantly, what affects our business is less any one individual policy, but the sum of the dozens of different policies (or, more succinctly, the totality of the policy agenda) that the respective parties enact. We're thus supportive of a contract for "the totality of the policy agenda" and a contract on Congressional control. We believe this would be a good signal for how legislation will affect our business.

Risks are born in large measures and small measures. We do not see any reason to consider smaller risks as less important than larger risks. It is particularly encouraging to have a product that is tailored explicitly for small and medium-sized businesses. The low position limits of $25,000 are perfect to allow for even smaller businesses to hedge. While there may be some businesses with even larger hedging needs, this provides a meaningful tool for us to stabilize and protect our business, and we believe a useful starting point for a new business tool.

Congressional control is an important factor in determining the profitability of my business and the businesses of millions of others. While many participants may join this market because they love politics or love forecasting (and thereby add liquidity for those of us who wish to hedge), they are far from the only people, and we don't believe this should be an impediment to us accessing financial markets to hedge our risks.

Thank you for providing the opportunity to comment.

Matanya Horowitz

To the Honorable Commissioners of the Commodity Futures Trading Commission,

My name is Dustin Moskovitz. I am a co-founder of the work management platform Asana, as well as a co-founder of Facebook. I've also founded several nonprofits including Good Ventures in 2011 and Open Philanthropy in 2014, which was founded as a partnership between Good Ventures and GiveWell. In 2021, OpenPhil gave over $400 million in grants, with over $300 million allocated to public health efforts in the developing world. I am writing in support of Kalshi's submission to the CFTC to be allowed to offer a prediction market on Congressional control and to express my general belief that prediction markets (including from other providers such as PredictIt) can provide important benefits to society.

A core tenet of Open Philanthropy is our belief in the importance of improving our judgment. All private action–from business decisions to nonprofit grant allocation–requires making forecasts about the future. A business deciding whether to expand into a new market is implicitly making a forecast about the tax and regulatory environment in the future. A nonprofit deciding which cause areas are most tractable need to make forecasts about what the political environment will soon look like. Consider a grantmaking body trying to decide which groups to give money to. That grantmaking body will consider several factors, such as how important the cause they are considering is as well as the expected effectiveness of the potential recipient of the money at furthering that cause. But efficacy is often downstream of political control. A group trying to lobby Congress to change criminal justice laws, for instance, needs to adopt very different strategies if Republicans are in power or Democrats. In many cases, a grant may simply not be worth it if one party or another gains power, as the probability of reform in a given area may just be too remote.

As such, it is highly important to have *precise and accurate information* about the probability of different parties controlling Congress. We know from the academic literature on forecasting (such as the work from Philip Tetlock) that the sayings of pundits and experts are not the most accurate at estimating event probabilities. Liquid prediction markets can do much better, by not just aggregating the opinions of the masses but giving them a profit incentive to do as much research as possible to get the answer correct. By giving forecasters skin in the game, the price on the market would represent the most accurate election probabilities available. While many other commenters have spoken about the ways these markets could be used for hedging, or the way it could be used to price other financial instruments, I wanted to use this comment to explain how–in my own experience as both a corporate CEO and a major participant in the world of charity–accurate forecasting is critical to making good judgments. In this sense, prediction markets on Congressional control are indubitably in the public interest.

I know there are a number of prediction markets seeking CFTC recognition - Kalshi, PredictIt, Polymarket - and more that would if there were a clear path to operation. I support a simple and

open path to regulation, that protects consumers whilst providing the public access to this valuable and unbiased source of information.

Of course, it's important to validate that these contracts would not conflict with the public interest, and specifically the integrity of our elections. I am confident, however, they would not do so. Similar markets not only exist in many liberal democracies like the UK, but create a thriving scene that actually encourages voter participation and engagement. Moreover, the relatively low position limits make it such that no one would have the financial incentive (let alone the means) to attempt to manipulate elections in order to receive a payout. Elections are multi-billion dollar affairs with millions of interested parties attempting to influence people's vote–the resources necessary to make a dent far outstrip the $25,000 by several degrees of magnitude. These contracts will enhance the integrity of our elections by providing the news media with an accurate estimate about the state of the race. Rather than listen to pundits with a less-than-ideal track record and perceived partisan biases, the broader public can be informed by the unbiased market. That can help to enhance public understanding of how our elections work, and enhance voter trust in the overall process.

Thank you for your consideration.

Scott Supak
PO Box 395
Cherry Valley, NY 13320

Secretary of the Commission
Office of the Secretariat
U.S. Commodity Futures Trading Commission Three Lafayette Centre
1155 21st Street, N.W. Washington, D.C. 20581

Dear Chairman and Commissioners of the Commodity Futures Trading Commission:

I am a retired union stagehand who consistently lost money in the stock market. I had to give up sports betting because I consistently lost at that too. Both of those attempts to supplement my small, fixed retirement income wound up being drains on my income and my family. And then I discovered prediction markets. I found that my knowledge of politics and probabilities were actual assets that I could use to make money. I found that my critical thinking skills and the ability to learn quickly were even more valuable than I had ever dreamed. I found that when I was able to keep my bias in check, I could profit from those who could not. I found that when I didn't understand something, I could learn about it, and be rewarded for that learning!

Unlike sports betting, casino gambling, or even investing in the stock market, I felt as if I was providing a public service by predicting election outcomes, and polling averages, even climate change, and economic indicators. Prediction markets have been proven to aggregate large swaths of data and make accurate predictions that are much more useful to the economy, and the world, than predicting who will, for example, win the Super Bowl.

I was a "Superforecaster" at the Good Judgement Project where our predictions regularly wound up on the desks of the President, Senators, and many other members of the US government who found our predictions to be a valuable tool. I was a forecaster at Intrade where we accurately predicted several elections and even managed to keep predictions accurate when millions of dollars were coming in on what would prove to be the losing side. Those markets worked well despite the attempts by some very wealthy people to paint a narrative by manipulating those markets. Those of us who saw that one side was attempting to influence prices to influence the media narrative (and thereby the election outcome) knew exactly what was happening and profited from it. We were the poster children of efficient market theory!

I have been predicting elections and polling averages at Predictit since its founding and have become an expert on making those markets more efficient using "linked margin" in what Kalshi refers to as "mutually exclusive groups." I've appeared on multiple podcasts to help people understand these methods of creating liquidity and efficiency in these markets. My years of work in this area have proven quite profitable and helped me in retirement by providing regular income for my efforts.

I work with a team of people who have all become amazingly good at what we do. The efficiency and accuracy of the markets at Predicit are a testament to the good work we (and many others) have done, and it's a shame that all that hard work could be meaningless now in a world where anyone with a phone can bet on a football game, but those of us who actually invest in futures (that help scientists, economists, and politicians create a better world more accurately based on facts and implied probabilities) will be left with no place to use our talents and skills.

Since Kalshi has moved into the prediction market arena, I've discovered that I can use their site to hedge economic risks to me, such as inflation, interest rates, and even recessions. Even better: I've discovered that the large institutions to whom I likely lost money when I was investing in stocks and bonds are hedging on these economic indicators like inflation, and they often distort prices away from what is the likely reality, offering me excellent expected values that have proven quite profitable.

The same reasoning behind having prediction markets that allow Wall Street to hedge against risk in economic indicators such as inflation, GDP, and interest rates apply even more to elections! Because much of what happens economically is directly related to political power, prediction markets on who will have that power provide two extremely beneficial effects: hedging against the risk of political change and accurately predicting future events that have an outsized impact on economics.

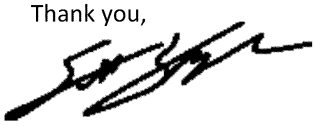
I'm especially interested in predicting climate change, something with the potential to greatly upset economic markets all over the world. I would relish the chance to invest in more markets that predict the long-term impacts of climate change, from polar ice caps melting to global temperatures, from sea-level rise to freshwater reservoir demise. By investing in a future where climate change impacts are much worse than they are now, I can create wealth to help my family deal with those impacts. And since what we Americans do about climate change is highly dependent on electoral outcomes, I would relish the ability to minimize the risks my family might face in this climate emergency future by investing in the political futures I see coming.

In the more immediate political future, the hedging benefits are obvious: since I'm no longer employed through my union, my wife no longer has health coverage through my union, so we must purchase (very expensive) health insurance from the marketplace. When it seems that Republicans are likely to take control, I can invest in that possibility, and hedge against the risk that her health insurance premiums will go up (or that the subsidy will get smaller, or that her ability to purchase insurance at all is taken away completely).

But even in markets where I am not hedging risk, I am still providing a valuable service by making the markets more liquid, and more predictive. I've learned valuable skills in market-making, and liquidity-providing that provide me with a regular income while I'm making the markets more efficient and predictive. In many cases, especially with "linked markets" or "mutually exclusive groups" as I mentioned above, I've been able to make money with little, or even no risk, to myself. These kinds of arbitrage opportunities just aren't realistically possible for small investors in big markets like the stock market, and they don't exist at all in the gaming world of sports and casino gambling.

I hope for all our sakes, and especially for the sake of my granddaughter, that the CFTC embraces this innovative and beneficial possibility for Kalshi to provide election markets so that we can live in a world where facts, logic, and reason are still valuable commodities that one can use to create value.

Thank you,



Scott Supak

September 16, 2022

SUBMITTED VIA CFTC PORTAL
Secretary of the Commission
Office of the Secretariat
U.S. Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, N.W.
Washington, D.C. 20581

Re: Review of KalshiEx LLC's proposed Congressional Control Contracts pursuant to Commodity Futures Trading Commission Regulation 40.11(c).

I'm a founder and angel investor from the Bay Area. SVAngel, my investment firm, has had the privilege of working with several hundred companies over the last 30 years, across dozens of different industries. These partners include firms like Google, Facebook, Coinbase, and Stripe. I'm also an advocate for more government action surrounding gun control, served as Vice Chairman of UCSF Medical Foundation, and have sat on the development committees of institutions like UCLA, Packard Children's Hospital, and the Tiger Woods Foundation, which aims to promote children's health and education.

I appreciate the CFTC requesting the public's input into these contracts so that I and others have the opportunity to weigh in on their value. The CFTC's products underlie the global financial system by providing risk management policies for many different sectors. Consequently, I pay close attention to the space. Kalshi's contracts would meet a demand from the market for both hedging and pricing purposes, and provide an invaluable public service to compete with polling and other forecasts. I strongly encourage the Commission to approve Kalshi's contract for listing by October 28th in time for the midterm elections.

Hedging and price basing (economic) utility

Kalshi's contract would provide meaningful risk mitigation for small businesses and households. In my experience as an investor and advisor to so many companies and small, growing businesses, I've seen first hand people struggling with these risks. The product proposed by Kalshi would go a long way towards managing these risks.

More specifically, the CFTC has solicited public comment regarding whether the outcomes of elections are "predictable" in order to serve as effective hedging tools. They are. The evidence is extensive and hard to ignore.

This is not a secret. Investment banks hire whole divisions to estimate the impact elections will have on their clients. This data is also published publicly on occasion, or discussed by the financial press (Slate: "Wall Street Says You Should Short Mexico to Prepare for Trump").[1] While some headlines refer to presidential outcomes, plenty detail very specific Congressional outcomes, like when, in 2020, Bank of America provided roadmaps for each type of partisan outcome (one party controls all of government, divided government, et cetera). There, they wrote that full Democratic control of government would lead to $2-2.5 trillion in stimulus compared to a Biden win with a divided Congress ($0.5-1 trillion) or a Trump win with a divided Congress ($1.5-2 trillion). They also detailed impacts to specific sectors, like businesses exposed to Chinese trade, in each scenario.[2]

Academics consistently discuss the link between changes in partisan control of Congress, and changes in polling, with consistent effects on financial markets, suggesting significant hedging and repricing by the market to manage risks arising from upcoming shifts in control of Congress.

CEOs also frequently flag electoral risk as it relates to their bottom line in earnings calls. According to Factset, more than a third of earnings calls in Q3 2020 mentioned the word "election".[3] I encourage Commissioners and staff to see these discussions. Concerns about a particular Congressional outcome are particularly relevant for energy, health care, and financial firms. Comments by several businesses and individuals have also testified to the importance of hedging elections in their lives and businesses.

If the market is engaging in significant extant hedging activity, then it is not deniable that an election event contract contains significant hedging utility and it is reasonably likely that the contract will be used for hedging. The hedging use of this contract is so obvious that it would satisfy even the CFTC's proposed test of "market demand exists."

I also note that concerns along the lines of whether elected officials actually successfully implement their goals and policies are incorrect. As discussed above, markets and businesses react to risks of political control, so clearly political control risks have impacts, and these risks can be managed. Further, this is not different from many other existing CFTC products. Basis risk is normal in many derivative products, like hurricane or housing price index futures. There's no guarantee that a drop in the Case-Shiller housing price index (whose futures are listed on the Chicago Mercantile Exchange) will actually reduce asset value or cash flows for an investor or homeowner. Nonetheless, the CFTC permitted these valuable market innovations to be listed.

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[1] Banks suggest shorting peso to hedge against a Trump win. (slate.com)
[2] Bérengère Sim. 2020. "Bank of America wrote a massive 92-page report on election's impact — here's what investors need to know." Financial News.
[3] More Than One Third of S&P 500 Companies Are Discussing the Election on Q3 Earnings Calls (factset.com)

I also note that a commenter saying "I could not or would not use this contract to hedge" should have little consequence. There is certainly no requirement that everyone be able to use the contract to hedge, only that it can reasonably be used for hedging. All of the comments demonstrating how the contract can be used for hedging directly address the question and demonstrate that the contract can and will be used for hedging.

Question seven asks whether the risks that elections portend can be hedged using other products. I am not aware of another circumstance where this logic was used to potentially deny a product with legitimate hedging purposes. Though I can imagine many such instances (such as hedging the risk of government benefits being taken away), the contract itself would still be valuable to isolate risk (rather than be subject to the risks of other assets) and produce significant price basing benefits uniquely.

Public interest

In addition to furthering the public interest by introducing an important hedging tool, the markets will further the public interest by providing an important data point that will help researchers and policy makers. PredictIt has been cited by many prominent scholars and government officials. Its markets are frequently referred to by the political media and leading thinkers to get a non-partisan view of the likelihood of an election's outcome. Examples include its markets being consistently referenced as informative and useful by major, credible news organizations like CNN, CNBC, Politico, Bloomberg, The Economist, The Wall Street Journal, The Washington Post, and The New York Times, across sections like *The Upshot*, *DealBook*, opinion columns, and the technology section.[4][5][6][7] In addition, it has repeatedly been cited by prominent political officials and thinkers. Examples include economists like Jason Furman, previously President Obama's Council of Economic Advisors; Nobel Laureate Paul Krguman, a Professor at The Graduate Center and a columnist for *The New York Times*; and data scientists/reporters like Nate Silver, founder and editor-in-chief of *FiveThirtyEight*.[8][9][10] The fact that PredictIt has such power in the political press, despite its position and trader limits, is indicative of the incredible interest and social value in providing event contracts on elections to the public.

Academic researchers have used PredictIt's data (a good in and of itself), finding that it has a variety of public issues. Hundreds of papers on economics, finance, and political science use PredictIt's data to study prediction markets and their connection to political outcomes and traditional asset and currency markets. Examples include:

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[4] La Monica. "Joe Biden's Fed conundrum: Stick with Jerome Powell or let him go?" 2021. CNN Business.
[5] Heath. "These gamblers are putting money on the outcome of the impeachment inquiry." 2019. Washington Post.
[6] Contrera. "Here's how to legally gamble on the 2016 race." 2016. Washington Post.
[7] https://www.nytimes.com/search?query=PredictIt
[8] https://twitter.com/NateSilver538/status/1242845027014971394
[9] https://twitter.com/jasonfurman/status/1460404350975680514
[10] https://twitter.com/paulkrugman/status/1177602108763316227?lang=en

- Berg and Chambers (2016) found that using prediction markets, including PredictIt, increased user interest in civics and user news consumption.[11]
- Miller (2021) found that PredictIt is better at election forecasting than traditional methods of forecasting.[12]
- French (2020) created an election prediction model using PredictIt that outperforms many traditional methods of forecasting.[13]

Finally, the CFTC asked if this situation is any different than in 2012, when it previously ruled on similar contracts. Event contracts were extremely limited in practice in 2012. In 2008, when it sought public comment on event contract regulation, the Commission acknowledged its extremely limited experience with event contracts. In fact, it admitted its only experience was with Iowa Electronic Markets, for which it had given two no-action letters in the 1990s. Between then and the Nadex order, the only event contracts that were certified with the Commission were a small number of economic indicators from Nadex itself and motion picture box office contracts, which were swiftly banned by Congress. That being said, the concept of election event contracts was so natural to the Commission such that even at that time, the Commission used the example of a presidential election binary to explain event contracts to the public![14] Event contracts were so limited in 2012 that regulation 40.11–which was the justification for rejecting Nadex's contracts–was only published the day before the Nadex order. Kalshi's proposal provides a prime opportunity for the Commission to make a decision more in line with the public's interest and law.

Innovation

The fact that these contracts are innovative is not a reason to prohibit the contract. Many innovative products have become staples of the markets and have encouraged significant economic growth. In the past, for example, basic agricultural futures and index-settled products were once considered to be devoid of hedging utility and be pure gaming products. Today, those products are cornerstones of the global financial system. It is critical for government agencies to rely on evidence and testimony from potential hedgers and others rather than speculation or knee-jerk skepticism to novel products like Kalshi's. This means considering their testimony, looking at the experiences of other nations, and the large value that election markets have had for academics and the public.

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[11] Berg & Chambers. *Bet Out the Vote: Prediction Markets as a Tool to Promote Undergraduate Political Engagement*. 2018. Journal of Political Science Education.
[12] Miller. *Predicting the 2020 Presidential Election*. 2020. Data Science Quarterly.
[13] Franch. *Political preferences nowcasting with factor analysis and internet data: The 2012 and 2016 US presidential elections*. 2021. Technological Forecasting and Social Change.
[14] Federal Register :: Concept Release on the Appropriate Regulatory Treatment of Event Contracts

As discussed above, Kalshi's contract submission does already have significant market hedging activity. However, I'm concerned that it could stifle innovation to require this of proposals, especially as outlined in questions eight and nine. Question eight specifically requests whether the Commission should consider requiring applicants to provide 'demonstrated need' of hedging and then asking if some percent of market participants must be legitimately hedging. Both of these standards would be very damaging towards responsible innovators. A 'demonstrated need' standard could make it more difficult for participants to bring products to market that potentially disrupt and compete with existing products, or which serve a niche that has yet to, but will, be filled. In addition, there is no way for a registrant to prove in advance of listing (nor does there exist a mechanism by which the Commission could reasonably guess) what percent of its participants would be hedging as opposed to speculating. It seems perverse to prevent would-be hedgers from using a product that would benefit them on the basis that too many others would use it for speculation. It would be disappointing to see these novel standards applied to Kalshi's contract as precedent for future submissions.

Question nine then goes on to ask whether and how the Commission should consider the contract's availability towards retail investors should affect their analysis. The Commission should not punish the contract for being more accessible, not less, to investors. Although retail investors are smaller, they are affected just as much by macro-political level events as large businesses. Retail investors can hedge all the same, and are no more likely to engage in speculation as large-dollar institutions (many of whom specialize in such behavior).

Kalshi's contract is a potentially powerful tool for the market. I look forward to the Commission's decision.

HARVARD UNIVERSITY
DEPARTMENT OF ECONOMICS
LITTAUER CENTER, CAMBRIDGE, MASSACHUSETTS 02138-3001

September 18, 2022

SUBMITTED VIA CFTC PORTAL
Secretary of the Commission
Office of the Secretariat
U.S. Commodity Futures Trading Commission Three Lafayette Centre
1155 21st Street, N.W. Washington, D.C. 20581

Dear Chairman and Commissioners of the Commodity Futures Trading Commission:

I am writing in support of the Commodity Futures Trading Commission approving Kalshi's proposal for electoral prediction markets.

My name is Jason Furman, and I am jointly the Aetna Professor of the Practice of Economic Policy Harvard's Kennedy School and a Professor the Practice of Economic Policy in the Economics Department at Harvard University where I conduct a wide range of research on policy-related issues. I served as Chairman of the Council of Economic Advisers under President Obama from 2013 to 2017, serving as his Chief Economist and a member of his Cabinet. Prior to that I served as Deputy Director of the National Economic Council from 2009 to 2013. In those capacities, I was deeply involved in the Administration's response to the Great Recession and at the forefront of some of the largest economic and policy debates of the time, including the American Recovery and Reinvestment Act, the Affordable Care Act, and the debates over the debt limit and fiscal cliff in 2011 and 2012.

My own use of prediction markets, including electoral prediction markets

I have personally encountered and extensively used prediction markets, including electoral prediction markets, extensively in three different settings:

The first is in the White House I, along with other members of the economic team, would regularly refer to prediction markets on electoral outcomes and specific events to help inform our understanding of how political and economic developments would affect economic policymaking. In understanding the risks of a government shutdown or debt limit showdown, for example, it would be helpful to understand what informed traders with money at stake would expect—a method of understanding probabilities that research has consistently shown is superior to other ways of summarizing and updating based on information.

The second is in economic research. While I have not done any research on prediction markets I have frequently read and referred to this research to understand not just elections but the way that elections affect financial markets and the economy more broadly. In fact, some research on financial markets and the economy would be impossible without these prediction markets.

The third is in teaching. I co-teach Harvard's introductory economics class, called Ec10, and we introduce our students to prediction markets, show that, on average, they have historically been very accurate, and then show them political prediction markets. I believe that understanding probability, the difference between people's actions when money is at stake and when it just cheap talk, and the role of markets in aggregating information is helpful to students generally and specifically in the case of electoral prediction markets.

The reason why political prediction markets are superior to other tools for all of the above purposes is that they incorporate a wide range of information quickly and efficiently. A statistical model such as FiveThirtyEight's can only reflect the impact of an event on the political race once it starts appearing in polls. In contrast, a prediction market can react immediately. This near real-time probability calibration can be highly useful for researchers, whose event studies rely on a quick turnaround between the event occurring and the change in the data, in order to isolate the effects of the event from anything else occurring in that period. For instance, a researcher trying to learn the effects of a Supreme Court decision, an economic data release, or a candidate debate on electoral outcomes cannot wait weeks for enough polls to arrive to form a competent polling average, as too many different events may have occurred in the interregnum to be able to draw conclusions about any one in particular.

Prediction markets as a price discovery tool

The benefits of electoral prediction markets go well beyond the ways in which I have used them in my career. Elections can have profound affects for businesses. It is important for businesses to be able to make better predictions about elections (discussed in this section) and also hedge against the consequences of them (discussed in the next section).

Specifically, election prediction market can facilitate more accurate price discovery in other markets. Even those who are not actively participating in the market for election contracts, then, can benefit from the data that it provides.

For instance, suppose an energy firm is attempting to assess a fair market value for fuel to be delivered two years hence. To do so, the energy firm must estimate how supply and demand are likely to evolve over that period. Perhaps they use meteorological data and expect the winter to be unusually cold, and thus demand might rise. Or they survey earnings calls from key manufacturers to anticipate that supply chain bottlenecks from overseas natural gas producers might ease up, lowering the price. But another key factor they will consider is political risk. Legislative changes in environmental policy might increase or decrease the cost of producing natural gas.

While there is plenty of satellite data for a trader to use to estimate the weather impact on demand, there is little hard data to use to estimate political risk, which is a large part of the pricing puzzle. Enter election prediction markets. Traders know that their risk of beneficial or adverse policy changes depend on which party is in power and that change in risk is exactly what is necessary to price those commodity futures more accurately. A liquid, well-regulated

prediction market offering an accurate probability estimate of who is likely to control Congress would thus be highly valuable to price discovery.

There is ample academic evidence to suggest that prediction markets are highly efficient at aggregating information to produce an accurate forecast when compared to alternatives (especially farther out from an election). For example, economists Erik Snowberg, Justin Wolfers, and Eric Zitzewitz used data from the Iowa Electronic Markets to find clear linkages between prediction market prices and equity valuations.[1]

Benefits of electoral prediction markets for small businesses needing to hedge

Election markets can also allow businesses and others to participate directly and hedge against the consequences of elections. Absent prediction markets businesses have no simple and transparent way to hedge against these risks.

Millions of businesses are affected by changes in Congressional control, facing both positive and negative risks. Congressional control impacts legislation, policy, and the business environment in ways that have direct economic consequence to businesses and workers. This risk is conceptually identical to climate risk, business interruption risk, and other similar risks that can and should be managed using the financial markets.

Many businesses have a regulated component to them, either directly because the business is a regulated activity, or as an integral component to the business. Energy, healthcare, and education are some of the many industries that are directly affected by the Federal government. Even industries that are not directly regulated operate in an environment that is directly impacted by the Federal government whether it is due to tax policy, labor regulations, financial regulations, or other myriad policies the government sets.

Political control can also impact the overall business environment, including macroeconomic developments like the likelihood of legislation that will raise or lower overall economic activity—and thus business sales—and also specific changes that could affect a businesses' ability to raise capital, hire workers, and expand.

Businesses should recalibrate and manage risk before elections occur. Businesses are forward-looking and should anticipate changes in policy and government attitudes. For example, businesses hire, contract, and build in anticipation of future demand. Investment decisions, partnerships, acquisitions, and more are made in anticipation of future growth and performance. Partnerships, loans, and equity deals are similarly forward-looking and similarly are affected by political control. Accordingly, risk management must begin beforehand as well. Equities and commodity futures reprice to account for potential changes in political control.

Election markets also provide an efficient tool for managing these dynamic and interrelated risks. A person that faces risks from multiple legislative changes and the changes to the business

[1] Snowberg, Erik, Justin Wolfers and Eric Zitzewitz, 2013, "Prediction Markets for Economic Forecasting," in the Handbook of Economic Forecasting Volume 2, Elsevier Press, pp.657-687.

environment that come with political control can effectively manage the risk through this contract, but cannot easily do so using contracts for individual policies alone.

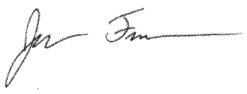
It is this hedging utility that distinguishes the market from the "gaming" contracts that the CFTC may be worried about. Whereas gaming contracts (such as a contract on the number of touchdowns a player scores in a football game) cannot reasonably be used for risk reduction purposes, an event contract on Congressional control clearly relates to an event of great economic importance.

The fact that many participants are not themselves using the contract for hedging does not refute this argument. If anything, non-hedgers serve a valuable purpose by providing greater liquidity and superior price discovery for the hedgers themselves—just as they do in a wide range of financial markets. Only if a market is exclusively used by speculators because the underlying event does not create sufficient risk that can be hedged would a contract be gaming. In contrast, not only can these markets be used for hedging, the great economic importance of the underlying event, and the significance of the risk, make them highly likely to be used as such.

The benefits of approving electoral prediction markets overwhelmingly outweigh the costs

Elections are not games, and the outcome of political control of Congress has enormous public interest ramifications. Election-focused prediction markets combine the economic significance of a powerful risk reduction tool for small businesses with the social significance of a powerful forecasting tool for researchers and policy-makers. A regulated election market will further the public interest by providing a valuable risk management tool, and providing data that will be valuable to businesses, economic researchers and policymakers alike. This is the exact kind of innovation that the CFTC should be embracing. I encourage the Commission to approve Kalshi's contract for electoral markets.

Sincerely,



Jason Furman
Professor of the Practice, Department of Economics, Harvard University
Professor of the Practice of Economic Policy, Harvard Kennedy School

From: Victor Jacobsson
Organization(s): Rosfelt, Klarna

Comment No: 69707
Date: 9/18/2022

Comment Text:

My name is Victor Jacobsson, and I am a co-founder of Klarna, the world's largest buy-now pay-later company, with over $80 billion in online sales in 2021. Today, I work as an independent advisor to a variety of startups and investors all around the world. In my experience–as an entrepreneur, advisor, and investor–political control has a vast impact on American businesses, and American business owners and workers deserve the opportunity to hedge the risk that political control might change in a way that adversely affects them.

The CFTC has asked the public to answer whether the effects of elections are predictable enough for them to be hedge-able events. While no one would claim to have a crystal ball and know exactly what bills Congress might pass, or exactly who they might confirm to important regulatory positions, risks indisputably rise when certain Congresses come into power, and hedging instruments are needed to mitigate that risk. The modern investor and business owner needs to take a comprehensive look at the risks (and opportunities) a business faces. Consider two risks, one of which has a 10% chance of occurring and will cause a $250,000 loss if it happens. Another has a 25% chance of happening but will cause a $100,000 loss. That first risk might be a hurricane, or a wildfire, or a particularly vicious hailstorm. The second might be an adverse change in Congress, with its concomitant changes in regulations, taxes, and beyond. It is considered negligent to not get insurance against the first risk. But in the United States, not only is it not obligatory to directly hedge yourself against the second, direct hedging products are strictly prohibited! From a business perspective, elections risk and other risks are very similar. Regulators should recognize that fact, and give business owners the tools they need to protect themselves in a similar manner.

The CFTC has also asked about whether these contracts can be used to price other services, including financial assets or commodities. As an investor and advisor, I receive a lot of pitches and proposals from entrepreneurs. A core part of any good pitch is an understanding of the legal, regulatory, and political environment. Shifts in any one of these key factors can impact a deal. There are any number of ways this can happen. An election might mean the end to a subsidy program the businesses rely on, or a tightening of regulation that increases their compliance cost, or a change to the way their customer base does business so that the expected future earnings of that company are lower. It is absolutely valuable then to know the probability of a new Congress entering government, as that affects the price that an investor is willing to pay per share of that company, and this is information that industry takes into account all the time. There is no doubt that businesses will start incorporating the data from the contract market into their assessments.

In conclusion, these contracts serve a valuable hedging function and price-basing function. My years of experience building, advising and investing in businesses strengthens the conviction I have in this fact. The CFTC should permit Kalshi to offer this valuable risk reduction tool to small business owners and the broader public.

ROA0001553

From: Michael Gibbs

Organization(s):
University of Chicago
Comment No: 69704
Date: 9/16/2022
Comment Text:
I am an economics professor at the University of Chicago. In my opinion, the Commission should approve this contract. Political elections are a major source of economic risk. There are good reasons to expect that election prediction markets will be a beneficial tool for improving hedging and efficiency of economic decision making that is contingent on such risks. Existing evidence suggests that such contracts have performed well in the past. It is worthwhile to experiment with this contract, and to expand the use of such contracts in the event that this experiment has a positive outcome.

Important insights into these issues are provided in a special symposium of the Journal of Economic Perspectives (Spring 2004): “Prediction Markets” (Justin Wolfers and Eric Zitzewitz, pp. 107-126); “Historical Presidential Betting Markets” (Paul Rhode and Koleman Strumpf, pp. 127-142). Both papers provide many additional relevant citations.

– Do these contracts involve, relate to, or reference gaming as described in Commission regulation 40.11(a)(1) and section 5c(c)(5)(C) of the Commodity Exchange Act, or in the alternative, involve, relate to, or reference an activity that is similar to gaming as described in regulation 40.11(a)(2) or section 5c(c)(5)(C) of the Commodity Exchange Act?

It is not appropriate to view any election contract as gaming. “Gaming” involves betting on outcomes that are intrinsically enjoyable but have no economic effect, such as sporting events. Elections have far-reaching economic effects. A better analogy is trading on futures contracts for interest rates or commodities prices.

– Do the contracts serve a hedging function? Are the economic consequences of congressional control predictable enough for a contract based on that control to serve a hedging function? Please provide tangible examples of commercial activity that can be hedged directly by the contracts or economic analysis that demonstrates the hedging utility of the contracts.

These types of contracts can be extremely valuable for hedging. The economic effects of election outcomes are enormous – even with respect to local elections, but certainly for national elections. This implies large economic uncertainties and risks associated with elections. Election prediction markets can be a valuable tool to help many types of economic agents to hedge their risks.

Even if the market or transaction size is too small for direct hedging of risks, prediction markets hedge risks more deeply, because they can provide more accurate, real-time predictions of the likelihood of various outcomes. That provides better information which can be used to improve the quality of decision-making, investments, etc. For example, consider a firm contemplating a large capital investment, with value contingent on the outcome of an election. Better quality predictions about the election can improve the timing, type, and magnitude of investment, increasing economic efficiency.

– Are there unique economic risks tied to the outcome of congressional control that cannot be hedged via derivative products on equities, debt, interest rates, tax rates, asset values, and other commodity prices?

The economic risks of election outcomes can be imperfectly hedged via other means currently available. However, prediction markets on these enormously significant events can greatly improve the ability to hedge (directly, and via improved economic decision making, as described above).

Moreover, evidence from academic research suggests that these types of contracts are a very promising tool. They tend to outperform other methods (e.g., polling). Moreover, there is little evidence that attempts to manipulate such markets succeed. These points are discussed in Wolfers & Zitzewitz; Rhode & Strumpf.

– Should the Commission consider the contract design and payout when trying to assess the economic utility of the contract? For example, are binary contracts useful for hedging nonbinary economic events?

Binary contracts are useful, and have the virtue of simplicity in design and execution. However, the Commission should consider future applications with non-binary contracts. That includes markets with multiple possible outcomes

(e.g., a set of competing Presidential candidates), but also index and spread contracts (see Wolfers & Zitzewitz, Table 1).

Dr. Peter J. Kempthorne
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September 16, 2022

U.S. COMMODITY FUTURES TRADING COMMISSION
Three Lafayette Centre
1155 21st Street, NW, Washington, DC 20581

Re: Public Comment on Kalshi Proposed "Will <party> be in control of the <chamber of Congress>?" Contracts Pursuant to Commission Regulation 40.11(c)

Dear Commissioners:

I am writing to strongly support the approval of Congressional Control Contracts by Kalshi EX, LLC. As Lecturer in the Mathematics Department at the Massachusetts Institute of Technology, I teach financial mathematics and statistics courses. The contribution of the Kalshi exchange's trading in event contracts is highly significant in providing the public and financial markets with explicit wisdom of crowds. Participants choosing to trade contracts based on their price is the scientific way to communicate their beliefs concerning the likelihood of the associated events. In addition to providing direct value to traders in the contracts, the public and financial markets benefit from the information conveyed by the dynamics of trading and prices in the contracts. Such activity supports efficiency in financial markets with the enhanced information flow of trading on a regulated exchange.

I have been registered with the CFTC for many years (as Commodity Pool Operator and now as a Commodity Trading Adviser). The importance of regulated exchanges to ensure the integrity and fairness of trading in financial markets is highly significant. I have been a long-term advocate for Kalshi in their pursuit of registering the exchange with the CFTC. In that capacity, I am an outside/independent director on the company's risk oversight committee. Based on my experience and perspective, I offer below comments on several of the Public Questions posted in support of Congressional Control Contracts.

Yours truly,

Peter J. Kempthorne

Dr. Peter J. Kempthorne

Comments on selected Public Questions posted concerning the Congressional Control Contracts.

1. Do these contracts involve, relate to, or reference gaming as described in Commission regulation 40.11(a)(1) and section 5c(c)(5)(C) of the Commodity Exchange Act, or in the alternative, involve, relate to, or reference an activity that is similar to gaming as described in regulation 40.11(a)(2) or section 5c(c)(5)(C) of the Commodity Exchange Act?

Comment: The underlying activity of the contracts is political control. This activity is not one of the excluded activities in regulation 40.11(a)(1) – "terrorism, assassination, war, or gaming or an activity that is unlawful under any State or Federal law." While such contracts involve betting on an event outcome, the outcomes of such bets are not purely random as in casino games or akin to sports betting for which the

public interest could be challenged. Instead, the Congressional Control Contracts provide a way for the public to communicate and share their expectations about congressional control. Such contract trading would have no direct impact on the outcome, but indirectly the wisdom of crowds would serve the public interest by helping to anticipate congressional composition and prepare for the impact of alternate outcomes.

2. Should the Commission consider whether similar offerings are available in traditional gaming venues such as casinos or sports books and/or whether taking a position on elections or congressional control is defined as gaming under state or federal law?

Comment: While traditional gaming venues such as casinos or sports books might allow similar offerings, these do not serve the public interest. Allowing Congressional Control Contracts on the Kashi Exchange would serve the public interest by providing a completely equitable, transparent market for such contracts. Moreover, providing such contracts on a central exchange where the public can know and research the trading activity would support increasing the liquidity of such contracts, enabling the public with contract positions to adjust or close their contract positions efficiently in both time and cost. Such public-interest features are not available at casinos or sports books.

6. Do the contracts serve a hedging function? Are the economic consequences of congressional control predictable enough for a contract based on that control to serve a hedging function? Please provide tangible examples of commercial activity that can be hedged directly by the contracts or economic analysis that demonstrates the hedging utility of the contracts.

Comment: These contracts definitely serve a hedging function for individuals and investors. Their employment circumstance and opportunities can depend significantly on the political side with congressional control. Providing the ability to hedge alternate outcomes could have significant value to affected individuals. Also, the investment prospects of stocks or bonds in companies can depend significantly on congressional control (e.g., renewable vs fossil fuel energy companies; electronic vehicle and battery manufacturers). The Congressional Control Contracts would provide additional investment options to individuals which could diversify and lower their exposures to identifiable financial risks.

7. Are there unique economic risks tied to the outcome of congressional control that cannot be hedged via derivative products on equities, debt, interest rates, tax rates, asset values, and other commodity prices?

Comment: The traditional derivative products focus on the risks of existing underlying assets of the derivatives. The impact of congressional control is more broad-based. With a congressional control contract, such risks would be directly tradable, making the amorphous impact direct and tradable.

8. What standard should the Commission use in reviewing the contact's hedging function? Is it sufficient that a contract could theoretically be used for hedging or, should an exchange provide evidence of demonstrated need by likely hedgers in the market? How often must a contract be used for hedging or what percentage of market participants or open interest must represent hedging use?

Comment: The hedging function of Congressional Control Contracts can only be determined through their use as actively traded contracts. The proof of demonstrated need by likely hedgers would likely not come until the active and liquid market for such contracts is available to the general public. While premature, an interesting question is whether the position limits for such contracts could be raised for participants self-designating themselves as hedgers. Such market activity would be feasible when trading in such a contract reaches maturity with sufficient liquidity.

11. Do the contracts serve a price-basing function? For example, could they form the basis of pricing a commercial transaction in a physical commodity, financial asset, or service?

Comment: As noted in Question 6, the investment potential of stocks and bonds of companies can be significantly affected by the outcome of the Congressional Control Contract. The risks of which political party is in congressional control could have an important impact on pricing commercial transactions in such assets or of related commodities. In addition to the direct payoffs of such contracts, their information value in terms of market insight/sentiment/wisdom would contribute to pricing and trading in these other assets.

12. Are the proposed contracts contrary to the public interest? Why or why not?

Comment: The Congressional Control Contracts are definitely in the public interest. They provide two key contributions: 1) the ability to trade contracts on event outcomes for individuals directly affected by the event; and 2) the information content of informed, active traders about the likelihood of the contract event for use and consumption by the general public.

16. Should campaign committees, political action committees, candidates for the House and Senate, and other entities involved in political fundraising and expenditures or likely to hold non-public information, or subject to Federal Election Commission oversight, be prohibited from participating in the contracts? Would such a prohibition help address federal campaign law or manipulation and surveillance concerns? How would such restrictions impact the Commission's determination of whether the contracts are contrary to the public interest?

Comment: These possible prohibitions could be important in maintaining the integrity of the market in such contracts. I would support such prohibitions as supporting the public interest objectives of the Commission.

To whom it may concern,

My name is Sam Altman. I am the CEO of OpenAI, the world's leading artificial intelligence research laboratory and corporation, perhaps best known for the large language model GPT-3 and the image generation model DALL-E. Before OpenAI, I was president of the startup accelerator Y Combinator, the company that helped launch thousands of companies, including Airbnb, Dropbox, Doordash, Reddit, Stripe and Twitch. While president of Y Combinator, I helped launch the YC Continuity fund, a $700 million fund to invest in YC portfolio companies. I am submitting this public comment to support Kalshi's proposed contract on Congressional control.

As a long-time investor in hundreds of early-stage startups, I know from personal experience that Congressional control has significant, direct, and predictable impacts on the risk exposures of small businesses, startups, and their founders and employees. Here is an example of how political control can directly and predictably affect the risks that a biotech startup faces. First, the biotech company has risk from FDA appointments and priorities which can mean the difference between rapid approval of a new treatment, or a yearslong delay that can cost the company's resources, and in extreme cases force the company into bankruptcy or a firesale. The company also faces risk regarding federal funding for research. Additionally, a Congress passing a mammoth new bill may force small businesses to spend small fortunes trying to navigate the regulatory uncertainty as the rulemaking process plays out. The risks of these events is directly, and predictably, tied to Congressional control and elections in general, and the risk management tools for this will be also. Nearly every business we fund faces risk from Congressional action in multiple ways..

Needless to say, then, these contracts have legitimate hedging use to manage risks and are not gaming. Congressional control is an economically significant event that impacts risk and many companies and founders and employees genuinely need to hedge against. The contract could be used by these companies, founders and employees to manage their risk very effectively. In my experience, many individuals and small businesses have the sophistication and foresight to hedge their risks quite effectively, and if the CFTC approves these contracts, based on my experience it is reasonable to assume that the contract will be used to hedge and manage risk.

I would not be writing this letter if I was not confident that this contract would not be contrary to the public interest. These contracts are obviously not the only economic exposure that small businesses and individuals have to elections. As I just illustrated, there are already significant exposures to elections. These contracts would actually help manage their existing risk. As an added advantage, the price of the contract represents the best "wisdom of the crowd" estimate of the probability of a given party winning the election. This data can be highly valuable to small businesses trying to make plans about the future and wondering about the expected

future path of federal policy, but also to researchers who are trying to estimate the effects of one party's agenda on various financial and economic variables.

It thus seems to me that the risks are minimal and largely speculative, whereas the benefits are real and large. The CFTC would be remiss to miss this opportunity to bring this socially valuable activity to American soil.

Stanford Law School

Joseph A. Grundfest
W. A. Franke Professor of Law and Business. Emeritus
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September 14, 2022

SUBMITTED VIA CFTC PORTAL
Secretary of the Commission
Office of the Secretariat
U.S. Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, N.W.
Washington, D.C. 20581

Re: Review of KalshiEx LLC's proposed Congressional Control Contracts pursuant to Commodity Futures Trading Commission Regulation 40.11(c).

Dear Chairman and Commissioners:

This comment urges approval of KalshiEx, LLC's ("KalshiEX" or "Kalshi") proposed Congressional Control Contracts pursuant to Commodity Futures Trading Commission Regulation 40.11(c).

I am a former Commissioner of the United States Securities and Exchange Commission (1985-1990).[1] I am currently the W.A. Franke Professor of Law and Business (Emeritus) at Stanford University where I have served since leaving the SEC in 1990, and am also Senior Faculty of the Rock Center on Corporate Governance. My scholarship has been published in the Harvard, Yale, and Stanford law reviews, and my areas of specialization include financial market regulation, fraud, corporate governance, and venture capital.

When considering the public policy implications of the proposed contract, it is constructive for the Commission to recognize the robust information environment in which the contract proposes to trade. In particular, there is no shortage of commentary and prediction relating to the outcome of federal elections in general, or the prospects for control of either house of Congress in particular. The proposed contract will thus not be introduced in an information vacuum. The contract's implications for the public interest are therefore most accurately appreciated by considering the marginal effects that its introduction would have over and above the robust information sources already present in the market, and that will continue to be vigorously exercised if the contract is approved.

Significantly, dozens of polls seek to measure and predict the outcome of Congressional elections by district and in the aggregate. These polls include Quinnipiac,[2] ABC/Washington Post[3],

[1] The views expressed in this comment are my own and do not reflect, nor should they be ascribed to, the views or positions of any other organization with which I may be affiliated.
[2] Quinnipiac University, "Poll Results", https://poll.qu.edu/poll-results
[3] Washington Post-ABC News Poll, https://www.washingtonpost.com/wp-srv/politics/polls/postabcpoll_031012.html

New York Times/Siena,[4] Ipsos,[5] and Emerson College.[6] For example, a recent Emerson College poll found Senator Raphael Warnock trailing his challenger Herschel Walker for the Georgia Senate seat by two points.[7] Other Senate races, such as the one in Pennsylvania, have been similarly well-polled with Emerson College[8] polling joining similarly reputable Susquehanna Polling & Research and giving Lieutenant Governor John Fetterman a modest margin over his challenger, Mehmet Oz.[9]

Many commentators and consultants also predict Congressional campaign outcomes, again on a district-by-district basis, as well as for Congress as a whole. These commentators include the Cook Political Report,[10] Data for Progress,[11] Politico[12] and Frank Luntz.[13] Steve Shepard of Politico, as an example, rates the Senate as a "toss up" but projects that Republicans are "likely" to take control of the House.[14] Meanwhile, the Cook Political Report rates nine of the thirty-five Senate seats up for re-election as Safe Democrat, three as lean Democrat, four as lean Republican, and fifteen as Safe Republican.[15]

Some analysts construct statistical models that rely on polling data to aggregate this information and to generate quantitative predictions of likely electoral outcomes. The most famous of these models is, perhaps, operated by FiveThirtyEight,[16] but there are many prominent alternatives, including models generated by the Economist[17] and the New York Times.[18] FiveThirtyEight, as of September 11, 2022, projected a 74% probability that Republicans would take control of the House, and a 69% probability that Democrats would control the Senate.[19] The Economist also projects a 74%

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[4] The New York Times/Siena College Research Institute July 5 -7 2022. https://int.nyt.com/data/documenttools/us0722-crosstabs-nyt071122/33ffa85627ee4648/full.pdf

[5] Ipsos. "Political and Public Opinion Polling". https://www.ipsos.com/en/political-and-public-opinion-polling

[6] Emerson College Polling. https://emersoncollegepolling.com/

[7] See https://emersoncollegepolling.com/georgia-2022-walker-holds-two-point-lead-over-warnock-in-tight-senate-race-kemp-leads-abrams-by-four/

[8] See https://emersoncollegepolling.com/pennsylvania-2022-fetterman-holds-four-point-lead-over-oz-for-us-senate-shapiro-leads-mastriano-by-three/

[9] See https://www.politicspa.com/susquehanna-poll-fetterman-holds-five-point-lead-on-oz-49-44/111648/

[10] Cook Political Report, https://www.cookpolitical.com/

[11] Data for Progress, "Elections", https://www.dataforprogress.org/elections

[12] Politico. "2022 Election Forecast", https://www.politico.com/2022-election/race-forecasts-ratings-and-predictions/

[13] Frank Luntz, "What Happened When 7 Trump Voters and 6 Biden Voters Tried to Find Common Ground". NEW YORK TIMES (Jul. 28, 2022), https://www.nytimes.com/interactive/2022/07/28/opinion/focusgroup-political-division.html

[14] See, Politico Forecast, September 11, 2022, available at https://www.politico.com/2022-election/race-forecasts-ratings-and-predictions/

[15] See https://www.cookpolitical.com/ratings/senate-race-ratings

[16] FiveThirtyEight, "2022 election forecast",https://projects.fivethirtyeight.com/2022-election-forecast/senate/?cid=rrpromo

[17]The Economist, "How The Economist presidential forecast works", THE ECONOMIST (2020), https://projects.economist.com/us-2020-forecast/president/how-this-works

[18] See https://www.nytimes.com/live/2020/presidential-polls-trump-biden

[19] See https://projects.fivethirtyeight.com/2022-election-forecast/house/; and https://projects.fivethirtyeight.com/2022-election-forecast/senate/

probability that Republicans will control the House, but generates a higher 78% probability that Democrats will control the Senate.[20]

Other analysts build models that rely on economic or other macro criteria to predict the outcome of federal elections, including presidential and congressional campaigns. For instance, Yale Professor Ray Fair,[21] Google's Patrick Hummel and Microsoft Research's David Rothschild[22] all have developed models along these lines. London School of Economics' Torun Dewan and Harvard's Kenneth Shapsle reviewed the vast literature surrounding these fundamentals models (including political science game theoretic models of elections) and found dozens of models, which encompass a wide variety of modeling choices.[23] For example, as of July 28, Fair's model projected that Democrats will receive 47% of the two-way House vote in the 2022 midterm election.[24]

Prediction markets based on federal elections are active abroad and easily accessed by US persons. At Britain's BetFair, more than $250 million was traded on the US election as of the Wednesday before election day, with another $150 million expected over the following few days.[25] Several other sites, including Ireland's Paddy Power (now owned by BetFair) and UK's LadBrokes saw millions in trading as well.[26] Polymarket's 2020 presidential election market supported more than $10 million in trading.[27] Many US residents access these markets using a variety of affordable VPNs, and the predictive probabilities implied by trading in these markets are obvious to all. Recent prices on Betfair imply a 68% probability that Democrats retain control of the Senate and a 74% probability that Republicans take control of the House, with roughly $400,000 wagered on the outcome of Senate races and $300,000 wagered on House races.[28] At Ladbrokes, prices imply a 56% probability that Democrats retain control of the Senate and a 75% probability that Republicans take control of the House.[29]

There is no shortage of press commentary that reviews and aggregates these different perspectives into a single overarching theme. The New York Times recently published a roundup of

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[20] Split Decision, The Economist, Sept. 10, 2022, at 25.
[21] Ray C. Fair, "Predicting Presidential Elections and Other Things", 2002. https://fairmodel.econ.yale.edu/rayfair/pdf/vote.pdf
[22] Patrick Hummel and David Rothschild, "Fundamental models for forecasting elections at the state level", ELECTORAL STUDIES (2014), https://www.sciencedirect.com/science/article/abs/pii/S0261379414000602#
[23] Torun Dewan and Kenneth Shepsle, "Political Economy Models of Elections", ANNUAL REVI EW OF POLITICAL SCIENCE (2011),https://www.annualreviews.org/doi/10.1146/annurev.polisci.12.042507.094704
[24] See https://fairmodel.econ.yale.edu/vote2020/indexne1.htm
[25] Chris Isidore. "$284 million has already been wagered by British bettors on the US election outcome". CNN (October 30, 2020), https://www.cnn.com/2020/10/30/business/us-presidential-election-wagering-record/index.html
[26] "Betting sites see record wagering on US presidential election", CNBC (Nov. 7, 2016), https://www.cnbc.com/2016/11/07/betting-sites-see-record-wagering-on-us-presidential-election.html
[27] Polymarket, "Will Trump win the 2020 US presidential election",https://polymarket.com/market/will-trump-win-the-2020-us-presidential-election
[28] See https://www.betfair.com/exchange/plus/politics/market/1.179673535
[29] See https://sports.ladbrokes.com/event/politics/international/uselections/2022-house-elections/234135146/all-markets

the prognostications of election "soothsayers."[30] Such coverage is common at leading media sources, including the Washington Post,[31] Politico,[32] and the Wall Street Journal.[33]

Finally, overt and entirely legitimate efforts by millions of people seek legally and powerfully to influence the outcome of federal elections. Editorial boards, columnists, and armies of influencers, endorsers, and campaign contributors all strive to tilt election outcomes. Presidential candidates in 2020 spent north of $4 billion,[34] and Congressional candidates spent a further $4 billion,[35] all raised from more than four million donors.[36]

The public interest benefits of introducing Kalshi's contract in this environment are palpable and easily enumerated.

First, Kalshi's proposed contract will identify all market participants and subject them to know-your-customer and anti-money laundering requirements. The contract will generate audit trails and all transactions will be transparent to regulators. In contrast, alternative data sources operate with varying degrees of transparency and disclosure, and many are not subject to direct federal regulatory oversight. Federal authorities, for example, neither know the identities or incentives of persons who respond to polls, nor can audit or validate the numerous statistical models that operate in this space. Indeed, First Amendment considerations properly limit the government's ability to monitor and control alternative predictive information sources. In contrast, Kalshi's contract will have a level of transparency and regulatory compliance unequaled by any of these other predictive sources. The processes by which Kalshi generates its predictive information will also be fully transparent to regulators and market participants alike, and will be subject to careful scrutiny. Kalshi will thus add a differentiated and regulated voice to predictive public information flows.

Second, numerous observers have commented on the possibility that polling data are becoming less reliable either because respondents are unwilling to respond truthfully to pollsters or

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[30] Blake Hounshell, "Why the Soothsayers Are So Puzzled by This Year's Midterms", NEW YORK TIMES (Aug. 8, 2022), https://www.nytimes.com/2022/08/08/us/politics/midterm-election-democrats-republicans-predictions.html

[31] Annie Linskey and Michael Scherer, "Democrats see the once unthinkable: A narrow path to keeping the House", WASHINGTON POST (Aug. 27, 2022), https://www.washingtonpost.com/politics/2022/08/27/democrats-republicans-house-midterms/

[32] Myah Ward, "Election forecasters rethink their ratings", POLITICO (Aug. 25, 2022), https://www.politico.com/newsletters/politico-nightly/2022/08/25/election-forecasters-rethink-their-ratings-00053839

[33] John McCormick. "Independent Voters Now Tilting Toward Democrats in Midterm Elections, WSJ Poll Finds", WALL STREET JOURNAL (Sep. 1, 2022), https://www.wsj.com/articles/democratic-midterm-prospects-improve-as-races-heat-up-wsj-poll-finds-11662024601

[34] Federal Election Commission, "Statistical Summary of 24Month Campaign Activity of the 2019-2020 Election Cycle", https://www.fec.gov/updates/statistical-summary-24-month-campaign-activity-2019-2020-election-cycle/#:~:text=Presidential%20candidates%20raised%20and%20spent,2019%20through%20December%2031%2C%202020.

[35] *Id.*

[36] OpenSecrets, "Donor Demographics", https://www.opensecrets.org/elections-overview/donor-demographics?cycle=2020&display=G

because the evolution of internet and cellphone communications introduces bias into polling practices.[37] Kalshi's market is not as vulnerable to these concerns because Kalshi market participants have powerful incentives to accurately predict election outcomes. Expressing any other incentive would be financially costly and adverse to the trader's financial interests. From that perspective, knowledgeable observers interested in adjusting for biases that might be influencing polling practices have incentives to express their adjustment factors by participating in the Kalshi contract, and thereby informing the rest of the market of these adjustment factors.

Third, by operating a differentiated market in which knowledgeable observers can express predictive judgments in an incentive compatible manner, free of biases that can influence other predictive methodologies, Kalshi's contract will add to the competitiveness, accuracy, and transparency of all predictive forms of expression in the marketplace.

Fourth, concerns that a contract like Kalshi's might be used for manipulative purposes are easily exaggerated. Persons interested in manipulating markets have little incentive to identify themselves to federal authorities who can quickly respond with civil or criminal sanctions. Persons interested in manipulating federal elections will find it far more rational to launch social media disinformation campaigns or other forms of deception than to participate in a contract market where they must identify themselves and know that their every move is monitored by regulatory authorities. Further, because of the ambiguous relationship between turnout and perceived position in a campaign, it is far from clear how persons interested in manipulating an election would participate in the Kalshi market. Would a person favoring Candidate X want to inflate the probability that Opponent Y will prevail, and thereby attempt to stimulate more X supporters to show up at the polls? Or, would the person favoring Candidate X want to deflate the probability that Opponent Y will prevail in order to dishearten Candidate Y's supporters and suppress opponent turnout? And, if market participants seek, for partisan reasons, to tilt the market one way or another, they will be entirely unable to prevent counterparties from entering the market to offset their non-market-based efforts to influence Kalshi's predictive estimates. Indeed, they woud be creating profitable trading strategies for their opponents – hardly an outcome they would welcome. The optimal strategy for a potential manipulator is thus far from clear, and this ambiguity very substantially diminishes concern that the Kalshi market will be used for manipulative purposes. Indeed, given the ambiguous electoral consequences of efforts to influence pricing of the Kalshi contract, a person interested in promoting one candidate over another would likely find it far more rational simply to contribute to the favored candidate's campaign where the effect of the contribution is far less ambiguous.

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[37] Joseph P. Williams, "The Problem with Polls", US NEWS (Sep. 28, 2015), https://www.usnews.com/news/the-report/articles/2015/09/28/why-public-opinion-polls-are-increasingly-inaccurate; Jemima McEvoy. "2020 Election Polls Were the Least Accurate In Decades—Mostly For Underestimating Trump, Report Finds". FORBES (Jul. 19, 2021), https://www.forbes.com/sites/jemimamcevoy/2021/07/19/2020election-polls-were-the-least-accurate-in-decades-mostly-for-underestimating-trump-report-finds/?sh=4cf10fe5631& Nate Cohn, "Yes, the Polling Warning Signs are Flashing Again", NEW YORK TIMES (Sep.. 12, 2022), https://www.nytimes.com/2022/09/12/upshot/pollingmidterms-warning.html?campaign_id=9&emc=edit_nn_20220912&instance_id=71706&nl=the-morning&regi_id=159018825&segment_id=106056&te=1&user_id=399100d1a84e7cf6e6483cec4f676104 David Leonhardt, "Are the Polls Wrong Again?", NEW YORK TIMES (Sep.12, 2022), https://www.nytimes.com/2022/09/12/briefing/polling-midterms-republicans-democrats.html

Fifth, the electorate's view of the likely outcome of an election will not be determined exclusively by the pricing of the Kalshi contract. Voters retain access to multiple sources of predictive information, as described above, and will discount Kalshi's predictive information, to the extent appropriate, in light of all other predictive information sources that are active in the market.

Sixth, the extent to which the public is willing to rely on the predictive information generated by the Kalshi contract will be codetermined by the level of confidence the Kalshi contract generates in its integrity. The greater the public's confidence in the integrity of the information generated by the contract, the greater the reliance the public will place on the contract, and the more valuable the contract to society and to its sponsors. The contract's sponsors thus have intrinsic incentives to operate the market without bias or favor to any side of any contract, and to assure that the contract's predictive results are as unbiased and accurate as possible. It is unclear that every other voice in the market for predictive information has equivalently neutral incentives.

I trust that these observations are helpful to the Commission in its deliberations and would be happy to respond to any inquiries that the agency might wish to pose as part of its deliberative process.

With best regards,

Joseph A. Grundfest
The William A. Franke Professor of
Law and Business, Emeritus

To whom it may concern,

I wish to write in favor of Kalshi's proposed contracts regarding the midterm elections. I'm a lifelong philanthropist and activist focusing on promoting women's rights and LGBTQ+ rights. I'm on the board of Vital Voices, a nonprofit organization originally founded by Hillary Clinton to advance women's rights and economic empowerment. I'm an art dealer by trade, and I run an art gallery that specializes in centering women, LGBTQ+ and minority art voices. One of my core driving missions is to promote the integrity of the US electoral system and safeguard it from threats to discredit and undermine it.

All of my work is rooted in my and my family's long history of promoting rights for women and LGBTQ+ communities everywhere in the world. I draw a lot of inspiration for my work from my ancestor Rajkumari Amrit Kaur, who was honoured in the TIME 100 Women list for her activism around women's rights to vote and her work alongside Mahatma Gandhi (some of which has inspired Martin Luther King Jr.'s incredible impact in this country).

Financial markets provide many a path to achieve financial independence and weather the tides of political change. I've seen first hand how elections can have enormous societal impact, and the ability to financially safeguard oneself from those changes is paramount.

Whether it be social spending, labor regulation, or the promotion of human dignity and respect, elections impact people's everyday lives. People deserve the ability to hedge themselves against those risks. Traditional financial tools–like derivatives and options–may protect someone with traditional financial assets at stake, but for most people who are imperiled by elections in a way wholly unique from anyone else, these tools just won't cut it. A straightforward hedging contract–such as the proposed election contracts– is a better way to help individuals with what they need. If you are a woman whose right to female health services is under threat, election outcomes matter. If you work in retail or in food service, as millions of Americans do, macroeconomic policies have a strong and obvious effect on your ability to make ends meet: when the economy craters, your job is at risk. If you stay at home to care for a loved one–a child, an aging parent, a sick relative–different governments have different policy proposals towards supporting you and your needs. The ability to protect yourself against a government who will not support you and your needs a valuable public service.

As I said, elections matter and they immense impact on millions of people, if not all people. Another principal benefit of election markets is their forecasting value. Millions of Americans read the news each evening during election season to find out who's winning, who's falling behind, and more. But many of those news reports are, to be generous, of dubious quality. They base themselves off of who they feel has the "momentum" or other determinations of fuzzy, unscientific provenance. Misinformation is everywhere and is polarizing the country. Polls are getting less and less accurate and more and more biased over time. Prediction market values would be an invaluable addition to the media ecosystem but, to date, they have largely been eschewed in part due to prediction markets' small size and questionable legal status. A well-regulated, safe, and trustworthy prediction market could integrate into the news reports and provide useful information to millions of Americans, by giving them a source of more truthful forecasts of what's going to happen with the next electoral event.

In sum, these are all the reasons why I strongly support these markets and the public benefits they bring to the table.

Amar Singh

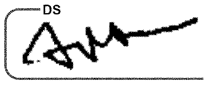
To the Commissioners of the CFTC,

My name is Jorge Paulo Lemann. I am a Swiss / Brazilian businessman who co-founded 3G Capital in the U.S., Banco Garantia in Brazil, and helped create Anheuser-Busch InBev, the world's largest brewery business. In the past and present I have been a board member of the Gillette Company, Kraft Heinz, Swiss Re, AB InBev, Lojas Americanas, and have participated in Advisory Councils of NYSE, Credit Suisse, DaimlerChrysler, J.P. Morgan, Harvard Business School, and Exor.

Several consumer-packaged goods (CPG) companies I built and have helped build are some of the largest participants in a variety of commodity futures and derivatives markets. As someone who deeply understands the fundamental purpose of futures markets and their crucial ability to transfer risk in the economy, I am writing in strong support of CFTC approval of Kalshi's proposal to list political event contracts.

In its questions to the public, the CFTC questions whether this contract possesses (a) hedging utility (question 6), and (b) price-basing utility (question 11). Previously, when deciding the Nadex case, the CFTC had determined that "the unpredictability of the specific economic consequences of an election means that the Political Event Contracts cannot reasonably be expected to be used for hedging purposes" and that "there is no situation in which the Political Event Contracts' prices could form the basis for the pricing of a commercial transaction involving a physical commodity, financial asset or service". These statements are inconsistent with the preponderance of the academic research on the subject and is inconsistent with the actual experience of anyone who has ever operated a business in or with the United States or traded on the global commodity markets. Experience and empirical observation show that elections have consequences, and these consequences directly create risk that can be hedged, and are factored into pricing commodities, financial assets, and services. Political parties have different platforms, different people, and different policy goals, and while the precise details of what the government ultimately enacts may not be known with certainty, elections have a direct impact on the risk of economically costly events occurring and economically beneficial events not occurring. Elections result in the appointment of different people to regulatory positions, the enactment of different regulatory policies, the passing of different farm bills, and more. These all directly impact pricing, investment outlooks, and many other economic decisions because they shape the landscape that businesses operate in. An investment may look very different if hypothetical legislative and regulatory events x, y and z occur than if they do not occur. If an election makes it materially more likely for the events to occur, that election poses significant risk to the parties in the deal. That risk can and should be hedged.

Additionally, the consequences of elections on risk mean that commodity markets will respond to elections as well. And because the financial markets are forward looking, they change in response to the likely outcomes of elections too. From my experience, the data from these markets will be useful in determining the pricing for commodities, investments and financial assets, and services. Thus, even companies for whom the position limits ($25,000) are too small to be valuable would benefit from having this valuable data point available in the market.

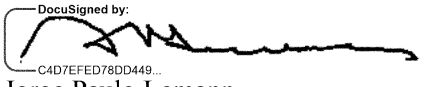


Moreover, in the seventh question that the CFTC posed to the public, they ask whether there exist "unique economic risks tied to the outcome of congressional control that cannot be hedged via [traditional] derivative products". The answer is yet again a resounding yes. In an increasingly globalized world, the risks that businesses face cannot be merely reduced to price shocks in raw commodities. Of course, changes in the wheat market (to produce beer at AB InBev) affect the profits of my companies, and we use existing products to hedge accordingly. But those are hardly the only risks that we face. National policy from many countries, including the United States, have an impact, and constitute risk, as well. And these risks manifest in ways beyond just the raw commodity price mechanism (though elections do certainly affect commodity prices as well), and therefore cannot be fully hedged using only existing hedging products. For example, even in cases when appointments to certain regulatory positions do not affect commodity prices, they would still impact the input prices we must pay. One tax or regulatory change might not affect the price paid wholesale for wheat but might increase the cost it takes to process it. As a result, a hedge on the price of wheat would not capture the financial risks we face. While large companies like AB InBev can safely absorb increased compliance costs to accommodate new or different rules, many smaller farms, and companies–many of whom operate on razor-thin margins–cannot so easily do so. As a result, they are subject to the vicissitudes of federal policymakers with little ability to reduce their exposure in a way a larger company might be able to do so. The $25,000 position limits may not be the perfect fit for a company with billions of dollars in annual revenue, they are perfect for small businesses and, should this market evolve over time, may be a great fit in the future for larger businesses.

Additionally, several questions can be seen to imply the possibility that an exchange, or the CFTC, should be determining how market participants should manage their risk. That would be a profound and unfortunate shift from the current regime that was created by Congress and has allowed for significant growth and development of healthy markets. It is up to market participants to determine whether there is risk, how to manage their risk, and what products and strategies to use to hedge their risk. Similarly, it is up to firms to determine what data points they will utilize in conducting their business.

The CFTC should act in a way consistent with its mandate and with the law: to allow legitimate economic contracts that can be used for hedging and for price-basing purposes by thousands of American businesses.

Sincerely yours,



Jorge Paulo Lemann

From: Sam Steyer
Organization(s): Greenwork

Comment No: 69677
Date: 9/11/2022

Comment Text:

To whom it may concern,

My name is Sam Steyer, and I'm writing on behalf of myself and Greenwork, where I'm co-founder and CEO. Greenwork is a software company that helps clean energy companies build their installation and construction capacity. We offer our customers tools to hire skilled tradespeople, build a network of local contractors, and ensure compliance with labor regulations. I'm writing in support of Kalshi's political control contracts, which would greatly help mitigate risk and provide accurate information for businesses like ours that engage in politically sensitive sectors.

Energy as a sector has always been deeply tied with policy and regulation. From the earliest days, electric utilities have operated under a government-granted monopoly and been subject to a regulated rate of return model. The US government has been deeply involved in ensuring access to oil at reasonable prices through the Strategic Petroleum Reserve and negotiation with foreign parties like OPEC. Most recently, we have been thrilled to watch the passage of the landmark Inflation Reduction Act, which invests $369B in clean energy and climate work over 10 years and we view as foundational to bringing about a zero-carbon energy transition.

Greenwork has already experienced the importance of government policy very directly. Much of this experience has been very positive! We are members of the Department of Energy's Better Buildings Workforce Accelerator and have applied to both California and Federal Grants. Policies like the Investment Tax Credit and California's Net Metering rules are fundamental to the success of many of our customers in the solar industry.

One early potential Greenwork cofounder did not join the company, in part, out of concern that if an administration that was skeptical of clean energy was elected in 2020, it would undermine our customers and our business. To be clear: election risk was a major concern for a co-founder who would have greatly helped our business and will remain a clear and tangible risk that our business faces going forward. This is a great example of exactly the use case of Kalshi's contract, and the fears that market participants have. Not (just) that a particular policy will be enacted, but rather, that a government hostile to our interests could be elected, who could implement myriad such policies through regulation, subsidy, judicial nominations, taxation, departmental appointments, and more. Such an election would deter not just cofounders, but investors and partners as well. The election risk is the thing we wish to hedge uniquely.

In addition, decisions like those would be made with more confidence and certainty if Kalshi's contracts were permitted for approval. A market on election outcomes would be a better prediction tool than current polling and modeling by aggregating all information and having people put their personal wealth on the line. We'd gladly use this information in order to inform company decisions, as would others in the industry.

The 2022 midterms are no different. The Inflation Reduction Act of 2022 is the most important climate and clean energy legislation ever passed in the United States. The way that it is implemented over the coming months and years will have a very meaningful effect on our business. For example, if the prevailing wage and apprenticeship requirements in the bill are robustly supported, as we expect they will be under a pro-labor government, that will create demand for HR services like ours that help companies invest in worker training and well-being, paying more to provide a better worker experience and creating a market for Greenwork.

I believe that small businesses, such as ours, should have tools to hedge against political outcomes impacts on their businesses, in the same way that large companies, in practice, already do. To that end, I encourage the Commission to approve Kalshi's contracts before the October 28th stated deadline if at all possible.

Comment No. 72509 Christopher Greenwood, N/A 2023 Contract

From: Zvi Mowshowitz
Organization(s):

Comment No: 69673
Date: 9/9/2022

Comment Text:

Dear CFTC,

I am writing in support of Kalshi's submission to the CFTC regarding prediction markets on elections. I have previously been a quantitative trader with Jane Street Capital, and I have been a long-time supporter of and participant in prediction markets. I am currently writing at Don't Worry About the Vase where a major topic is forecasting events, in particular Covid-19. I am one of the world's leading experts in prediction market construction and design, and have consulted for multiple prediction market companies.

I believe that well-functioning markets on elections are crucial, and that they should be granted legal status.

Prediction markets are our best tool for understanding many aspects of our world. Unlike many financial markets, the market will resolve to a definite value within a limited time frame, so they reward being right about what will happen rather than trying to anticipate market trends. Losses are bounded, so you can stay solvent longer than the market can stay crazy. This rapid feedback and the potential to fully realize one's edge attracts smart money to correct mistakes.

This is how we live in a world where we can use prediction markets to get access to excellent probabilistic knowledge of which scientific papers will replicate, or the outcomes of sporting events, or the outcome of an election. All we need is a prediction market with broad participation.

In many prior elections, prediction markets were by far the best tool for knowing the current state of the race and the likelihood of different outcomes. This was for example greatly helpful to stock market investors in 2016, to separate out the impact of changes in the presidential race from other drivers of stock prices.

Not only do I reject the CFTC's suggestion that these markets might compromise election integrity, I would claim the exact opposite. Having prediction markets preserves election integrity. When prediction markets are greatly surprised by an outcome, or are predicting an outcome in a way that does not reflect what a free and fair outcome would look like, that is an alert that integrity is under threat.

In 2020, on election night, prediction markets acted as an important check against attempts to prematurely declare victory. As things progressed, they sent a strong signal that changes were not the result of fraudulent changes but rather predictable from the distribution of ballots and how and when they were counted. They also served, after the outcome was decided, as a canary in the coal mine that there would be continued challenges to the integrity of the election, giving us a warning that something like January 6 was possible.

They continue, today, to alert us to threats to election integrity.
If someone wants to profit from manipulating an election, there already exist many ways to get indirect exposure to elections synthetically via other markets that would exceed the exposure plausibly available directly in election markets at any reasonable price.

Attempting to manipulate election markets to distort public perception would end in failure. Citadel LLC and others have expressed a clear willingness to take large positions if someone moves the market to an unnatural price. It would be exponentially expensive, likely costing billions, to cause a persistent and large jump in a regulated and legal prediction market on a major American election.

Also, to the extent this is a worry, Kalshi's proposal makes this a smaller worry because prediction markets already exist overseas, and Kalshi's market would be even more robust to this attack.

Prediction market information also protects the public from media bias and media attempts to distort the state of the race. The best media coverage of recent elections has fully integrated existing prediction market information, and is far better for it. Other news coverage ignored such predictions, both before and on election night, and ended up spreading misinformation.

Election markets not only do not harm the integrity of the political process, they are vital to the integrity of the political process. They should be embraced by US regulators.

To whom it may concern:

I am a lawyer, a policy analyst, and founder of the think tank People's Policy Project. Over the last five years, my organization has produced research and policy proposals on topics including the welfare state, climate change, housing, and social ownership of wealth. Before starting the People's Policy Project, I worked at the think tank Demos. My work has been cited or featured in almost every major media publication, including the *New York Times*, the *Washington Post*, and *The Wall Street Journal*.

I am writing this letter in support of allowing KalshiEx to offer binary contracts on which political party will be in control of the U.S. Congress and in support of allowing tightly-regulated entities to offer binary contracts on election outcomes generally (Filing 22-002).

I believe that these contracts serve two important purposes:

1. For the public, the trading of these contracts produces useful real-time information about the important question of who is likely to govern the country in the near future. This information is widely sought out already, which is why many major publications, including *The New York Times* and *FiveThirtyEight*, publish election forecasts based on polling data, and why hundreds of articles are produced each election cycle prognosticating about the election outcome. The implied probabilities produced by actual traders risking their own money gives a separate insight into the question that polling aggregation and punditry does not.

2. For individuals, these contracts allow hedging against certain policy outcomes that could be important to their personal finances. While it's true that the ultimate policy outcome of a given election outcome is not entirely certain, candidate promises and the general policy tendencies of the parties provide some guidance about the direction policy will shift based on who wins. More narrowly, there are hundreds of thousands of individuals who work in and around politics whose life circumstances are altered quite radically by political outcomes.

It's almost certainly true that most of the individuals who would participate in these futures markets are not hedging against any personal risk and just hoping to make money by picking the right side of a binary election outcome contract. These kinds of participants are not sympathetic and enabling this kind of behavior should not be the aim of public policy. But these participants are also necessary to produce the valuable informational and hedging functions of these contracts. So these considerations need to be balanced against one another and, in my view, the balance of considerations favors allowing the contracts.

Lastly, it is worth remembering that there are foreign betting markets, like Betfair in the UK, where gamblers, including Americans, already place wagers on the outcomes of US elections. Bringing election contracts onshore and regulating them domestically would reduce the risks involved in this market relative to the status quo.

Sincerely,

Matt Bruenig

NABIS

United States Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, NW
Washington, DC 20581

Dear regulators at the CFTC,

I am writing as the founder and co-CEO of from Nabis, a wholesale technology platform supporting legal cannabis sales in California. As one can reasonably surmise from the nature of our business, political outcomes have a substantial impact on our bottom line. Different governments may have different policy preferences regarding the legality of our product. Legislation impacts our ability to safely access banking and the rest of the financial system. National policy impacts our ability to market, attract talent, and reach needed reforms. Few businesses in the nation are more directly downstream of who wins Congress.

To be perfectly blunt, policy risk is no different to us than a tree falling on the roof of our headquarters. We'll lose tens of thousands of dollars if a tree falls on us, cannabis-averse leaders gained control of either the House or the Senate and the odds of major policy progress collapse. Both are equal risks, but only one we can potentially purchase a hedging product for. While much larger companies may be able to go to a major investment bank and get an election hedge constructed for them out as an over-the-counter derivative, the overwhelming majority of businesses in America cannot. A simple, intuitive election hedge could thus help reduce the policy risk we have in our business, allowing us to focus on delivering the best product we can.

Thank you!

Jun S. Lee,
Founder and Co-CEO,
Nabis

From: Flip Pidot

Organization(s):
Sharp Square Capital
American Civics Exchange
Comment No: 69645
Date: 9/2/2022
Comment Text:
In my capacity as manager of a CPO/CTA fund organized to provide liquidity to and transact on KalshiEx, and in light of my experience curating and writing rules for the markets on PredictIt from 2014-2019, I write in support of Kalshi's proposed Congressional Control Contracts.

These contracts should be approved without hesitation, as they clearly conform to CEA provisions and CFTC regulations and core principles. The economic purpose to be served by such contracts is overwhelming and the objections commonly presented are unfounded.

The CFTC's rejection a decade ago of similar products proposed by Nadex involved a fairly egregious misinterpretation of Dodd-Frank's event contract proscriptions, an error that not only disqualifies it as precedent in this review, but deserves explicit correction as part of the Commission's approval.

The Commission poses the following 17 questions in its request for public comment (paraphrased for brevity):

1. Do the contracts involve gaming as described in Regulation 40.11 or section 5c(c)(5)(C) of the CEA?

These sections don't define gaming, of course, but simply prohibit event contracts that involve gaming, leaving the reader (or regulator) to figure out how to define it. In its 2012 order prohibiting Nadex's election contracts, the CFTC relied on the definition of "bet or wager" in USC § 5362, which includes staking value on the outcome of "a contest of others" (and the CFTC then judged that an electoral "contest" qualifies as such).

This aggressive interpretation of the phrase "a contest of others" plainly does not reflect the Commission's own criteria for application of Reg 40.11. If a political campaign, in which multiple candidates vie for the "prize" of election to public office, qualifies under this definition, surely contests such as the

Oscars, Emmys and Grammys (in which candidates vie for literal prizes) likewise qualify. Yet Kalshi has previously self-certified and listed numerous contracts tied to these contests without objection by the CFTC.

Furthermore, PredictIt (the market operating under no-action relief since 2014), while neither a DCM nor an SEF, has nonetheless been bound by the product proscriptions in Reg 40.11, being unable to list contracts tied to most military activities, outcomes closely associated with mortality of public officials, etc. Yet PredictIt has successfully and without issue listed many thousands of contracts tied to electoral outcomes. Notwithstanding the Commission's recent decision to revoke PredictIt's no-action letter for alleged non-compliance, its routine listing of electoral "contests" clearly did not run afoul of Reg 40.11's topical prohibitions.

2. Should the Commission consider whether election contracts are available in casinos or defined as gaming under state or federal law?

Federal law grants the CFTC exclusive and preemptive jurisdiction over futures transactions. The Commission should resist any temptation to cede its jurisdiction to state law or regulations.

As the Commission summarized in a brief to SDNY years ago:

CEA Section 2(a)(1)(A) grants the CFTC "exclusive jurisdiction" to regulate "transactions involving," inter alia, "contracts of sale of a commodity for future delivery." 7 U.S.C. § 2(a)(1)(A). This provision "preempts the application of state law." Leist v. Simplot, 638 F.2d 283, 322 (2d Cir. 1980) (Friendly, J.); see also Stuber v. Hill, 170 F. Supp. 2d 1146, 1150-51 (D. Kan. 2001). That plain meaning is confirmed by the statute's legislative history, which says that "regulations issued by the Commission . . . preempt the field insofar as futures regulation is concerned," and, if state law conflicts with the Commission's regulations, "Federal law w[ill] govern."

https://www.cftc.gov/sites/default/files/idc/groups/public/@newsroom/documents/file/cftcbriefiso102612.pdf

The issue of federal legislative definition of gaming is discussed in Question 1.

3. Do these contracts involve "an activity that is unlawful under any State or Federal law" as described in Reg 40.11 and section 5c(c)(5)(C) of the CEA?

They do not. Elections are not unlawful activities.

The lawfulness test plainly refers to the underlying activity/events (not the lawfulness of listing contracts tied to their outcomes), appearing as it does as the first in a list of proscribed event topics that includes assassination, terrorism, war, etc.

4. In determining whether these contracts involve unlawful activity, should the Commission be influenced by whether state laws permit betting on the outcome of elections or by federal prohibition of interstate betting?

No, because, as discussed in Question 3, this is simply irrelevant. The lawfulness test applies to the underlying activity (elections), not the listing of contracts tied to such activity.

5. Are the contracts substantively different from the contracts Nadex proposed in 2012 such that the Commission's analysis should be different?

They are not substantively different. The Commission's analysis should be different not because the contracts are different, but because the Commission's 2012 analysis was incorrect.

Since elections are neither unlawful activity, assassinations, acts of war, nor terrorism, Reg 40.11 offers the Commission only two even superficially plausible bases on which to prohibit election contracts: 1) that they constitute gaming (addressed above) or 2) that they fit into the final catch-all category of "other similar activity determined by the Commission, by rule or regulation, to be contrary to the public interest."

This catch-all, importantly, must not be misinterpreted as "anything else determined by the Commission to be contrary to the public interest." Congress enumerated several specific categories of undesirable activities, presumably because it feared the consequence of the potentially perverse incentives for market participants to bring about (or at least profit from) such outcomes.

Some of these activities, however, have notoriously slippery legal definitions. The United States hasn't declared war in 80 years, but it's safe to assume Congress meant to include plenty of military activities that fall outside such a narrow scope. Hence the catch-all.

Also note that the phrase “contrary to the public interest” here directly applies to the underlying activity, not to the listing of the contracts.

Just as they are not unlawful, elections are not contrary to the public interest.

6. Are the economic consequences of congressional control predictable enough to serve a hedging function? Provide tangible examples of commercial activity that can be hedged directly by the contracts.

According to FEC data compiled at OpenSecrets.org, the top 50 interest groups had by June of this year given nearly a billion dollars to Congressional candidates for this midterm cycle alone. Not only does every major business sector have a demonstrable financial interest in (and hedgeable exposure to) the Congressional balance of power, but that exposure is nicely asymmetric, making electoral outcomes especially well-suited to the risk reallocation function of futures markets.

Oil and gas, agriculture and automotive companies, for example, steer more than two thirds of their donations toward Republican candidates. Unions, law firms, tech and media companies on the other hand donate overwhelmingly to Democratic candidates.

7. Are there unique economic risks tied to the outcome of congressional control that cannot be hedged via derivative products on equities, debt, interest rates, etc.?

The economic consequences of various election outcomes do often affect the pricing of traditional financial instruments and their derivative products, but attempting to use such products to offset an electoral exposure carries enormous basis risk. The whole point of regulated event contracts is to enable market participants to offset their own unique economic exposure to discrete underlying outcomes, rather than attempt to construct sloppy proxy hedges from products whose price movements are affected by countless additional factors.

8. Is it sufficient that a contract could theoretically be used for hedging or, should an exchange provide evidence of demonstrated need by likely hedgers in the market? How often must a contract be used for hedging or what percentage of market participants or open interest must represent hedging

use?

For any emerging product category, it's vital not to impose an unduly burdensome threshold that will prevent its maturation. Most prospective natural hedgers will either be unaware of the products' existence or be reticent to manage any significant degree of financial risk using such products, at least until they're able to observe a certain level of liquidity and price stability, a track record of stable exchange operation, and a lack of settlement surprises arising from insufficiently robust rules writing.

It should be sufficient that the contracts address significant, two-sided quantifiable economic exposure among natural hedgers, even if the related hedging demand in some cases may presently be largely theoretical. Surely the majority of contracts currently trading without controversy or special review on Kalshi would fail any meaningful hedging percentage test, but that doesn't and shouldn't disqualify those non-electoral event contracts from being listed.

9. Should the Commission consider contract and position sizes and the intended customer base to assess hedging use? Do small dollar contracts targeted at retail customers have hedging utility against macro level national political events? Does whether contracts are margined or fully collateralized affect this analysis?

The $25,000 position limit is an artificial constraint that, while surely well-intended, unduly constrains maturation, liquidity and adoption of these contracts by natural hedgers, particularly institutional market participants.

However, targeting retail customers does not constitute a hedging mismatch. Retail customers include small business owners, homeowners, tax payers, energy consumers, medical patients, and investors in traditional financial markets, all capacities in which they experience meaningful economic exposure to federal electoral outcomes and other macro political events.

10. Should the Commission consider contract design and payout? Are binary contracts useful for hedging nonbinary economic events?

Binary contracts can be sub-optimal for inherently non-binary events, but the contracts at issue in this review involve distinctly binary outcomes (i.e. which of the two major parties will control each chamber of Congress).

As for non-binary economic events already traded on Kalshi, like target interest rates, GDP growth, forex rates, or the closing value of an equity index, the mismatch between the binary product structure and the scalar nature of the underlying is addressed to some extent by the listing of several binary brackets representing various numerical ranges. When those ranges are mutually exclusive, the application of margin linking contributes to better liquidity and aggregate pricing coherence across the several brackets.

11. Do the contracts serve a price-basing function? For example, could they form the basis of pricing a commercial transaction in a physical commodity, financial asset, or service?

Better visibility into the probability of a party's control of a legislative chamber serves a significant and plainly evident price-basing function. Prevailing tax rates, closure of tax loopholes, federal spending levels and priorities, sector-specific subsidies, energy policy, and health care policy are among the more glaring examples of Congressional agenda items that can be reliably expected to differ drastically depending on which party holds the gavels. Decisions as major as a multi-billion dollar M&A and project finance transactions and as minor as whether to purchase an electric vehicle or install solar panels on a home all incorporate a series of assumptions about future federal policy, the prospects of which are closely tied to the identity of the majority party..

Awareness of shifting odds of a particular favorable or adverse treatment that is anticipated to correlate strongly with the party in power will naturally enable more reliable pricing across a wide range of transactions.

12. Are the proposed contracts contrary to the public interest?

On the contrary. Just as every other category of regulated commodity futures enables the efficient reallocation of risk, so too do event contracts, so long as a wide array of prospective market participants are asymmetrically economically exposed to the underlying events.

Electoral outcomes clearly meet this test.

13. Could the trading of these or other political control or election-based contracts affect the integrity or the perception of integrity of elections?

A common argument against bringing electoral contracts on-exchange holds that the existence of such markets is somehow corrosive to election integrity, but this amounts to little more than a knee-jerk reaction to any novel intersection between money and politics.

Ironically, the wholly uncontroversial (to the point of being clichéd) idea that money is a corrosive force in politics is one of the strongest arguments in favor of listing electoral outcomes on regulated exchanges. So universal and overwhelming is the exposure of virtually every commercial concern (including small business and households) to electoral outcomes that countless commercial entities shovel as much money as legally permissible (at times, perhaps more) at the candidates and parties they feel pose less threat of enacting adverse policy changes.

What better way to reduce that pernicious imperative than to offer a more sanitized, transparent, duly regulated mechanism through which market participants can offset such unwanted exposure, with no attending influence over candidates and elected officials?

14. Could the contracts facilitate violations of campaign finance laws? For example, could the contracts make it easier to sidestep prohibitions governing coordination between candidate campaign committees and PACs?

Such coordination prohibitions are already trivially easy to sidestep and need no assistance from the futures markets. It's not clear that the existence of such markets offers any novel or more clandestine means by which to coordinate.

15. Do the contracts present special considerations with respect to susceptibility to manipulation or surveillance? Could candidate campaign committees or PACs manipulate the contracts by trading on internal, non-public polling data?

Yes. These contracts should, by exchange rule, forbid trading by certain enumerated parties, to include, at a minimum, federal policymakers (legislators, regulators and judges) and their staffs, candidates and their staffs, and registered campaign committees and PACs.

16. Should campaign committees, PACs, candidates, entities subjected to FEC oversight, and those likely to hold non-public information be prohibited

from participating?

Yes.

17. What other factors should the Commission consider in determining whether these contracts are “contrary to the public interest?”

None.

Under Reg 40.11, the Commission is empowered to make such a determination only when the proposed event contracts reference “1) unlawful activity, 2) terrorism, 3) assassination, 4) war, 5) gaming, or 6) other similar activity determined [...] to be contrary to the public interest.”

Congress expressly limited the public interest catch-all to apply only to activities “similar” to crime, terrorism and warfare.

Even in 2022, elections don’t qualify.

ROCK
Family of Companies

Secretary of the Commission
Office of the Secretariat
U.S. Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, N.W.
Washington, D.C. 20581

Re: KalshiEX LLC

Dear Members of the Commission:

I write on behalf of the Rock Family of Companies, the largest private employer in the City of Detroit and the largest investor in the city's revitalization. Since moving to Downtown Detroit some 12 years ago, the Rock Family of Companies has grown our presence in the city to nearly 15,000 team members and has committed more than $5.6 billion to rebuilding and revitalizing the city.

As you know, the State of Michigan was one of the epicenters of unfounded challenges to the results of the 2020 election. In particular, the City of Detroit was singled out for unfounded allegations regarding the processing and counting of ballots. These allegations had unmistakable racial undertones and strove to cast Detroit in a light diametrically at odds with our efforts, and the efforts of so many, to build a more positive future for the city.

We are aware of a pending application by KalshiEx LLC for regulatory approval of a trading market regarding the outcome of elections for the United States Congress. In general, it is our view that such a platform offers another antidote to unfounded claims about election outcomes. The ability to say that the "market has spoken" in recognizing official election results offers yet another affirmation and bulwark against persistent efforts to challenge, or undermine, the results of our democratic elections.

We appreciate the Commission's consideration of the pending request, as well as this comment in favor of its approval.

Sincerely yours,

Jared Fleisher
Vice President for Government Affairs
Rock Family of Companies

To the Commissioners of the Commodity Futures Trading Commision,

We are a group of progressive legislators, policymakers, activists, journalists, pollsters and grassroots organizers. We are writing this letter in staunch opposition to the Commission's rumored action prohibiting election prediction markets. A prohibition is not customer protection and it is not market integrity preservation. The evidence is clear: **the potential decision to prohibit election markets actively undermines election integrity and shakes our confidence in the ability of the CFTC to effectively protect consumers in emerging markets.** Instead the Commission would be unfairly stifling valuable innovation**.**

Prohibiting prediction markets threatens election integrity.
In short, prohibiting these markets doesn't protect election integrity; it actively undermines it by furthering polarization, worsening the public's understanding of our democratic process and promoting unsafe, black market exchanges. To ban these markets is highly contrary to the public interest.

The Commission must look and evaluate the hard evidence. Real-world data repeatedly emphasizes the superior forecasting accuracy of prediction markets to polls and pundits. Because traders have financial skin in the game, their principal incentive is to predict accurately, instead of merely supporting a partisan line. In 2020, small-scale prediction markets were one of the few remaining places where people from different political walks of life interacted with each other regarding politics, and it helped to moderate right-wing extremist beliefs about the inevitability of Trump's re-election. Going forward, as the threat of right-wing radicalism only grows, it's more important than ever to have these mechanisms that combat extremism in place. Beyond participants, these markets benefit the public as well: these accurate forecasts help regular citizens understand elections far better than relying on the right-wing media ecosystem or a social media echo chamber. Banning these markets, moreover, will only push this activity onto offshore, unregulated platforms without customer protection and surveillance. Protecting customers and our elections means these markets need to be on regulated exchanges, not relegated to the shadows where the CFTC can pretend their hands are clean so it isn't their problem.

Accusations of heightened manipulation risk are unfounded.
There are mountains of data from other countries and in smaller-scale markets such as PredictIt that these prices are resilient to manipulation. Many features of the market–low position limits, bounded prices, the ultimate resolution of the contract to a 0 or 1–make these markets more resistant to market irrationalities or manipulation than metals futures, energy commodity futures, or even many equities. Protecting markets and election integrity means looking at evidence and the data, not idle speculation.

The risk of insider trading is minimal, especially in relative terms.
Unlike in energy commodities where a single EIA report could swing the outcome, there is little genuinely decisive and actionable material nonpublic information for the aggregated results of over 450 elections. Standard market procedures, including KYC, exchange rules, CFTC regulations, trader prohibitions and market surveillance, are more than sufficient to mitigate this risk.

The CFTC should not privilege speculative insider trading concerns over real-world data showing these markets can be offered safely. These concerns are no basis to block a market. How will the CFTC handle other markets' insider trading threat–will they prohibit all trading there as well? CFTC and exchange rules and protections exist for a reason: they work.

The CFTC has an opportunity.
The CFTC has an opportunity to allow these markets to foster with the appropriate safeguards. The CFTC must approve election markets.

Signatories:

Rep. Ritchie Torres (D-NY 15)
Sean McElwee (Founder, Data for Progress)
Drey Samuelson (Co-founder TakeItBack.org)
Dylan Matthews (Vox)
Joel Wertheimer (Civil rights lawyer)
Ethan Winter (progressive pollster)

About the Signatories

Ritchie Torres is the U.S. Representative for New York's 15th District, which is primarily located in the South Bronx. Torres is a lifelong progressive, and a member of the Congressional Progressive Caucus. He is also a co-chair of the Congressional LGBTQ+ Equality Caucus, and a member of the Congressional Black Caucus and the Congressional Hispanic Caucus. He is a supporter of protecting elections and voting rights, and was a supporter of the For the People Act.

Sean McElwee is the founder of Data for Progress, the leading progressive polling and political consultancy organization. Data for Progress is the industry leader in issue polling and specializes in helping progressives use data to optimize their advocacy efforts and political strategy. Sean's writing has been featured in the New York Times, the Washington Post and The Atlantic. Sean is an expert in election integrity, and is the founder of AVR NOW, an advocacy group dedicated to passing automatic voter registration in the state of New York. He recently testified in front of the New York State assembly on issues of election security and integrity.

Drey Samuelson is a former Chief of Staff for Senator Tim Johnson (D-SD), working for him from 1997 to 2015. He is the co-founder of TakeItBack.org, an organization dedicated to helping build grassroots organizations to support progressive candidates and causes, including promoting Medicaid expansion and voter turnout.

Dylan Matthews is a senior correspondent and lead writer at Vox and a founder of Vox's Future Perfect, a series focusing on "finding the best ways to do good". His writing focuses on economic policy, poverty reduction and global health. He previously wrote for the Washington Post.

Joel Wertheimer is a civil rights lawyer, political consultant and an advisor to New York State Senator Alessandra Biaggi. He also served as Assistant Staff Secretary to President Barack Obama and Staff Secretary to Governor Andrew Cuomo. His civil rights work focuses on many causes, including wrongful convictions and police misconduct.

Ethan Winter is a leading progressive pollster, having advised Super PACs, pro-choice ballot initiatives and democracy partners.

We are professors and academic researchers from a variety of disciplines–from economics to political science to law. We are writing in support of legalizing the use of prediction markets for electoral outcomes, not just for Kalshi but for all other Designated Contract Markets (DCM) under the supervision of the Commodity Futures Trading Commission (CFTC). We believe these markets are squarely in the public interest, and reject claims that they constitute gambling or may threaten the integrity of our democratic process.

- Election prediction markets are a powerful resource for researchers. Researchers have been using the data generated by existing markets such as the Iowa Election Market (IEM) and PredictIt for over fifteen years (see, for example, "Party Influence in Congress and the Economy," from Erik Snowberg, Justin Wolfers and Eric Zitzewitz). Much of this research falls into two camps: first, some researchers use prediction market probabilities to estimate the effect of the election on various economic variables. Second, other researchers use prediction market probabilities to learn what events actually influence campaigns. A legalized market with greater liquidity and participation numbers should allow these efforts to expand even further. As such, these contracts serve the public interest.

- The CFTC solicited public comment on the price-basing utility of election contracts. In our experience observing the market, financial market participants routinely use the probability of various parties' controlling Congress (and the Presidency) to accurately price various assets. An accurate valuation of many investments, assets, physical commodities, and the value of services requires an accurate assessment of the future trajectory of the political environment. The political environment has significant and predictable impacts on business, and it is a significant factor that affects valuations. A fully-approved market without the limitations on existing unregulated markets will provide even better data that not only can be used for pricing financial assets, physical commodities, and services, but no doubt will.

- Furthermore, election contracts have bona fide hedging utility. Companies already hedge electoral risk demonstrating that this demand is real and large. However, these hedges are often indirect, since there are no election-based event contracts, and their pricing is not as accurate as an event contract on the elections would be.

- Kalshi's new submission's larger position limits and order sizes make the contract more suitable for hedging, especially by institutions. These features will reduce the number of casual speculators using the contract and increase the number of market participants who will use the contract to mitigate risk. The CFTC should encourage these types of measures as they are indicative of responsible innovation.

- The CFTC also asked for comments on whether exchanges should have to prove an existing market demand for hedging before listing a new product. As made clear above, there is a demonstrated market for hedging this product. However, the CFTC should refrain from adopting any of the tests implied in these questions as they are overbroad and will have a negative impact on innovation: the line of questioning is the kind that is indicative of the type of government overreach that generally stifles innovation. If the CFTC would force an exchange to prove that there is an existing demand for hedging, the CFTC risks preventing innovation, and significantly stunting the growth and development of event contract markets and other futures and derivative markets. Additionally, the CFTC should not substitute its judgment for market participants' own assessment of their risks and how best to manage their risk.

- A common theme of the CFTC questions is in regard to whether election prediction markets constitute gaming. They do not. An election prediction market is no more gaming than traditional financial markets, including commodity, futures, and derivatives markets, due to the vast economic utility of the contracts. While it is true that a portion of market participants may speculate, this is fully consistent with normal market functioning. Many participants in energy or agricultural markets are speculators, yet their presence does not refute the economic utility of those contracts. If anything, these speculators serve an important role by providing liquidity and rapid price-discovery. Considering the vast hedging and price-basing value of these contracts, it would be a mistake to consider these “gaming”.

- In addition, these markets are resilient against manipulation. In academic studies of manipulation on existing prediction markets, price ‘pump’ attempts were short-lived and The combination of greater liquidity and number of participants makes such a phenomenon substantially less likely on a well-regulated market.[12] In addition, the relatively low position limit means any one participant, even maxing out their total position, is highly unlikely to be able to move the market in a meaningful way for any meaningful period of time as sophisticated traders enter on the other side of the market to profit off of the mispricing.

- Manipulation of the election itself seems even less likely. The argument would be that if someone now has a financial stake in the outcome of over 400 elections, they may either change their own vote or attempt to change the vote of others. This argument ignores the fact that people *already* have a *significant* amount at stake in elections. Additionally,

[1] For a historical analysis, see: Paul Rhode & Koleman Strumpf, 2006. "Manipulating political stock markets: A field experiment and a century of observational data," Natural Field Experiments 00325, The Field Experiments Website.

[2] For the theoretical argument, see: Robin Hanson, “A Manipulator Can Aid Prediction Market Accuracy”, 2007. http://mason.gmu.edu/~rhanson/biashelp.pdf

these fears are unfounded speculation, and ignore the empirical fact that direct election trading exists in many other countries, such as the U.K., without such documented ill effects. Moreover, the contract has been designed to prevent that from happening by imposing Know-Your-Customer authorization, CFTC oversight, and a modest position limit. Changing the outcome of any election by even an infinitesimal amount, let alone altering a national election or the totality of all the Congressional elections, would be far more costly than the proposed position limits. Kalshi's new submission also enumerated many actors prohibited from trading on the contract.

- If these markets have any impact on the electoral process at all, it would be a positive impact. Polling error has increased in recent years, polarization is at an all time high, fake news is rampant: a market-based mechanism for forecasting the outcome of the midterms would be a vastly superior alternative to polling and punditry, and would thus foster a healthier and more reasonable debate around the electoral process. Combating fake news and providing a better mechanism for truth makes the proposed contracts very much so in the public interest.

Ultimately, these are economically valuable markets (not gaming markets) that promote the public interest through superior forecasting. The Commission should embrace this valuable activity by bringing it under its regulatory umbrella.

Signed,

Justin Wolfers
Professor of Public Policy and Economics, University of Michigan
Senior Fellow, Brookings Institution
Senior Fellow, Peterson Institute

Michael Abramowicz
Jeffrey and Martha Kohn Senior Associate Dean for Academic Affairs
Oppenheim Professor of Law, The George Washington University

Joseph Grundfest
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Alex Tabarrok
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Research Fellow, Mercatus Center
Co-Author, *Marginal Revolution*

Michael Gibbs
Clinical Professor of Economics, The University of Chicago
Research Fellow, Center for the Study of Labor
Co-Author, *Personnel Economics in Practice*

July 23, 2023

SUBMITTED VIA CFTC PORTAL
Secretary of the Commission
Office of the Secretariat
U.S. Commodity Futures Trading Commission
Three Lafayette Centre 1155 21st Street, N.W.
Washington, D.C. 20581

Re: Comments Responding to the Commission's Specific Questions Related to KalshiEX, LLC's Proposed Congressional Control Contracts

To Whom It May Concern:

KalshiEX, LLC ("Kalshi" or "Exchange") is grateful to the Commission for its consideration of Kalshi's proposed contracts. As with Kalshi's previous submission, the Exchange welcomes the opportunity to address the Commission's questions in full. Public comment is a critical tool for the Commission to engage with market participants and gauge the public's stance on issues regarding contract utility, surveillance, and viability.

The Commission is unique among financial regulators for its commitments to, and success fostering, innovative new products. As Chairman Behnam testified recently in front of the Senate Agriculture Committee,

> On September 21, 1922, nearly 100 years ago to the day, the Grain Futures Act of 1922 was signed into law, which led to the near immediate establishment of the then CFTC. With that legislative accomplishment, this Committee and the Congress swiftly responded to a policy need that arose on the heels of emerging risks to American consumers because of new financial markets and products, technological innovation, and the promise of economic development. With the CFTC's rich history overseeing commodity markets, coupled with its expertise and track record, which rests on a firm foundation as a forceful and disciplined cop on the beat, the Agency stands ready to tackle these new risks and opportunities one century later.[1]

Or as former Chairman Giancarlo wrote to the same body,

> …the CFTC has been at the forefront of US financial market innovation since the agency's inception. In fact, the CFTC was reformulated over forty years ago into an

[1] Testimony of Chairman Rostin Behnam Regarding the Legislative Hearing to Review S.4760, the Digital Commodities Consumer Protection Act at the U.S. Senate Committee on Agriculture, Nutrition, and Forestry. September 15, 2022. Available at https://www.cftc.gov/PressRoom/SpeechesTestimony/opabehnam26.

> independent body specifically to safeguard a breakthrough in financial innovation – financial futures – that enabled the global economy to hedge the risk of moving interest and exchange rates ensuring the US Dollar's primacy as the world's reserve currency. During the past decades, the CFTC has deftly overseen more new financial product innovation than almost any other market regulator. [2]

Projects like LabCFTC–now the Office of Technology Innovation–, and the continued efforts by the Commission to regulate digital asset markets, remind us of the agency's commitment to responsible innovation. Responsible innovation is in the public interest and provides market participants with hedging and price basing opportunities they would not otherwise have.

Kalshi's contract is yet another iteration of this endeavor. The contract is compliant with the law, Core Principles, rules, and regulations. It has broad hedging and price-basing utility and social value, as detailed by Kalshi's submission to the Commission and dozens of public comments from retail customers, small businesses, and leading members of industry. The Commission's decision should consider the full weight of evidence that it has been provided with, beginning with Kalshi's original submission regarding political control contracts to DMO on March 28, 2022, until today. That evidence comes from academic research, market testimony, and other election markets running in the United States and abroad. After considering all of this evidence, there is only one reasonable determination the Commission can make: that these contracts comply with the Commodity Exchange Act ("CEA") and are affirmatively advance, as the CEA's mission reminds us, the "national public interest by providing a means for managing and assuming price risks, discovering prices, or disseminating pricing information through trading in liquid, fair and financially secure trading facilities."

In these responses, the Exchange references and integrates comments from the prior submission, as well as the current one, which Kalshi strongly believes are material to this matter.

1. **Do these contracts involve, relate to, or reference gaming as described in Commission regulation 40.11(a)(1) and section 5c(c)(5)(C) of the Commodity Exchange Act, or in the alternative, involve, relate to, or reference an activity that is similar to gaming as described in Commission regulation 40.11(a)(2) and section 5c(c)(5)(C) of the Commodity Exchange Act?**

The application of the Special Rule in section 5c(c)(5)(C) of the Commodity Exchange Act ("Special Rule") is addressed at length in its original submission, including letters provided by our counsel Elie Mishory, along with former CFTC General Counsel Jonathan Marcus and

[2] Giancarlo, J. Christopher. "J. Christopher Giancarlo Letter in Support of the Digital Commodities Consumer Protection Act." September 15, 2022. Available at https://tabbforum.com/opinions/j-christopher-giancarlo-letter-in-support-of-the-digital-commodities-consumer-protection-act/.

former CFTC General Counsel Dan Davis.[3] Additional commenters on this point include former Nadex CEO Timothy McDermott, as well as other public comments by former CFTC officials and industry actors such former Commissioner Brian Quintenz, former Commissioner Mark Wetjen, "father of futures" Dr. Richard Sandor, Gregory Kuserk, who led the Product Review branch in DMO, former MPD Director Josh Sterling, Daniel Gorfine, Lewis Cohen, Jeremy Weinstein, Susquehanna International Group, Tabet DiVito & Rothstein, and Railbird Technologies.[4] Many other comments also detail the qualitative differences between the contracts proposed by Kalshi and gaming, by virtue of the contract's economic purpose. The Exchange makes the following points as well.

1: Elections and political control are not games.

Unlike games, in which the underlying activity has no inherent economic value apart from the money wagered on it, political control has an obvious and large economic impact, as it heavily influences expectations and the likelihood of public policy change. As Gregory Kuserk noted, unlike games, "Elections are events that are very important to the public, and there is a very strong public interest in having accurate data regarding elections."[5] Kalshi detailed as much in dozens of pages of evidence provided to the Commission, drawing on private and university research, policymaker and industry testimony, and the financial press.[6] Many public comments by retail, industry, and academia have confirmed as much.[7]

Kalshi's contracts do not involve gaming. It involves the partisan affiliation of the Speaker of the U.S. House of Representatives and the U.S. Senate's President *pro tempore*, which are not determined through or relate to games of chance, or games of skill.[8] Elections are not games, full stop. Indeed, the *Nadex Order* did not identify political elections themselves–the core of American democracy–as being a game.[9]

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[3] Public comment by Elie Mishory. Available at https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=70781.
[4] Public comments 70786, 70771, 69687, 70754, 69737, 70755, 69736, 69723, 70743, 70765, 70752.
[5] Public comment by Gregory Kuserk. Available at https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=70754.
[6] Memorandum in Support of Kalshi's Political Control Contracts, submitted to Division of Market Oversight (DMO) March 28, 2022.
[7] See public comments by Chicago Booth school Professor Michael Gibbs and Susquehanna International Group Special Counsel David Pollard. Available at https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=69704 and https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=70743.
[8] Kalshi's Congressional control submission, available at: https://www.cftc.gov/sites/default/files/filings/ptc/22/08/ptc082422kexdcm001.pdf. See page 9.
[9] In the Matter of the Self-Certification by North American Derivatives Exchange, Inc. of Political Event Derivatives Contracts and Related Rule Amendments under Part 40 of the Regulations of the Commodity Futures Trading Commission (April 2, 2012), available at: https://www.cftc.gov/stellent/groups/public/@rulesandproducts/documents/ifdocs/nadexorder040212.pdf.

2: Trading on Congressional control is not gaming

The *Nadex Order* asserted that gaming is equivalent to placing a wager or bet, and it cited a federal statute that defined the term bet or wager as "the staking or risking by any person of something of value upon the outcome of a contest of others."[10] If taking a position on a Congressional control contract is equivalent to a 'wager' or 'bet' because it places money on an event's outcome, that would imply that taking a position in any event contract is also equivalent to a 'wager' or 'bet'.[11] This is not true in law. While gambling is illegal in many states and interstate betting is prohibited, event contracts are legal in all jurisdictions. As former Commissioner Quintenz wrote:

> Gaming describes wagering money on an occurrence that has no inherent economic value itself other than the money wagered on its outcome. For instance, wagering money on roulette or blackjack should be considered gaming because there is no economic significance of the activity apart from the wager itself. Speculation, on the contrary, is risking value where the underlying activity has economic consequences, which then means the speculative activity creates valuable societal and economic benefit from a price-discovery and risk transfer function for those exposed to the risk of that underlying activity..[12]

The relevant language of "involve, relate to, or reference" comes from Commission regulation 40.11.[13] This language cannot be broader than the statutory language that is simply "involves".[14] By definition, if the regulation applied *more broadly* than the statute, it would per se violate the APA and be invalid.[15]

2. What role does the requirement that the contracts trade in multiples of 5000 and/or the position limits applicable to the contracts play in the analysis of whether the contracts involve, relate to, or reference gaming as described in Commission regulation 40.11(a)(1) and section 5c(c)(5)(C) of the Commodity Exchange Act? Are the position limits reasonably enforceable?

It does not play a role. A larger order size will likely reduce the number of smaller traders and trades, but does not affect the contract's hedging utility.

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[10] *Nadex Order* at 3

[11] Some commentators appear to equate speculation with gaming and do not sympathize with the important role speculation plays in price discovery and risk transfer. Many commodity futures markets, such as those in oil, often feature large amounts of speculative behavior yet clearly do not constitute "gaming" contracts.

[12] See Public Comment on Kalshi Contracts from Brian D. Quintenz, available at: https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=70786

[13] 17 C.F.R. § 40.11(a)

[14] 7 U.S.C § 7a-2(c)(5)(C)

[15] Quintenz, *ErisX*.

The position limits are enforceable; Kalshi is regulated by the Commission who can monitor such behavior. Other exchanges list products with custom order sizes, notional sizes, and position limits as well. There is no reason to speculate that Kalshi will somehow not be able to enforce this. Indeed, the Division is well aware of Kalshi's ability to enforce position limits. Additionally, it is not clear why Kalshi's ability to enforce a rule is appropriate for public comment. How is a member of the public supposed to have information on Kalshi's systems and procedures and internal processes for compliance? It would seem that the most appropriate party to address this question to is Kalshi, and Kalshi notes that surprisingly and incongruously, the Commission has never asked Kalshi this question.

3. Should the Commission consider whether similar offerings are available in traditional gaming venues such as casinos or sports books and/or whether taking a position on elections or congressional control is defined as gaming under state or federal law?

1: Should the Commission consider whether similar offerings are available in traditional gaming venues such as casinos or sports books?

No, the Commission should not consider this in determining whether a contract is gaming and subject to the Special Rule for event contracts, for four reasons:

1. Presence on an illegal exchange, casino or sportsbook does not by right cause relation to gaming. For example, if corn futures become widely traded in casinos and sports books, that would not change the nature of the corn futures contract into a gaming contract. The converse is also true. If a traditional futures exchange started a roulette parlor, the bets in the parlor would still be gaming.
2. What is offered at such venues changes over time. For example, if we used this "nature of the venue determines nature of the product" standard, many commodity futures and securities might have originally been considered gaming because bucket shops traded those products in large volumes in the late 19th and early 20th centuries. They may have continued to do so in the absence of bucket shop prohibitions.
3. The Commission prevented Congressional control contracts from being listed on-exchange in the *Nadex Order*. It would be circular to use the fact that such activity has persisted off-exchange as evidence the activity is gaming. For example, if the Commission prohibited oil futures, and oil futures trading moved to casinos, that would not suddenly change the economic nature of oil futures.
4. The Commission did not consider the venues offering, for example, Bitcoin contracts prior to the listing of Bitcoin contracts on DCMs. If the Commission considered this inquiry to be dispositive that something is gaming, those contracts would be gaming contracts because of their large presence on such venues.

However, even if the Commission did consider venue as relevant in determining whether the contracts involve gaming, Congressional control is not offered on any legal American sportsbook and is not available in casinos, like those in Las Vegas.[16] Bets on the control of Congress aren't accepted at Caesar's Palace or the Bellagio. Such contracts are only currently offered on some overseas betting services, and illegal or unregulated venues in the United States.

Instead of considering venue, the Commission should consider whether the subject of the contracts involves gaming when adjudicating whether a contract involves gaming, per Kalshi's letter on the Special Rule's application.

2: Should the Commission consider taking a position on elections or congressional control is defined as gaming under state or federal law?

No, for two reasons.

First, because per the Special Rule, only the underlying event (Congressional control) should be considered in determining whether the contracts involve gaming. The application of the Special Rule with regards to this question is addressed at length in a separate comment, which also includes letters provided by our counsel, former CFTC General Counsels Jonathan Marcus and Dan Davis.[17] Additional commenters on this point include former Commissioner Brian Quintenz, former Commissioner and Acting Chairman Mark Wetjen, "father of financial futures" Dr. Richard Sandor, MPD Director Josh Sterling, our director Timothy McDermott, as well as other public comments by former CFTC officials and industry actors such as Daniel Gorfine, Lewis Cohen, Tabet DiVito & Rothstein, and Jeremy Weinstein.[18]

Second, taking a position in an event contract is not equivalent to, as states or the federal government may define it, gaming. This is not true legally (interstate betting is illegal, and betting is illegal in many states; event contracts are legal in all jurisdictions) or in practice. As then Commissioner Quintenz wrote in his *ErisX* statement,

> Whereas bettors participate in games of pure chance, whose sole purpose is to completely reward the winner and punish the loser for an outcome that would otherwise provide no economic utility (think roulette), speculators in the derivatives market participate in non-chance driven outcomes that have price forming impacts upon which legitimate businesses can hedge their activities and cash flows.[19]

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[16] McIntre, David. "They Won't Take Your Bet On The Election In Las Vegas." *FiveThirtyEight*. 2016.
[17] Public comment by Elie Mishory. Available at https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=70781.
[18] Public comments 70786, 69737, 69687, 70755, 69736, 70765, and 69723.
[19] See Statement of Commissioner Brian D. Quintenz on ErisX RSBIX NFL Contracts and Certain Event Contracts, "Any Given Sunday in the Futures Market" (Mar. 25, 2021), available at https://www.cftc.gov/PressRoom/SpeechesTestimony/quintenzstatement032521)

Taking a position in an event contract is also not equivalent to gaming, as defined by those laws, because such laws are not operative on CFTC-regulated products. Federal law definitions of gaming, betting, wagering carve out exemptions for CFTC-regulated products.[20] Many states' gaming provisions also include such exemptions.[21] States' gaming provisions are preempted explicitly as well by the CFMA.[22] Even derivatives products that are excluded or exempted from CFTC regulation still preempt state gaming and bucket shop laws per the CFMA.[23] It could not follow more plainly that CFTC-regulated derivatives have the same preemptive effect. Congress has repeatedly recognized that futures and other derivative contracts serve economic purposes and, therefore, state laws that purport to prohibit or regulate futures or derivative contracts (including gaming laws) do not violate the CEA and are preempted. All of this shows that Congress and the states understand that there is a critical distinction between betting and legitimate, federally recognized and regulated financial activity. Election contracts that are designed for price formation and hedging on a derivative exchange constitute legitimate financial activity. Therefore, it would be incorrect to give consideration of the definitions under state and federal gambling laws. As these laws themselves recognize, they do not apply to contracts like Kalshi's.

Indeed, a key purpose of the CEA and granting the CFTC exclusive jurisdiction over futures was to authorize and promote trading of futures contracts notwithstanding state laws that might purport to prohibit them as gambling. The only way in which state law is relevant is if the activity underlying the event contract violates state law, such as a contract on murder or state income tax evasion. In that case, Congress wanted to make sure that a futures contract would not legitimize that activity without the Commission considering whether trading the contract would be contrary to the public interest.[24]

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[20] The Unlawful Internet Gambling Enforcement Act of 2006 "do[es] not include…any transaction conducted on or subject to the rules of a registered entity or exempt board of trade under the Commodity Exchange Act". 31 U.S.C. § 5362(1)(E) (2006).

[21] For example, Washington state RCW 21.30.030 clarifies that CFTC-regulated transactions are not affected by its anti-bucket shop provisions.

[22] 7 USC 2(a)(1) covers exclusive CFTC jurisdiction over futures and swaps, so any state laws that would purport to regulate or prohibit futures or swaps would be preempted.. The CEA also preempts state gaming laws with respect to derivative products that are excluded or exempt from the CEA. *See* 7 USC 16(e)(2) ("This Act shall supersede and preempt the application of any State or local law that prohibits or regulates gaming or the operation of bucket shops . . . in the case of --- (A) an electronic trading facility excluded under section 2(e) of this Act; and (B) an agreement, contract, or transaction that is excluded from this Act under [provisions of] the Commodity Futures Modernization Act of 2000, or exempted under section 4(c) of this Act.").

[23] *Ibid*

[24] Congress obviously would not be concerned about legitimizing elections. Even if the focus comes to legitimizing the trading on elections as part of the ultimate public interest analysis, the Commission has already crossed that bridge by long permitting market participants to trade such contracts pursuant to no action letters awarded to unregulated markets. The notion that allowing a regulated exchange to offer the contracts is what changes the public interest analysis is insupportable.

As for the federal prohibition on interstate betting, the Wire Act is irrelevant here–it applies only to sports betting and wagering. Moreover, when Congress most recently addressed the intersection of gambling/gaming and the Internet, it carved out derivatives contracts (both on exchange and over the counter) from the definition of betting and wagering, thereby plainly recognizing that derivatives contracts serve economic purposes that distinguish them from gambling/gaming.[25] Congress recognized this much earlier too, granting the CFTC exclusive jurisdiction over futures as noted above and expressly preempting state gaming laws in the CFMA.[26]

Additionally, many broad state gambling laws would define all event contracts as gaming, as well as many other futures, swaps, and options. States like New Hampshire, for example, define gambling as having "to risk something of value upon a future contingent event not under one's control or influence."[27] If the Commission were to find that the contracts involve gaming on the theory that New Hampshire state law prohibit gambling/wagering on elections, that would mean "wagering" is equivalent to taking a position on any event contract, which in turn would require that the Special Rule is triggered by *any* event contract because many New Hampshire's and many other state's gambling laws prohibit wagering on the outcome of *any* future event. That interpretation was clearly not Congress' intent. Instead, Congress narrowly defined a small number of event contracts whose underlying event involves an unsavory activity that Congress did not want the CFTC to legitimize without evaluating whether trading a contract on that activity would be contrary to the public interest (as per the text, which isolates a selected set of enumerated events to target).

Time and time again, Congress and states have indicated that the Commission has the decision making power over derivatives market issues, including event contracts, and approval of Kalshi's contract has no involvement with gaming any more than an event contract on the growth of Gross Domestic Product or whether a bill becomes law. If the Commission chooses to isolate

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[25] The Unlawful Internet Gambling Enforcement Act of 2006 "do[es] not include…any transaction conducted on or subject to the rules of a registered entity or exempt board of trade under the Commodity Exchange Act". 31 U.S.C. § 5362(1)(E) (2006).

[26] 7 USC 2(a)(1) covers exclusive CFTC jurisdiction over futures and swaps, so any state laws that would purport to regulate or prohibit futures or swaps would be preempted.. The CEA also preempts state gaming laws with respect to derivative products that are excluded or exempt from the CEA. *See* 7 USC 16(e)(2) ("This Act shall supersede and preempt the application of any State or local law that prohibits or regulates gaming or the operation of bucket shops . . . in the case of --- (A) an electronic trading facility excluded under section 2(e) of this Act; and (B) an agreement, contract, or transaction that is excluded from this Act under [provisions of] the Commodity Futures Modernization Act of 2000, or exempted under section 4(c) of this Act.").

[27] New Hampshire Rev Stat § 647:2(II)(d) (2017); see also Alaska Stat. § 11.66.280(3) ("gambling" means that a person stakes or risks something of value upon the outcome of a contest of chance or a future contingent event not under the person's control or influence, upon an agreement or understanding that that person or someone else will receive something of value in the event of a certain outcome"); Oregon Rev. Stat. § 167.117(7) ("'Gambling' means that a person stakes or risks something of value upon the outcome of a contests of chance or a future contingent event not under the control or influence of the person . . .").

these contracts as involving gaming but not those many others, it would be acting contrary to Commission precedent and in an arbitrary way.

4. Do these contracts involve, relate to, or reference "an activity that is unlawful under any State or Federal law" as described in Commission regulation 40.11(a)(1) and section 5c(c)(5)(C) of the Commodity Exchange Act?

No. The contracts solely involve the partisan affiliation of the Speaker of the U.S. House of Representatives and the President *pro tempore* of the U.S. Senate.

The contracts also do not involve unlawful activity because of state prohibitions against election 'wagering' or 'betting', or federal laws prohibiting interstate 'betting'. Two arguments below explain why.

First, because per the Special Rule, only the underlying event (Congressional control) should be considered in determining whether the contracts involve gaming. The application of the Special Rule with regards to this question is addressed at length in a separate comment, which also includes letters provided by our counsel, former CFTC General Counsels Jonathan Marcus and Dan Davis.[28] Additional commenters on the matter include former MPD Director Josh Sterling, our director Timothy McDermott, as well as other public comments by former CFTC officials and industry actors such as Daniel Gorfine, Lewis Cohen, Tabet DiVito & Rothstein, and Jeremy Weinstein.[29]

Second, taking a position in an event contract is not equivalent to, as states or the federal government may define it, 'wagering' or 'betting' which they prohibit. This is not true legally (interstate betting is illegal, and betting is illegal in many states; event contracts are legal in all jurisdictions) or in practice.

Taking a position in an event contract is also not equivalent to the unlawful activity such laws refer to, because such laws are not operative on CFTC-regulated products. Federal law definitions of gaming, betting, wagering carve out exemptions for CFTC-regulated products.[30] Many states' gaming provisions also include such exemptions.[31] States' gaming provisions are preempted explicitly as well by the CFMA.[32] Even derivatives products that are excluded or

[28] Public comment by Elie Mishory. Available at https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=70781.

[29] Public comments 69737, 69687, 70755, 69736, 70765, and 69723.

[30] The Unlawful Internet Gambling Enforcement Act of 2006 "do[es] not include…any transaction conducted on or subject to the rules of a registered entity or exempt board of trade under the Commodity Exchange Act". 31 U.S.C. § 5362(1)(E) (2006).

[31] For example, Washington state RCW 21.30.030 clarifies that CFTC-regulated transactions are not affected by its anti-bucket shop provisions.

[32] 7 USC 2(a)(1) covers exclusive CFTC jurisdiction over futures and swaps, so any state laws that would purport to regulate or prohibit futures or swaps would be preempted.. The CEA also preempts state gaming laws with respect

exempted from CFTC regulation still preempt state gaming and bucket shop laws per the CFMA.[33] It could not follow more plainly that CFTC-regulated derivatives have the same preemptive effect. Congress has repeatedly recognized that futures and other derivative contracts serve economic purposes and, therefore, state laws that purport to prohibit or regulate futures or derivative contracts (including gaming laws) do not violate the CEA and are preempted. All of this shows that Congress and the states understand that there is a critical distinction between betting and legitimate financial activity. Election contracts that are designed for hedging on a financial market constitute legitimate financial activity. Therefore, it would be incorrect to consider the contracts as involving unlawful activity. As these laws themselves recognize, they do not apply to contracts like Kalshi's.

A key purpose of the CEA and granting the CFTC exclusive jurisdiction over futures was to authorize and promote trading of futures contracts notwithstanding state laws that might purport to prohibit them as gambling. The only way in which state law is relevant is if the activity underlying the event contract violates state law, such as a contract on murder or state income tax evasion.[34] In that case, Congress wanted to make sure that a futures contract would not legitimize that blatantly illegal activity without the Commission considering whether trading the contract would be contrary to the public interest.[35]

As for the federal prohibition on interstate betting, the Wire Act is irrelevant here–it applies only to sports betting and wagering. Moreover, when Congress most recently addressed the intersection of gambling/gaming and the Internet, it carved out derivatives contracts (both on exchange and over the counter) from the definition of betting and wagering, thereby plainly recognizing that derivatives contracts serve economic purposes that distinguish them from gambling/gaming.[36] Congress recognized this much earlier too, granting the CFTC exclusive jurisdiction over futures as noted above and expressly preempting state gaming laws in the CFMA.[37]

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to derivative products that are excluded or exempt from the CEA. *See* 7 USC 16(e)(2) ("This Act shall supersede and preempt the application of any State or local law that prohibits or regulates gaming or the operation of bucket shops . . . in the case of --- (A) an electronic trading facility excluded under section 2(e) of this Act; and (B) an agreement, contract, or transaction that is excluded from this Act under [provisions of] the Commodity Futures Modernization Act of 2000, or exempted under section 4(c) of this Act.").

[33] *Ibid*

[34] We note some commenters have compared these contracts as equivalent, hypothetically, to contracts on mass shootings. The analogy is clearly incorrect and is a gross misinterpretation of the statute.

[35] Congress obviously would not be concerned about legitimizing elections. Even if the focus comes to legitimizing the trading on elections as part of the ultimate public interest analysis, the Commission has already crossed that bridge by long permitting market participants to trade such contracts pursuant to no action letters awarded to unregulated markets. The notion that allowing a regulated exchange to offer the contracts is what changes the public interest analysis is insupportable.

[36] The Unlawful Internet Gambling Enforcement Act of 2006 "do[es] not include…any transaction conducted on or subject to the rules of a registered entity or exempt board of trade under the Commodity Exchange Act". 31 U.S.C. § 5362(1)(E) (2006).

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Additionally, many broad state gambling laws would define all event contracts as gaming, as well as many other futures, swaps, and options. States like New Hampshire, for example, define gambling as having "to risk something of value upon a future contingent event not under one's control or influence."[38] If the Commission were to find that the contracts involve unlawful activity on the theory that there are state laws (or a federal law) prohibiting gambling/wagering on elections, and that wagering is equivalent to taking a position on an event contract, that would mean that the Special Rule is triggered by *any* event contract because many state gambling laws prohibit wagering on the outcome of *any* future event. That interpretation was clearly not Congress' intent. Instead, Congress narrowly defined a small number of event contracts whose underlying event involves an unsavory activity that Congress did not want the CFTC to legitimize without evaluating whether trading a contract on that activity would be contrary to the public interest (as per the text, which isolates a selected set of enumerated events to target).

Time and time again, Congress and states have indicated that the Commission has the decision making power here and approval of Kalshi's contracts has no involvement with unlawful activity any more than an event contract on Gross Domestic Product or whether a bill becomes law. If the Commission chooses to isolate these contracts as involving unlawful activity but not those many others, it would be acting contrary to Commission precedent and in an arbitrary way.

5. In determining whether these contracts involve an activity that is unlawful under any State or Federal law, should the Commission be influenced by whether state laws permit betting on the outcome of elections or other political outcomes and/or by the prohibition of interstate betting under Federal law?

No. The contracts solely involve the partisan affiliation of the Speaker of the U.S. House of Representatives and the President *pro tempore* of the U.S. Senate.

This issue was addressed in the previous question's response. It has been copied here for ease. The contracts also do not involve unlawful activity because of state prohibitions against election

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to derivative products that are excluded or exempt from the CEA. *See* 7 USC 16(e)(2) ("This Act shall supersede and preempt the application of any State or local law that prohibits or regulates gaming or the operation of bucket shops . . . in the case of --- (A) an electronic trading facility excluded under section 2(e) of this Act; and (B) an agreement, contract, or transaction that is excluded from this Act under [provisions of] the Commodity Futures Modernization Act of 2000, or exempted under section 4(c) of this Act.").

[38] New Hampshire Rev Stat § 647:2(II)(d) (2017); see also Alaska Stat. § 11.66.280(3) ("gambling" means that a person stakes or risks something of value upon the outcome of a contest of chance or a future contingent event not under the person's control or influence, upon an agreement or understanding that that person or someone else will receive something of value in the event of a certain outcome"); Oregon Rev. Stat. § 167.117(7) ("'Gambling' means that a person stakes or risks
something of value upon the outcome of a contests of chance or a future contingent event not under the control or influence of the person . . .").

'wagering' or 'betting', or federal laws prohibiting interstate 'betting'. Two arguments below explain why.

First, because per the Special Rule, only the underlying event (Congressional control) should be considered in determining whether the contracts involve gaming. The application of the Special Rule with regards to this question is addressed at length in a separate comment, which also includes letters provided by our counsel, former CFTC General Counsels Jonathan Marcus and Dan Davis.[39] Additional commenters on the matter include former MPD Director Josh Sterling, our director Timothy McDermott, as well as other public comments by former CFTC officials and industry actors such as Daniel Gorfine, Lewis Cohen, Tabet DiVito & Rothstein, and Jeremy Weinstein.[40]

Second, taking a position in an event contract is not equivalent to, as states or the federal government may define it, 'wagering' or 'betting' which they prohibit. This is not true legally (interstate betting is illegal, and betting is illegal in many states; event contracts are legal in all jurisdictions) or in practice. As "father of futures" Dr. Richard Sandor wrote in his comment letter,

> A major misconception that still prevails among the public is the equivalence of gambling and speculation. Nothing could be farther from the truth. Gambling is an artificial, self-constructed risk created for recreation. Speculation is the assumption of risks that already exist in the real and financial markets. The recreational risk of gambling is not present until the casino or racetrack is built and wagers are accepted. On the other hand, risk in the production of good and services in the economy are real and will exist even in the absence of futures markets. The same can be said for equity and interest rate and risk. It seems reasonable to conclude the risks associated with policy changes from different election outcomes are most similar to the latter. The transfer of risk by hedgers would be real and the assumption of that risk by speculators would be proper.[41]

Taking a position in an event contract is also not equivalent to the unlawful activity such laws refer to, because such laws are not operative on CFTC-regulated products. Federal law definitions of gaming, betting, wagering carve out exemptions for CFTC-regulated products.[42] Many states' gaming provisions also include such exemptions.[43] States' gaming provisions are

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[40] Public comments 69737, 69687, 70755, 69736, 70765, and 69723.
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[42] The Unlawful Internet Gambling Enforcement Act of 2006 "do[es] not include…any transaction conducted on or subject to the rules of a registered entity or exempt board of trade under the Commodity Exchange Act". 31 U.S.C. § 5362(1)(E) (2006).
[43] For example, Washington state RCW 21.30.030 clarifies that CFTC-regulated transactions are not affected by its anti-bucket shop provisions.

preempted explicitly as well by the CFMA.[44] Even derivatives products that are excluded or exempted from CFTC regulation still preempt state gaming and bucket shop laws per the CFMA.[45] It could not follow more plainly that CFTC-regulated derivatives have the same preemptive effect. Congress has repeatedly recognized that futures and other derivative contracts serve economic purposes and, therefore, state laws that purport to prohibit or regulate futures or derivative contracts (including gaming laws) do not violate the CEA and are preempted. All of this shows that Congress and the states understand that there is a critical distinction between betting and legitimate financial activity. Election contracts that are designed for hedging on a financial market constitute legitimate financial activity. Therefore, it would be incorrect to consider the contracts as involving unlawful activity. As these laws themselves recognize, they do not apply to contracts like Kalshi's.

A key purpose of the CEA and granting the CFTC exclusive jurisdiction over futures was to authorize and promote trading of futures contracts notwithstanding state laws that might purport to prohibit them as gambling. The only way in which state law is relevant is if the activity underlying the event contract violates state law, such as a contract on murder or state income tax evasion. In that case, Congress wanted to make sure that a futures contract would not legitimize that activity without the Commission considering whether trading the contract would be contrary to the public interest.[46]

As for the federal prohibition on interstate betting, the Wire Act is irrelevant here–it applies only to sports betting and wagering. Moreover, when Congress most recently addressed the intersection of gambling/gaming and the Internet, it carved out derivatives contracts (both on exchange and over the counter) from the definition of betting and wagering, thereby plainly recognizing that derivatives contracts serve economic purposes that distinguish them from gambling/gaming.[47] Congress recognized this much earlier too, granting the CFTC exclusive

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[44] 7 USC 2(a)(1) covers exclusive CFTC jurisdiction over futures and swaps, so any state laws that would purport to regulate or prohibit futures or swaps would be preempted.. The CEA also preempts state gaming laws with respect to derivative products that are excluded or exempt from the CEA. *See* 7 USC 16(e)(2) ("This Act shall supersede and preempt the application of any State or local law that prohibits or regulates gaming or the operation of bucket shops . . . in the case of --- (A) an electronic trading facility excluded under section 2(e) of this Act; and (B) an agreement, contract, or transaction that is excluded from this Act under [provisions of] the Commodity Futures Modernization Act of 2000, or exempted under section 4(c) of this Act.").

[45] *Ibid*

[46] Congress obviously would not be concerned about legitimizing elections. Even if the focus comes to legitimizing the trading on elections as part of the ultimate public interest analysis, the Commission has already crossed that bridge by long permitting market participants to trade such contracts pursuant to no action letters awarded to unregulated markets. The notion that allowing a regulated exchange to offer the contracts is what changes the public interest analysis is insupportable.

[47] The Unlawful Internet Gambling Enforcement Act of 2006 "do[es] not include…any transaction conducted on or subject to the rules of a registered entity or exempt board of trade under the Commodity Exchange Act". 31 U.S.C. § 5362(1)(E) (2006).

jurisdiction over futures as noted above and expressly preempting state gaming laws in the CFMA.[48]

Additionally, many broad state gambling laws would define all event contracts as gaming, as well as many other futures, swaps, and options. States like New Hampshire, for example, define gambling as having "to risk something of value upon a future contingent event not under one's control or influence."[49] If the Commission were to find that the contract involve unlawful activity on the theory that there are state laws (or a federal law) prohibiting gambling/wagering on elections, and that wagering is equivalent to taking a position on an event contract, that would mean that the Special Rule is triggered by *any* event contract because many state gambling laws prohibit wagering on the outcome of *any* future event. That interpretation was clearly not Congress' intent. Instead, Congress narrowly defined a small number of event contracts whose underlying event involves an unsavory activity that Congress did not want the CFTC to legitimize without evaluating whether trading a contract on that activity would be contrary to the public interest (as per the text, which isolates a selected set of enumerated events to target).

Time and time again, Congress and states have indicated that the Commission has the decision making power here and approval of Kalshi's contract has no involvement with unlawful activity any more than an event contract on Gross Domestic Product or whether a bill becomes law. If the Commission chooses to isolate these contracts as involving unlawful activity but not those many others, it would be acting contrary to Commission precedent and in an arbitrary way.

6. Are the contracts substantively different from Nadex's previously proposed political event contracts such that the Commission's analysis should be different? For reference, please see "CFTC Order Prohibiting North American Derivatives Exchange's Political Event Derivatives Contracts" (Apr. 2, 2012), available at https://www.cftc.gov/PressRoom/PressReleases/6224-12.

There are a number of important distinctions between these Contracts and the Nadex contracts: (i) the contemporary understanding of the contracts' value, economic and otherwise, is more

[48] 7 USC 2(a)(1) covers exclusive CFTC jurisdiction over futures and swaps, so any state laws that would purport to regulate or prohibit futures or swaps would be preempted.. The CEA also preempts state gaming laws with respect to derivative products that are excluded or exempt from the CEA. *See* 7 USC 16(e)(2) ("This Act shall supersede and preempt the application of any State or local law that prohibits or regulates gaming or the operation of bucket shops . . . in the case of --- (A) an electronic trading facility excluded under section 2(e) of this Act; and (B) an agreement, contract, or transaction that is excluded from this Act under [provisions of] the Commodity Futures Modernization Act of 2000, or exempted under section 4(c) of this Act.").

[49] New Hampshire Rev Stat § 647:2(II)(d) (2017); see also Alaska Stat. § 11.66.280(3) ("gambling" means that a person stakes or risks something of value upon the outcome of a contest of chance or a future contingent event not under the person's control or influence, upon an agreement or understanding that that person or someone else will receive something of value in the event of a certain outcome"); Oregon Rev. Stat. § 167.117(7) ("'Gambling' means that a person stakes or risks
something of value upon the outcome of a contests of chance or a future contingent event not under the control or influence of the person . . .").

robust, (ii) there is data available to the Commission today that was not available to it in 2012 to assist its assessment of the Contracts' economic purpose and hedging utility. It was for these reasons that Mark Wetjen, former Commissioner and Acting Chairman and who served when the agency ruled against Nadex, supports Kalshi's submission.[50]

First, the understanding of the scope and significance of how market participants face risk from elections and attempt to hedge and manage their risks is much greater today than it was when the Commission considered Nadex's contracts. Today, news articles frequently discuss election risk and limited hedging opportunities.[51] Studies and commenters have discussed how banks engage in such hedging, both using traditional instruments and over-the-counter products.[52] In recent years, CEOs use the word 'election' at very high rates on earnings calls near election time.[53] Additionally, there is now data on the correlation between perceived election outcomes and pricing of financial assets that were not available when the Commission considered Nadex. Many researchers utilized data from PredictIt to study the link between market based election outcome pricing, along with election polling and the impact on pricing financial assets.[54] They also consistently found that it was often more dynamic and accurate than polling.[55] These findings by academics have been replicated many times, as described in Kalshi's original submission at length.

Second, the understanding of the public interest factors of the contracts is very different today than it was when the Commission considered the Nadex contracts. Victoria University of Wellington's operation of its exchange pursuant to a CFTC no-action letter provided evidence and data from trading on these markets and other similar markets (including more local markets) over a period of close to eight years. PredictIt has traded more than a billion shares.[56] Its markets were consistently referenced, in real time and in hindsight, as informative and useful by major news organizations like *CNN*, *CNBC*, *Politico*, *Bloomberg*, *The Economist*, *The Wall Street Journal*, *The Washington Post*, and across various sections of *The New York Times* like *The*

[50] Public comment by Mark Wetjen. Available at https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=70771.

[51] There are too many examples to cite. Some can be found at Refinitiv ("A US Election Hedge"), Barron's ("This Election Could Be Really Weird. Hedge Your Portfolio"), or Yahoo Finance ("How To Hedge Your Portfolio For The Election"), all from the last 5 years. Available at: https://www.refinitiv.com/en/the-big-conversation/episode-48-a-us-election-hedge, https://www.barrons.com/articles/this-election-could-be-really-weird-hedge-your-portfolio-51599130801, and https://finance.yahoo.com/news/hedge-portfolio-election-173325198.html.

[52] Public comment by Angelo Lisboa. Available at https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=69666.

[53] John Butters. 2020. "More than one third of S&P 500 companies are discussing the election on Q3 earnings calls." Factset.

[54] Such as Snowberg, Zitzewitz, and Wolfers (2006); Zitzewitz and Wolfers (2016); and Jayachandran (2016). Available at: https://www.frbsf.org/economic-research/publications/working-papers/2006/08/, https://www.brookings.edu/research/what-do-financial-markets-think-of-the-2016-election/, and https://escholarship.org/content/qt25p4z52g/qt25p4z52g.pdf?t=krnmet.

[55] Miller, Thomas W. "Predicting the 2020 Presidential Election." *Data Science Quarterly*. 2021.

[56] LinkedIn profile of Will Jennings, former PredictIt employee. https://www.linkedin.com/in/will-jennings-pi

Upshot, *DealBook*, opinion columns, and the technology section. The reliance on PredictIt demonstrates the public's interest and social value in its data across all spectrums of society. In addition, information generated from PredictIt's markets was repeatedly cited by prominent political officials and commentators. Examples include economists like Jason Furman, previously President Obama's Council of Economic Advisors Chair (who submitted a supportive comment letter which noted PredictIt's election market data was used while he was in the White House); Nobel Laureate Paul Krugman, a Professor at Graduate Center, CUNY and a columnist for *The New York Times*; and data scientists/reporters like Nate Silver, founder and editor-in-chief of *FiveThirtyEight*.[5758] All of this strong support for the contract's public interest was not available to the Commission when it considered Nadex.

Additionally, the fears driving the *Nadex Order* with respect to election integrity–that voters could be incentivized to switch votes given election markets–has never been realized or suggested. The complete lack of evidence for the concern in the *Nadex Order*, despite a massive growth in election trading post-*Nadex*, is highly probative. PredictIt traded over 1.2 billion shares from 2014 to the present.[59] U.S. elections traded around $250 million between off-shore exchanges like InTrade and BetFair in 2012; by 2020, PredictIt and Betfair alone combined for nearly $1b in trading.[60] The Commission's fear, speculative at the time, has been rebutted through recent history with materially similar market activity. For these reasons, the Commission's past – and speculative – concern that approving the Nadex contracts would create monetary incentives to vote for a particular candidate cannot be relied on again.

Finally, these markets have grown dramatically despite the *Nadex Order*. The public is very interested in the information provided by these markets, even when that information comes from unregulated or offshore sources. While market demand for a product is not sufficient alone to determine the public interest, it is undeniably an important factor that the Commission should consider in determining whether a contract is contrary to that interest. It is unlikely that the Commission would disagree that its many Core Principles and regulatory oversight lead to a safer market experience for participants. Accordingly, there is significant public interest in having these markets available on regulated exchanges.

Similarly, especially with regard to Congressional control contracts, it is important that market activity not be a detrimental or negative force. There are obvious benefits to market activity occurring under the sanitizing light of regulation–as Justice Louis Brandeis said, "sunlight is said

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[57] Public comment letter by Jason Furman. Available at: https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=69708.
[58] For the sake of brevity, a full list of citations in this section can be found at the end of this document.
[59] LinkedIn profile of Will Jennings, former PredictIt employee. https://www.linkedin.com/in/will-jennings-pi
[60] Full breakdown of volume at end of document.

to be the best disinfectants."[61] The demonstrated rapid growth of this activity is unlikely to abate absent significant actions from the Commission to *prevent* the activity, a tall task given constrained Commission resources, the breadth of these markets, and the ease of their creation. Accordingly, these markets will likely continue to exist. The question is whether they will exist also in a regulated market or remain just in the unregulated shadow market. This is of course not a reason to permit the contracts *independently* of the Contract's economic utility. But it is an undeniably important public interest consideration. Because the breadth of the current unregulated marketplace is a more recent development, this public interest consideration was not before the Commission when it considered Nadex.

The Exchange also notes that exchanges are not granted exclusive licenses to list products. If the Commission would allow these contracts, Nadex would generally be able to list the same contracts Kalshi is proposing today.

7. Are the contracts substantively different from Kalshi's previously proposed, and withdrawn, congressional control contracts? For reference, please see "CFTC Announces Review and Comment Period of KalshiEX Proposed Congressional Control Contracts Under CFTC Regulation 40.11" (August 26, 2022), available at https://www.cftc.gov/PressRoom/PressReleases/8578-22.

Kalshi's contract was modified in response to Commission questions, the public comments, and Commission staff feedback. There are three changes to the contract:

1. An increase in the position limits from $25,000 for all participants to a tiered system for retail, institutions, and eligible contract participants that allows for potentially much higher limits.
2. An increase in the order size to 5000 contracts, from 1.
3. A list of political actors who are prohibited from trading were detailed.

Whether the proposed contract is "substantively different" is a semantic matter. The contract serves broadly the same economic purpose but has been more narrowly tailored to promote *bona fide* hedging behavior and gate out potential insiders. In practice, the contract will be used less by smaller retail users compared to the previous submission. Kalshi's previous submission is still compliant with the Core Principles and the Act, and would serve the public interest by virtue of its hedging, price basing, and forecasting benefits.

What is clear and obvious is that this contract that is before the Commission, like the prior contract, can be used to hedge risk exposure to political control, and will serve as a price

[61] Brandeis, Louis. "What Publicity Can Do." 1914. Accessed via the website of the Louis D. Brandeis School of Law Library. Available at https://louisville.edu/law/library/special-collections/the-louis-d.-brandeis-collection/other-peoples-money-chapter-v

discovery tool for the market's pricing of the likelihood of the various outcomes of political control.

Further, just as the Special Rule for Event Contracts does not apply to the prior contract because the underlying event is not one of the enumerated events, so too it does not apply to this contract.

8. Do the contracts serve a hedging function? What standard should be used in reviewing the contracts' hedging function? Is it sufficient that a contract could theoretically be used for hedging, or should an exchange provide evidence of demonstrated need by likely hedgers in the market? How often must a contract be used for hedging or what percentage of market participants or open interest must represent hedging use in order for a contract to serve a hedging function?

Yes, the contracts serve a hedging function. The financial press frequently reports on how elections (and changes in election polling, no less) affect the prices of financial assets, well before any laws by the new Congress have been enacted.[62][63][64] Academic research consistently finds a link between movements in election prediction markets and financial assets, as well as between polls and financial assets.[65] Even though the exact consequences of elections are not certain, political parties make sufficiently credible commitments to changing government policies in a manner that market participants currently believe are predictable enough–they're already pricing in the risk and putting money on the line.

The remaining elements of the question can be unpacked as follows:

1. An assumption that the Commission should review a contract's hedging function.
2. Should the standard for hedging be theoretical use or demonstrated need?
    a. Must a contract's participants have a minimum required amount of hedging (either in absolute or percentage terms)?

The Exchange will address these seriatim. However, the Exchange notes that regardless of the standard, the contracts here passes: *Kalshi has demonstrated hedging need.* In its submission to DMO in March 2022, Kalshi provided many examples of consistent evidence of ongoing hedging in the public and private markets via testimony from market participants and academia. Many retail investors, small businesses, billion-dollar businesses, and members of industry provided comments testifying to their personal hedging use cases. These included those by Alex

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[62] Noel Randewich. 2020. "S&P 500 futures rise as U.S. election suggests less regulatory risk." Reuters.
[63] Myra P. Saefong. 2020. "Here's how the U.S. presidential election could shake up the oil market." Marketwatch.
[64] Matthew Weaver. 2020. "Congressional elections could impact commodity prices most, expert says." *Capital Press*.
[65] Such as Snowberg, Zitzewitz, and Wolfers (2006); Zitzewitz and Wolfers (2016); and Jayachandran (2016). Available at: https://www.frbsf.org/economic-research/publications/working-papers/2006/08/, https://www.brookings.edu/research/what-do-financial-markets-think-of-the-2016-election/, https://escholarship.org/content/qt25p4z52g/qt25p4z52g.pdf?t=krnmet.

Keeney, Ali Partovi, Arvind S, Jun Sup Lee, Edward Makino, Ramin Ahmari, Valentin Perez, Donald Stalter, Alexander King, Kenn Butler, Vivek Ranadive, Thomas Dalton Combs, among so many others.[66]

There is nothing more Kalshi and potential hedgers could have done in order to demonstrate the hedging need this product fills.

1: Should the Commission review a contract's hedging function?

There is no requirement from Congress, nor mechanism by which, the Commission can or should determine hedging utility as a metric on its own outside of the public interest. However, a contract's hedging utility can be considered as supporting the public interest as part of the public interest consideration should the Commission find that a contract involves one of the enumerated activities of the Special Rule.

2: What standard should the Commission use, theoretical use or demonstrated need?

A contract's hedging utility may be an important consideration in favor of finding that a contract is not contrary to the public interest should the Commission find that it involves one of the enumerated activities of the Special Rule. Hedging is in the public interest and promoting risk mitigation is a core mission of the CFTC. The Exchange notes, however, that these two suggestions ('theoretical' versus 'demonstrated need') are more like opposite ends of a spectrum, and there are variations in between.

It should use a theoretical use standard. A demonstrated need standard could inhibit the creation of new products with smaller or less clear markets; has no clear mechanism by which it can be determined; and because a contract only theoretically being used for hedging is not contrary to the public interest.

It should not be missed that the standard implied in the last part of this question (some minimum required amount of hedging, in absolute or percentage terms) would be likely to have unintended consequences if imposed on the market.

1. This standard has not been imposed on *any other contract in Commission history*, including any event contract. There are only 90 million barrels of oil produced per day, but almost 1 billion barrels are traded on Chicago Mercantile Exchange's crude oil futures every day (not to mention other highly traded products, like Intercontinental Exchange's West Texas Intermediate or Brent contracts).[67] The overwhelming majority of

[66] See comments 69612, 69608, 69671, 69647, 69696, 69669, 69725, 70770, 69709, 70776, 70757, 70767.
[67] CME Crude Oil Futures Volume & Open Interest. Available at https://www.cmegroup.com/markets/energy/crude-oil/light-sweet-crude.volume.html.

activity is not primary hedgers. Nonetheless, the market has clearly added value to the global financial system.

2. The percentage of the Contract's participants hedging will no doubt vary over time in a vibrant, dynamic marketplace as risks change.
3. Speculation is an accepted important use case for all contracts in the financial markets. Speculation on events of economic purpose is not equivalent to gaming or gambling, and has never been considered that. Non-hedgers help balance out any differences between short and long hedgers, and provide liquidity to the hedgers themselves. Without speculation, none of the major futures and derivatives markets would be as liquid as they are today, and thus as powerful in fulfilling the hedging utility as they are. Speculation improves a contract's hedging utility. Even in cases where the non-hedgers are not actually matching on the exchange with the hedgers, they are providing a valuable service to the hedgers. The price offered on an exchange is a function of many factors, including demand and liquidity–non-hedgers will demand a greater premium if they know it will be harder for them to exit their positions later if their needs change. So the presence of later non-hedgers willing to provide liquidity and trading volume is essential to encouraging the original round of liquidity providers to offer more competitive prices to the hedgers, since the original liquidity providers know that they will not have an issue exiting their positions later. As Commissioner Quintenz put it:

> Whereas bettors participate in games of pure chance, whose sole purpose is to completely reward the winner and punish the loser for an outcome that would otherwise provide no economic utility (think roulette), speculators in the derivatives market participate in non-chance driven outcomes that have price forming impacts upon which legitimate businesses can hedge their activities and cash flows… The other factor which makes speculation different than pure-chance gambling is the price forming impact it has on markets which allow businesses to hedge their risk.[68]

9. Are there unique economic risks tied to the outcome of congressional control that cannot be hedged via derivative products on equities, debt, interest rates, tax rates, asset values, and other commodity prices?

The Commission's question can be taken to imply two different things, either that the other products are linked directly on the same risks that the contracts would be used for hedging, or that market participants can reasonably approximate the Contract's hedging utility via a melange of other instruments.

Assuming the former, the answer is yes, there are risks that cannot be currently hedged. First, as noted by Hehmeyer and other commenters, and in the Exchange's submission, there are significant direct, non-policy related economic risks, such as the risks imposed by political

[68] Quintenz, *ErisX*.

outcomes on the fortunes of media personalities, media consultants, and others with connections and ties to the party in power. These risks cannot be otherwise hedged by traditional products.

As discussed earlier, changes in general risk that a certain Congress could pose to various industries can be discerned well in advance of knowledge of the particular policies that may be implemented by that Congress and provide just as valid a hedging rationale. This difference results from the time horizon between the election cycle and the implementation of a new Congress' specific legislative agenda or its potential responses to current events. For example, following the election of Republicans into Congress in 2016, many publications speculated that trade policy would become more restrictive; however, it was not known if this would come in the form of new trade deals, re-negotiating existing trade agreements, new tarrifs (and if so, on what goods and at what level), international lawsuits, and more. Another event contract or future on taxes or public policy would not have been very helpful. However, the risk of a more restrictive policy was there because of who would win the election, exactly what Kalshi's contracts allow traders to hedge.

Another example is new legislation that would burden a market participant. Once the legislation draft is released, the impact will begin to be felt immediately (on assets, cash flows, and partnerships as market participants price in risk), making a hedge useless; the downside risk has already had much of its effect. Markets are forward looking, and hedging products should reflect that. Even just a statement by a politician can be very damaging for firms.[69]

Additionally, a single market participant may face myriad risks from elections. Many firms and individuals are negatively affected by a suite of a party's policies, and thus wish to hedge the many different changes in risk through a single contract. For example, an oil company may wish to hedge the risk that a new Democratic government will come into office, because that government could not only impose new regulations on them but also change the composition of existing regulatory bodies and increase their labor costs (through raising the minimum wage, supporting unionization, or mandating greater health care benefits for employees). Only Kalshi's proposal lets them hedge the risk they actually face: Democratic government.

If the question is asking instead whether market participants can reasonably approximate the Contract's hedging utility via a melange of other instruments, the answer is they cannot. Many retail and small business market participants do not have access to these other instruments, and the inherent friction and transaction costs in arranging these types of complex proxy plays is prohibitive. It seems unlikely that the Commission would determine it in the public interest to solely rely on these tools that are inaccessible to many of the market participants who need risk management tools most. Additionally, the effectiveness of these baskets and combination of

[69] White, Spencer. "Hillary Clinton Blog Post Hits Valeant Stock For 9% Loss Without Revealing New Policy." Yahoo Finance. 2016.

instruments to hedge the risk from political control is considerably less than a contract directly on political control.

Importantly, the question implies that its answer matters, but does not explain why it would. A reasonable inference is that the Commission is saying no new method of hedging a risk should be permitted if there are other existing methods of hedging that risk. Nowhere in the CEA or the Commission's Regulations is there such a standard. The Exchange hopes this is not the Commission's view, as it has not been the Exchange's experience when engaging with the Commission on prior contracts. For example, should the Commission say "farmers can buy crop insurance therefore they should not have access to agricultural futures products"?

Furthermore, such an interpretation would be highly anti-competitive. Such an interpretation would mean that if one firm offers a contract on an event or a commodity, that no challenger should enter the market with a similar but different product to compete with it. In fact, such an interpretation would consistently punish novel or innovative products – in many cases, it is possible to construct a hedge using existing products, and attempting to do so might be expensive or incur excess basis risk. The fact that election risk has implications for other assets is, in fact, much of the justification *for* the contract's hedging utility and would work in concert with such assets. Many similar and competing products are listed by different exchanges in order to promote a vibrant and competitive marketplace for hedgers. This is also an important component of the contract's price discovery utility, discussed in a later question.

Such an interpretation would also curtail innovation. Innovation often happens through iterating on already successful products and ideas. As in the earlier example, the existence of insurance products would have inhibited the creation of futures. Innovation often requires creating new, and sometimes flawed, products in order to try and optimize use cases for market participants. Hedgers benefit when many exchanges are launching many different products to try and tailor to their needs; they suffer when the government limits their options. It's in the public interest for such innovation to occur, and for that to happen, the Commission should not take the view that this product should not be listed because it purportedly can be hedged through other means.

10. Are the economic consequences of congressional control predictable enough for a contract based on that control to serve a hedging function? Please provide tangible examples of commercial activity that can be hedged directly by the contracts or economic analysis that demonstrates the hedging utility of the contracts.

Yes. The financial press frequently reports on how elections (and changes in election polling, no less) affect the prices of financial assets, well before any laws by the new Congress have been

enacted.[707172] Academic research consistently finds a link between movements in election prediction markets and financial assets, as well as between polls and financial assets.[73] Even though the exact consequences of elections are not certain, political parties make sufficiently credible commitments to changing government policies in a manner that market participants currently believe are predictable enough–they're already pricing in the risk and putting money on the line.

Investment banks routinely provide clients with advice on hedging through their private wealth divisions. This was described in a comment letter provided by a Managing Director of JPMorgan Chase. He wrote,

> At JPMorgan, election risk is one of the largest risks our clients face, and they frequently engage us proactively on how to minimize it (hedge it, in other words). We work with and advise our clients on how to avoid that risk in their portfolios, especially when a client's cash flows or investments are very politically sensitive (for example, those in the coal industry are very concerned regarding election outcomes and policy expectations).
>
> Since clients have different risk profiles, we do extensive research to fine-tune how these risks add up in our clients' positions. Our division employs a team of economists, at service to our partners, whose role in election years is heavily to research election probabilities as well as the impact election outcomes will have on equities and other investment products. We frequently host discussions with experts and clients on the relevant risks (including one coming up this week!) and publish research for both clients and the public.[74]

Investment banks also publish research to money managers (and the public, as the above mentions) that provides advice on how to hedge election risk in very specific ways. For example, JP Morgan Chase projected that a Democratic victory in 2020 would lead to a rally in 'left-behind' equities, such as "European cyclicals, value, China-exposed stocks and renewables" and portfolios should be adjusted accordingly.[75]

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[70] Noel Randewich. 2020. "S&P 500 futures rise as U.S. election suggests less regulatory risk." Reuters.
[71] Myra P. Saefong. 2020. "Here's how the U.S. presidential election could shake up the oil market." Marketwatch.
[72] Matthew Weaver. 2020. "Congressional elections could impact commodity prices most, expert says." *Capital Press*.
[73] Such as Snowberg, Zitzewitz, and Wolfers (2006); Zitzewitz and Wolfers (2016); and Jayachandran (2016). Available at: https://www.frbsf.org/economic-research/publications/working-papers/2006/08/, https://www.brookings.edu/research/what-do-financial-markets-think-of-the-2016-election/, https://escholarship.org/content/qt25p4z52g/qt25p4z52g.pdf?t=krnmet.
[74] Public comment by Angelo Lisboa. Available at https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=69666.
[75] Ksenia Galouchko. 2020. "JPMorgan Says Biden Victory Could Mark a Stock Market Shift." Bloomberg.

Many other comment letters by retail traders (Raphael Crawford-Marks, Scott Supak, Jacob Colbert, Jacob Faircloth, Andrew Karas, Joseph Turano, among many others), industry leaders (Jorge Paulo Lemann, Christopher Hehmeyer, Ron Conway, Seth Weinstein, among many others) and owners of politically sensitive businesses, (Continental Grain Company, Klarna, Greenwork, Upsolve, among many others) agreed and specifically discussed personal hedging use cases.[76] Consider the comment by Scott Supak:

> In the more immediate political future, the hedging benefits are obvious: since I'm no longer employed through my union, my wife no longer has health coverage through my union, so we must purchase (very expensive) health insurance from the marketplace. When it seems that Republicans are likely to take control, I can invest in that possibility, and hedge against the risk that her health insurance premiums will go up (or that the subsidy will get smaller, or that her ability to purchase insurance at all is taken away completely).[77]

Or the comment by Greg Sirotek, the co-founder and CEO of Moneytree Power, a startup dedicated to installing solar power:

> Congress has an incredible influence over the future of the zero-carbon energy industry, particularly the solar industry…Given the respective differences in the two parties' positions on the importance of climate change mitigation, renewable energy development and the deficit, the risk profiles depending on which party is in power is vast. An event contract which pays out on the basis of Congressional control would allow our business to manage this previously unhedged risk.[78]

Lemann, a founder at 3G Capital (one of the world's largest investment firms) and a Board member of firms like AB-InBev and Kraft Heinz (some of the largest participants in traditional agricultural and metals futures), wrote:

> These statements [the *Nadex Order*'s claims that there are no hedging or price basing use cases for elections] are inconsistent with the preponderance of the academic research on the subject and is inconsistent with the actual experience of anyone who has ever operated a business in or with the United States or traded on the global commodity markets. Experience and empirical observation show that elections have consequences,

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[76] Public comments 69668, 69715, 69667, 69683, 69678, 69619, 69684, 69717, 69714, 69718, 69727, 69707, 69677, 69655.
[77] Public comment by Scott Supak. Available at https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=69715
[78] Public comment by Greg Sirotek. Available at https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=70751.

> and these consequences directly create risk that can be hedged, and are factored into pricing commodities, financial assets, and services.[79]

Hehmeyer, former Chair of the National Futures Association and Board Member of the Futures Industry Association, added that many are affected *regardless of policy outcomes*:

> For example, media personalities and companies face risk from Congressional control and elections. Early professionals hoping to work on Capitol Hill know there are far more positions available if their preferred party is victorious, as there are more Congressional offices and committee positions for them to staff. A consultancy that specializes in specific topic areas (for example, a green energy consultancy) may know the demand for their services will decline in anticipation that their issue of expertise is less likely to be operative under a split Congress. These risks occur regardless of the legislation that actually passes. There are billions of dollars at risk surrounding the outcome of Congressional control and elections. These risks can reasonably be expected to be managed through this contract on Congressional control.[80]

Although some commenters claimed election outcomes aren't predictable enough to be a useful hedge, that in no way contradicts or even diminishes those who say the opposite. *At most*, those commenters don't see hedging utility for themselves. But they cannot credibly say, especially given the comment file, that all the people who identify how they would use the contracts for hedging and managing their risk are mistaken or deficient in their ability to recognize risk and potential tools to manage or mitigate that risk. It would be arbitrary for the Commission to listen only to those who assert that there is no hedging use case for anyone when there are many others who state that they *would* use the product for themselves or their business.

As noted by Hehmeyer, there is sufficient impact from elections themselves, independent of the policy implications of political control, to not only justify these markets' economic utility but to make them valuable. In addition, markets already believe that the policy implications of elections themselves are sufficiently meaningful so as to be worth repricing assets, suggesting that they are predictable *enough*. Elections have vast consequences, which directly impact the likelihood of events happening or not happening (such as a bill being passed). While it is true that there is some uncertainty about the precise implementation of any given law by a new Congress (e.g., what exactly would the size of the stimulus checks be, what exactly would the new tax rate be), changes in probabilities are more than sufficient for hedging purposes. In addition, once the specifics of a policy risk have been announced (like the text of a bill), it's practically impossible to hedge because of the high cost now that the probability of the event has increased. It's

[79] Public comment by Jorge Paulo Lemann. Available at: https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=69684.
[80] Public comment by Christopher Hehmeyer. Available at https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=69717&SearchText=christopher.

important for a potential hedger to hedge in advance of the specifics of their risks being announced.

Changes in *general risk* also can provide a strong hedging need as opposed to the changes in risk of a specific outcome. If one party is in complete control of Congress, there is likely to be a change in *general* risk on carbon-based energy products and industries and an opposite change in *general* risk on renewable energy products and industries. While the specific policies implemented may be hard to know in advance, that change in *general* risk has been discussed at length in comment letters and is hedged extensively by larger institutions through complex products.[81]

Consider a concrete example of probabilistic change from the bond markets. Ten percent of the catastrophe bond market is in "parametric triggers," which means the bond pays out if certain meteorological triggers are met. The bond issuer does not know for certain whether the storm that meets the threshold will cause mass flooding, power outages and property damage (and conversely, it's possible that such damages could occur with a storm that does not meet the trigger thresholds) yet they use the bond to hedge nonetheless, because other features of the bond (hedging wind speed, namely) are more important to them than eliminating basis risk. Moreover, even if a wheat farmer buys a contract that pays out if the price of wheat falls below a certain threshold, there is still some uncertainty as to whether that event will harm them. It's possible that (a) wheat falls below a certain threshold because weather conditions are so great that there was a bumper crop and that the increase in their supply offset the loss in price, or (b) that the national price does not perfectly correlate with the local price they received–but they can use the product nevertheless.

11. Should the Commission consider contract and position sizes, size of trade requirements, and/or an exchange's intended customer base to help assess whether a contract is likely to be used for hedging in at least some cases? Does the requirement that all contracts listed on Kalshi must be fully-collateralized affect this analysis? Does the requirement that these contracts trade in multiples of 5000 and/or the position limits applicable to the contracts affect the analysis of the hedging utility of the contracts?

As noted earlier, outside of the public interest test, it is well settled that there is no required hedging test of the Contract, nor one provided by Congress, the rules, or the regulations.[82] Hedging should be an important consideration as part of a contract's public interest test should the Commission find that it involves one of the enumerated activities of the Special Rule, though

[81] Public comment by Angelo Lisboa. Available at https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=69666.

[82] Even in the public interest test, the Exchange notes that it is not at all settled that the original "economic purpose test" was resurrected. The better reading is that Congress wanted the Commission to look at the variety of factors that are discussed in the CEA, its purpose, and the core principles.

it need not be the only consideration. Hedging is in the public interest and promoting risk mitigation is a core mission of the CFTC and Kalshi.

In addition, whatever standard the Commission uses, Kalshi's contracts are permissible. As evidenced by the public comments, the intended customer base is a mixture of hedgers, liquidity providers/market makers, forecasters, and speculators. This is consistent with the customer base of some of the world's largest commodity markets, and is thus wholly permissible. The Commission would be speculating to suggest otherwise given the large body of relevant evidence.

1: Should the Commission consider contract and position sizes, size of trade requirements, and/or an exchange's intended customer base to help assess whether a contract is likely to be used for hedging in at least some cases?

The Commission can consider factors beyond hedging utility in its public interest analysis, should it find that the contracts involve one of the enumerated activities of the Special Rule. However, it should not consider an exchange's intended customer base. This would be very speculative. Customer bases change over time. In many cases, an Exchange may use a product in order to attract a new customer base, so using past customers as the foundation for guessing what the "intended customer base" is would be erroneous. If anything, this test would inappropriately penalize any novel product, as those are the products most likely to have an intended customer base most different from the existing user base. In short, there is no basis in law for the Commission to speculate about whether an Exchange's "intended customer base" meets its standards.

Trade requirement sizes are also not relevant. It may affect the number of parties who use the contract, for what purpose, and in what capacity; but nonetheless, the contract cannot serve *less* of a hedging function because of the proposed trade size, which is neither exceptionally small nor large compared to derivatives products available on CFTC-regulated boards of trade.

2: Does the requirement that all contracts listed on Kalshi must be fully-collateralized affect this analysis?

Whether a contract is fully collateralized or margined should not influence the Commission's thinking. Further, in this case it would be irrelevant. The hedging use cases shown by the public comments and other evidence provided to the Commission by Kalshi show that there is no basis to conclude that full collateralization will deter or preclude hedging behavior. Individuals, small businesses, and medium-sized businesses are all interested in using the contracts as they stand and as Kalshi proposed. Accordingly, even if the Commission considered the full collateralization requirement, it would still easily pass the test.

There is one area where the full collateralization requirement becomes relevant and that is in regard to responsible innovation. As a foray into quasi-new territory, it makes sense that the Exchange has certified only a fully collateralized product. This requirement will prevent excessive leveraging, and while it certainly may be appropriate to have margin products on this in the future, as an initial product it is prudent and sensible to maintain Kalshi's requirement that the contract be fully collateralized. Indeed, Kalshi should be commended for its cautious approach to innovation.

3: Does the requirement that these contracts trade in multiples of 5000 and/or the position limits applicable to the contracts affect the analysis of the hedging utility of the contracts?

No. As discussed earlier, trade requirement sizes are not relevant. It may affect the number of parties who use the contract, for what purpose, and in what capacity; but nonetheless, the contract cannot serve *less* of a hedging function because of the proposed trade size, which is neither exceptionally small nor large compared to derivatives products available on CFTC-regulated boards of trade.

12. Should the Commission consider the contract design and payout to help assess the hedging utility of the contract? For example, are binary contracts useful for hedging nonbinary economic events?

1: Should the Commission consider the contract design and payout when trying to assess the economic utility of the contract?

As noted in previous responses, outside of the public interest test, there is no required hedging test of the Contract, nor one provided by Congress, the rules, or the regulations. Hedging may be an important consideration as part of a contract's public interest test should the Commission find that it involves one of the enumerated activities of the Special Rule, though it need not be its only consideration as part of that test. Hedging is in the public interest and promoting risk mitigation is a core mission of the CFTC.

In addition, as argued above, the Commission should not speculate about the exact amount or percentage of total trading that will be used to hedge. Instead, it should consider whether there are hedging use cases. It is not contrary to the public interest for the contracts to be utilized for hedging as often as the market sees fit to hedge–many contracts listed by other exchanges are traded very little at all.

In fact, it is in the public's interest for *the market* to determine whether or not a contract design is appropriate for hedging, not the Commission. If the contract design is a poor fit for hedging

needs–which it does not appear to be, especially given the many public comments by retail, small businesses, and industry in support–then Kalshi will attract fewer participants and in the future will amend the contract structure to improve. The incentives of the Exchange and hedgers are aligned. Substituting the Commission's judgment for the market's would short-circuit that valuable process. Accordingly, the Commission's inquiry into hedging as part of its public interest inquiry should be whether the contracts can be used for hedging. As noted, however, the contracts here have significant hedging utility that would pass any of these tests.

Moreover, different firms have different hedging needs, and different structures can best meet those needs. What works for one firm may not work best for another firm. As a result, the Commission should not attempt to speculate about whether a particular structure would work, as they may miss many firms for whom an alternative structure is better. The utility of the market is that there exists a profit incentive to create products for even niche groups of buyers, and insofar as private firms are far closer to their potential customer base than a government agency which does not interact with them on a daily basis (unlike an exchange), it would be highly inappropriate for the Commission to impose its judgment about whether a product's structure meets potential customer's needs. It's in the public interest to permit innovative contracts that they may use.

2: Are binary contracts useful for hedging nonbinary economic events?

On a superficial level, Congressional control is one of the most true "binary" events in the world: either the Republicans win or the Democrats win. While the margin in each chamber certainly matters (a 53-Democrat Senate does look different from a 50-Democrat Senate), there is a sharp, binary, discontinuity in economic effects when control tips from one party to another.

Perhaps the Commission might argue that while Congressional control is binary, the effects of Congressional control are non-binary. Some people (like energy firms) might be affected a lot, whereas other people (like an IT consultancy) might be affected relatively less. Then there exists a continuum between the energy firm and the IT consultant of people affected. However, it does not follow that binary events cannot be a suitable tool for hedging since the effects are still caused by the binary control.

But more importantly, binary products are still capable of hedging non-binary events. The Commission has allowed binaries on the federal funds rate on the Chicago Board of Trade, even though it is self-evidently true that some people are hurt (or helped) by changes in interest rates more than others.[83] The Commission has allowed event binaries on monthly inflation prints, even though the Consumer Price Index is a continuous distribution of real numbers. Hundreds of millions of dollars are traded annually on binary parametric trigger catastrophe bonds, even

[83] Hunt, Katherine. "CBOT to launch binary options on target federal funds rate." *MarketWatch*. 2006.

though the economic effects of such catastrophes are far from binary. And traders hedge probabilities, not absolutes. Accordingly, binary products are perfectly compatible as a hedging device with non-binary economic events.

13. Do the contracts serve a price-basing function? For example, could they form the basis of pricing a commercial transaction in a physical commodity, financial asset, or service?

Yes. As discussed earlier, the market frequently reprices assets on the basis of changes in election expectations and election outcomes.[848586] Evidence abounds from the market, the financial press, and academia.

In 2012, more than two dozen economists signed a letter to the Commission supporting Nadex's submission that argued as much. Led by the late Nobel Laureate Kenneth Arrow in that 2012 letter, they wrote:

> Political event futures facilitate price discovery in other asset markets. One of the findings of [our] research is that firms and industries are exposed to political and policy risk. Political event futures provide investors with a market-based assessment of outcome probabilities, which reduces investors' uncertainty when trading other assets.[87]

Many economists have done the same for Kalshi, including Nobel Laureate Robert J. Shiller, Phillip Tetlock, Justin Wolfers, Scott Sumner, Michael Abramowicz, Joseph Grundfest, Alex Tabarrok, Michael Gibbs, Jason Furman, David Pennock, Harry Crane, David Rothschild, Koleman Strumpf, Ryan Oprea, and others.[88] A letter signed by Pennock, Crane, Rothschild, and Strumpf argued,

> Prediction market prices in political and policy events would help facilitate price discovery in a wide-range of asset markets, affecting the entire economy (note that pricing is freely available to non-traders). Political and policy events matter: they expose a wide-variety of businesses to risk that traditional financial markets have trouble pricing. A robust set of markets for political and policy events could price that risk, and, if they were allowed to flourish, could eventually grow to provide hedges where uncertainty is particularly acute.[89]

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[84] Noel Randewich. 2020. "S&P 500 futures rise as U.S. election suggests less regulatory risk." Reuters.
[85] Myra P. Saefong. 2020. "Here's how the U.S. presidential election could shake up the oil market." Marketwatch.
[86] Matthew Weaver. 2020. "Congressional elections could impact commodity prices most, expert says." *Capital Press*.
[87] *Nadex* public comment by Zitzewitz et al. Available at https://www.cftc.gov/sites/default/files/stellent/groups/public/@rulesandproducts/documents/ifdocs/ericzitzewitzltr020312.pdf.
[88] See public comments 70761, 69708, and 69735.
[89] Public comment by David Rothschild. Available at https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=69735.

The contracts can obviously be used to price MIAX's corporate tax futures and Kalshi's other political event markets related to bills passing, government shutdowns, and the debt ceiling. They can also be used to price other non-products, and election probabilities frequently are, as discussed above and in Kalshi's submission. For example, they can be used to help price economic event contracts. Investment banks provide clients and the public with recommendations on how Congressional outcomes affect macroeconomic forecasts. For example, Morgan Stanley cited the chance of stimulus along with infrastructure spending and corporate tax changes as a vehicle for a "blue wave" leading to a weaker dollar, lower interest rates, stronger GDP growth and lower bond prices.[9091] The Exchange provided many specific use cases and pricing analysis in its original submission.

Many also stated as much in public comments, including Flip Idiot, Victor Jacobsson, Angelo Lisboa, Peter Kempthorne, Seth Weinstein, David Pollard, David Trinh, Eriz Zitzewitz, James Cust, Caesar Tabet, Reed Newell, Jorge Paulo Lemann, Sebastian Strauss, Christopher Hehmeyer, Ron Conway, and Margaret Stumpp. As Stumpp, a senior vice president at Prudential Financial and a co-founder of Quantitative Management Associates, wrote,

> …a well functioning market for contingent political outcomes should improve the prices at which other securities (eg, stocks, bonds, options, etc…) trade. This reduces uncertainty, enhances capital market liquidity, and improves the efficiency by lowering uncertainty.[92]

Consider the following example: a junior investment bank has been instructed to price a security. That price is reflective of the stocks' net present value, itself a reflection of future expected profits. This includes political risk. If that banker knew with certainty that Republicans will take control of Congress, for example, and corporate taxes will not be raised, she would price the security higher than otherwise. Kalshi's contracts would help her in doing so.

14. Are the contracts contrary to the public interest? Why or why not?

No.

1: The contracts have a strong economic purpose.

The hedging and price basing use cases are myriad and would allow individuals to take advantage of a product that is currently strongly in demand. Elections cause extremely large

[90] Morgan Stanley. 2020. "A Revised Guide to Economic Policy Paths & Market Impacts".
[91] Morgan Stanley. 2020. "2020 US Election Preview: 5 Themes to Watch for Investors."
[92] Public comment by Margaret Stumpp. Available at https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=69722.

economic impacts and are some of the biggest risks that many businesses will ever face. This is detailed at great length in Kalshi's submission and has been validated by dozens of public comments from retail, business, academia, and members of industry, including Kevin Standridge, Sam Altman, Geoff Ralston, Robert Orr, Valentin Perez, Robin Hanson, James Bailey, Rohan Palvulri, Jason Crwaford, Dustin Moskovitz, Andrew N, and James Angel.

2: The contracts would serve as useful tools for voters, the media, and the public that would fight disinformation, improve election integrity, and improve decision making including policy making

The demand for accurate information surrounding elections is enormous – and valuable. This is why so many Americans turn to election models and updates offered by *FiveThirtyEight*, *The New York Times*, and *The Economist* around election time for advanced models that incorporate information. Its markets are consistently referenced as informative and useful by major, credible news organizations like *CNN*, *CNBC*, *Politico*, *Bloomberg*, *The Economist*, *The Wall Street Journal*, *The Washington Post*, and *The New York Times*, across sections like *The Upshot*, *DealBook*, opinion columns, and the technology section. In addition, Predictit has repeatedly been cited by prominent political officials and thinkers. Examples include economists like Jason Furman, previously President Obama's Council of Economic Advisors Chair (who submitted a comment letter detailing election markets use while he was in the Administration); Nobel Laureate Paul Krugman, a Professor at The Graduate Center and a columnist for *The New York Times*; and data scientists/reporters like Nate Silver, founder and editor-in-chief of FiveThirtyEight.[9394]

In a public comment, Furman also emphasized the importance of election markets for policy making. As he wrote,

> …in the White House I, along with other members of the economic team, would regularly refer to prediction markets on electoral outcomes and specific events to help inform our understanding of how political and economic developments would affect economic policymaking. In understanding the risks of a government shutdown or debt limit showdown, for example, it would be helpful to understand what informed traders with money at stake would expect—a method of understanding probabilities that research has consistently shown is superior to other ways of summarizing and updating based on information.[95]

[93] For the sake of brevity, a full list of citations in this section can be found at the end of this document.
[94] Public comment letter by Jason Furman. Available at: https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=69708.
[95] *Ibid*

Professor Furman went on to detail the other benefits for the contract, including helping academic researchers and educational benefits, a point also made by others, including Sebastian Strauss. PredictIt also has been used to promote civic engagement by undergraduates. Berg and Chambers (2016) found that using prediction markets, including PredictIt, increased user interest in civics and user news consumption.[96]

The preponderance of the academic literature suggests that existing media has misaligned incentives when it comes to reporting on a given party's chances of political control. This often results in bad reporting. For example, University of Pennsylvania professor Philip Tetlock evaluated the statements made by pundits and found that 15 percent of predictions claimed to be "impossible" did indeed occur and 27 percent of predictions claimed to be a "sure thing" did not.[97]

By providing an instant check against pundits, a market-based price created by the contracts can aid information aggregation for the public. For the numerically-inclined or the financially-minded, a viewer can see that one commentator is asserting that candidate X is a "sure thing" but the Kalshi contract gives them only (e.g.) a 20% chance of winning. They now have a competing alternative to that pundit's information.

Markets tend to be more accurate than any pundit or forecasting alternatives. The efficient, price-discovering nature of markets in a wide range of contexts is a well-substantiated finding in academic research. The collective wisdom of many people who have a direct monetary stake in the outcome results in a valuable price signal. Weather derivatives and agricultural futures are better at predicting the weather than meteorologists. Markets trading on the reproducibility of scientific research are better at discovering which papers will reproduce than experts, who do no better than chance. Most importantly, research studying IEM and PredictIt have confirmed that markets provide more accurate information than traditional forecasting methods.

Kalshi's contracts would provide a visible, well-trusted benchmark against which to evaluate a pundit's predictive power. As Professor Tetlock observed, "prudent consumers should become suspicious" when they confront a public record of poor performance relative to the market. In Tetlock's words, "Unadjusted ex ante forecasting performance tells consumers in the media, business, and government what most want to know: how good are these guys in telling us what will happen next?"[98]

<u>3: The contracts would not serve as threats to either election integrity or the perception thereof; instead, it would improve them both.</u>

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[96] Berg & Chambers. *Bet Out the Vote: Prediction Markets as a Tool to Promote Undergraduate Political Engagement*. 2018. Journal of Political Science Education.
[97] Philip Tetlock. "Expert Political Judgment". 2005.
[98] *Ibid*

Not threatening election integrity

It is important for the Commission to engage with the evidence on election integrity rather than speculate. The *Nadex Order's* suggestion that voters could be incentivized to switch their votes, and thus harm election integrity, was outright speculative in 2012, and has since been disproven by PredictIt's success without any claim of, let alone proof of, election impropriety driven by those markets. Today, election trading remains alive and well in other democracies like the United Kingdom, Australia, Ireland, and New Zealand[99], without documented attempts at–let alone successful–distortion of the electoral process. Several commenters confirmed this, including Eric Crampton, the academic advisor to iPredict, a New Zealand based political prediction market:

> What experience we had with iPredict suggests CFTC really doesn't have anything substantial to worry about in allowing contracts on political events. If anything, they heightened voter engagement. The CE [Chief Executive] of iPredict even featured on the nightly news during the election, giving the latest on election market prices. And for that brief period, whenever blowhard partisans insisted that some outcome was going to happen, people could just point to the iPredict price on the event and ask them why they thought that price was wrong, and whether they'd actually put their money where their mouth was. It was a remarkable era. iPredict inflation forecasts (they also had markets on inflation going out several years - it was so very good) wound up being noted in our Reserve Bank's Monetary Policy Statements. I desperately miss it. I envy the opportunities Americans could have if CFTC takes a sensible approach to regulation.[100]

Or Dustin Moskovitz, a co-founder of Facebook and founder of Asana:

> Of course, it's important to validate that these contracts would not conflict with the public interest, and specifically the integrity of our elections. I am confident, however, they would not do so. Similar markets not only exist in many liberal democracies like the UK, but create a thriving scene that actually encourages voter participation and engagement.[101]

References to other political markets without integrity issues were made by many commenters, including, in addition to the above, Justin Xavier Geraghty, Upsolve founder Rohan Pavuluri, People's Policy Project founder Matt Bruenig, Zvi Mowshowitz, Roots of Progress founder

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[99] iPredict, the New Zealand political trading exchange, is no longer in operation, but was following the *Nadex Order*.

[100] Public comment by Eric Crampton. Available at https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=69738.

[101] Public comment by Dustin Moskovitz. Available athttps://comments.cftc.gov/PublicComments/ViewComment.aspx?id=69716.

Jason Crawford, macro analyst Sebastian Strauss, Quantitative Management Associates co-founder Margaret Stumpp, and New York University Law School professor Max Raskin, among others.

The economic impacts of elections themselves dwarf the value of Kalshi's contracts many, many times over. Likely trillions in stock value are deeply dependent on elections; entire sectors, firms, and places can be favored by a candidate for office; and almost every actor in the economy is directly affected by tax rates. Elections already have billions in consequences for retail, small businesses, and industry, dwarfing the value of any Kalshi contract, and yet attempts at manipulation are unlikely, and successful manipulation even more so, thanks to the large, decentralized nature of elections, strong political norms, and laws protecting the vote. These contracts do not change, much less materially change the fact that individuals already have large stakes in election outcomes.

The only groups that can directly affect the leadership decisions are the U.S. Senate and U.S. House of Representatives. Members of these groups are extremely unlikely to attempt intentional manipulation of the leadership of their chambers merely to settle the contracts a certain way. Their finances are heavily monitored and subject to public disclosure and scrutiny, and Kalshi does not permit them, their close associates, or families to trade. Kalshi flags them and other politically exposed persons in the Know-Your-Customer authorization. Members of Congress also have a sworn duty to represent their constituents and have strong incentives not to manipulate electoral processes for private gain. Other related officials (like election officials, vote counters) also take such oaths and are heavily monitored because of the strong public interest in maintaining election integrity. This should clarify any claim that this could de-legitimize elections internal to Congress itself.

As further evidence, consider the history of political control contracts. University of Michigan professor Paul Rhode and Wake Forest professor Koleman Strumpf conducted a systematic review of the history of prediction markets both domestically and abroad, documenting their emergence back to "16th century Italy, 18th century Britain and Ireland, 19th century Canada and 20th century Australia and Singapore."[102][103] In the United States, they were popular from the post-Civil War period until the Great Depression tarnished the image of Wall Street in the public imagination. They wrote,

> Although vast sums of money were at stake, we are not aware of any evidence that the political process was seriously corrupted by the presence of a wagering market. This

[102] Paul Rhode and Koleman Strumpf. 2012. "The Long History of Political Betting Markets: An International Perspective." Strumpf also was a signatory to a supportive public comment. *See* Public comment 69735. Available at: https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=69735&SearchText

[103] Paul Rhode and Koleman Strumpf. 2003. "Historical Prediction Markets: Wagering on Presidential Elections".

analysis suggests many current concerns about the appropriateness of prediction markets are not well founded in the historical record.[104]

Prices are not able to be manipulated to the give the false impression of momentum

One may also imagine that a coordinated group of individuals may conspire to manipulate market prices to give the false impression of candidate "momentum," thus potentially harming the democratic process. This concern has been tested several times by researchers, who have concluded that all attempts at manipulation have failed.

Koleman and Strumpf in a later paper examined previous American political prediction markets and found that no previous effort at manipulation was capable of sustaining anything more than fleeting price movements. They wrote, "we find little evidence that political stock markets can be systematically manipulated beyond short time periods."[105] Moreover, the markets examined were much smaller and thus even more prone to manipulation than a fully regulated, liquid market like a DCM. As a result, manipulation on Kalshi's market is even less plausible. Indeed, as George Mason University professor Robin Hanson and University of California at Santa Barbara professor Ryan Oprea found, one major reason why political contracts are resistant to manipulation attempts is that any attempt to manipulate prices induces informed counter-parties to enter on the other side of the market.[106] In fact, the greater the attempts to jack up one side's prices, the greater the returns to becoming an informed trader. As University of Michigan economist Justin Wolfers and Dartmouth economist Eric Zitzewitz wrote regarding previous political contracts, "none of these attempts at manipulation had a discernible effect on prices, except during a short transition phase."[107] This finding was also supported by over two dozen economists in their 2012 Nadex letter and by many letters supporting Kalshi's submission.[108][109]

Importantly, the fact that these contracts are already traded on Commission-sanctioned unregistered trading venues in the United States by Americans should demonstrate that they do not cause manipulation and that the markets are safe. In 2014, PredictIt, a new unregistered trading venue dedicated to election and political event contracts, received a no-action letter.

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[104] Paul Rhode and Coleman Strumpf. 2003. "Historical Prediction Markets: Wagering on Presidential Elections".

[105] Paul Rhode and Koleman Strumpf. 2005. "Manipulating Political Stock Markets: A Field Experiment and a Century of Observational Data."

[106] Robin Hanson and Ryan Oprea. 2008. "A Manipulator Can Aid Prediction Market Accuracy." *Economica*.

[107] Justin Wolfers and Eric Zitzewitz. 2006. "Prediction Markets in Theory and Practice".

[108] *Nadex* public comment by Zitzewitz et al. Available at https://www.cftc.gov/sites/default/files/stellent/groups/public/@rulesandproducts/documents/ifdocs/ericzitzewitzltr020312.pdf.

[109] For example, the public comment by David Rothschild and company. Available at: https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=69735&SearchText=.

Since then, it has hosted more than $1B in contracts traded and has more than a quarter of a million registered users.[110]

This information – that hundreds of millions of dollars can be traded on political control contracts without triggering manipulation – was not available to the Commission the last time it considered similar event contracts in 2012. Although another political contract trading venue, the Iowa Electronics Market, received a no action letter in 1992, IEM is smaller and harder to access by individuals not associated with the University of Iowa. Now, far more money is known to have been traded on election outcomes.

The contracts would combat illegal behavior, improving the perception of election integrity

Americans can also readily access offshore platforms using a virtual private network such as Betfair.[111] Betfair had more than $500 million traded on the 2020 election.[112]These platforms are not registered with the Commission as DCMs, but frequently host such markets. There are no indications that the markets caused or induced an attempt to manipulate elections, let alone a successful manipulation. However, if the Commission is concerned that election markets could nevertheless create election integrity threats, it is imperative to shift trading to an exchange compliant with the Core Principles, with insider trading protections, surveillance, and KYC. In this way, among others, approving the contracts would improve, not harm, election integrity and the perception of it.

As part of the Exchange's KYC verification and monitoring system, the Exchange also cross-checks applicants against comprehensive databases. In particular, the Exchange will check whether any Members trading on these contracts are on databases of Politically Engaged Persons. The Exchange further cross checks applicants against databases of family members and close associates of Politically Engaged Persons. These checks help to further reduce the potential for trading violations and further increase the integrity of this Contract.

The contracts would promote the public perception in election integrity by providing an accurate and competing tool for election forecasting

As described in detail in the second part of this question's response, there is immense social value in accurate election forecasts. This will fight disinformation and promote truth with politics, increasing voter confidence and engagement.

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[110] LinkedIn profile of former PredictIt employee: "Oversaw company growth of nearly 400% - from roughly 50,000 registered users to more than 250,000 registered users, and over 1.2 billion shares traded on PredictIt's market exchange." https://www.linkedin.com/in/will-jennings-pi/

[111] Comment letter by policy commentator Matt Bruenig. Available at https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=69670.

[112] See end of document.

Decreasing Partisanship

Studies consistently show that polarization and partisanship has increased dramatically in the last few decades: every year, greater numbers of people say they believe people from the opposite party are "immoral" and express other hostile sentiments. More concerning than mere hostility is how partisan antipathy can create alternative sets of facts--voters from different parties simply believe two sets of facts about the world. It is from this miasma where conspiracy theories about stolen elections emerge that damage the electoral process.

Prediction markets can help remedy this problem. Economists John Bullock, Alan Gerber, Seth Hill, Gregory Huber conducted an experiment in 2013 and found that partisan gap in beliefs (e.g. if Republicans believe a statement is true with probability 80%, and Democrats believe it with probability 35%, then the partisan gap is 45 percentage points) shrunk by a shocking 55 percent when participants were given a financial incentive for being right.[113] If they were given a lesser financial prize for answering "unsure" (versus none for being wrong and a greater amount for getting it correct), the gap shrunk by about 80 percent.

The reasoning roughly tracks as follows: when no money is at stake, people conflate their beliefs as preferences. For example, a highly partisan liberal may say that a Democratic Party candidate is definitely going to win the 2024 presidential elections this year (a belief), when in reality they merely want the Democrat to win the championship (a preference). However, that same individual when challenged to trade money on that "definite" prediction will re-evaluate and calculate the odds and decide whether or not they should take that trade. In short, when no money is at stake, people express beliefs as mere signaling, lending itself to heavy partisan bias. When money is at stake, they are able to differentiate their beliefs from their preferences. In other words, the partisan reality gap shrinks, and individuals who trade on election markets become more attune to facts and less to partisan groupthink.

In conclusion, the contracts are not contrary to the public interest; rather, it strongly supports the public interest, as demonstrated by the evidence above. The contracts will improve asset pricing, provide risk management opportunities, enhance election integrity and trust, and shift trading activity to regulated exchanges.

15. Could the trading of these or other political control or election-based contracts affect the integrity of elections or elections within a chamber of Congress? Could they affect the perception of the integrity of elections or elections within a chamber of Congress?

[113] John Bullock, Alan Gerber, Seth Hill, Gregory Huber. 2013. "Partisan Bias in Factual Beliefs about Politics."

No. The benefits that Kalshi's contracts will have on the electoral and political process, as well as reasons why it will not have a negative effect, are also discussed in the prior question's response. Many of those same arguments are repeated here for ease and clarity, organized to suit this question.

1: The contracts will not harm election integrity or the perception of election integrity

It is important for the Commission to engage with the evidence on election integrity rather than speculate. The *Nadex Order's* suggestion that voters could be incentivized to switch their votes, and thus harm election integrity, was outright speculative in 2012, and has since been disproven by PredictIt's success without any claim of, let alone proof of, election impropriety driven by those markets. Today, election trading remains alive and well in other democracies like the United Kingdom, Australia, Ireland, and New Zealand[114], without documented attempts at–let alone successful–distortion of the electoral process. Several commenters confirmed this, including Eric Crampton, the academic advisor to iPredict, a New Zealand based political prediction market:

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[116] Public comment by Dustin Moskovitz. Available athttps://comments.cftc.gov/PublicComments/ViewComment.aspx?id=69716.

References to other political markets without integrity issues were made by many commenters, including, in addition to the above, Justin Xavier Geraghty, Upsolve founder Rohan Pavuluri, People's Policy Project founder Matt Bruenig, Zvi Mowshowitz, Roots of Progress founder Jason Crawford, macro analyst Sebastian Strauss, Quantitative Management Associates co-founder Margaret Stumpp, and New York University Law School professor Max Raskin, among others.

The economic impacts of elections themselves dwarf the value of Kalshi's contracts many, many times over. Likely trillions in stock value are deeply dependent on elections; entire sectors, firms, and places can be favored by a candidate for office; and almost every actor in the economy is directly affected by tax rates. Elections already have billions in consequences for retail, small businesses, and industry, dwarfing the value of any Kalshi contract, and yet attempts at manipulation are unlikely, and successful manipulation even more so, thanks to the large, decentralized nature of elections, strong political norms, and laws protecting the vote. These contracts do not change, much less materially change the fact that individuals already have large stakes in election outcomes.

The only groups that can directly affect the leadership decisions are the U.S. Senate and U.S. House of Representatives. Members of these groups are extremely unlikely to attempt intentional manipulation of the leadership of their chambers merely to settle the contracts a certain way. Their finances are heavily monitored and subject to public disclosure and scrutiny, and Kalshi does not permit them, their close associates, or families to trade. Kalshi flags them and other politically exposed persons in the Know-Your-Customer authorization. Members of Congress also have a sworn duty to represent their constituents and have strong incentives not to manipulate electoral processes for private gain. Other related officials (like election officials, vote counters) also take such oaths and are heavily monitored because of the strong public interest in maintaining election integrity. This should clarify any claim that this could de-legitimize elections internal to Congress itself.

As further evidence, consider the history of political control contracts. University of Michigan professor Paul Rhode and Wake Forest professor Koleman Strumpf conducted a systematic review of the history of prediction markets both domestically and abroad, documenting their emergence back to "16th century Italy, 18th century Britain and Ireland, 19th century Canada and 20th century Australia and Singapore."[117][118] In the United States, they were popular from the

[117] Paul Rhode and Koleman Strumpf. 2012. "The Long History of Political Betting Markets: An International Perspective." Strumpf also was a signatory to a supportive public comment. *See* Public comment 69735. Available at: https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=69735&SearchText

[118] Paul Rhode and Koleman Strumpf. 2003. "Historical Prediction Markets: Wagering on Presidential Elections".

post-Civil War period until the Great Depression tarnished the image of Wall Street in the public imagination.. They wrote,

> Although vast sums of money were at stake, we are not aware of any evidence that the political process was seriously corrupted by the presence of a wagering market. This analysis suggests many current concerns about the appropriateness of prediction markets are not well founded in the historical record.[119]

One may also imagine that a coordinated group of individuals may conspire to manipulate market prices to give the false impression of candidate "momentum," thus potentially harming the democratic process. This concern has been tested several times by researchers, who have concluded that all attempts at manipulation have failed.

Koleman and Strumpf in a later paper examined previous American political prediction markets and found that no previous effort at manipulation was capable of sustaining anything more than fleeting price movements. They wrote, "we find little evidence that political stock markets can be systematically manipulated beyond short time periods."[120] Moreover, the markets examined were much smaller and thus even more prone to manipulation than a fully regulated, liquid market like a DCM. As a result, manipulation on Kalshi's market is even less plausible. Indeed, as George Mason University professor Robin Hanson and University of California at Santa Barbara professor Ryan Oprea found, one major reason why political contracts are resistant to manipulation attempts is that any attempt to manipulate prices induces informed counter-parties to enter on the other side of the market.[121] In fact, the greater the attempts to jack up one side's prices, the greater the returns to becoming an informed trader. As University of Michigan economist Justin Wolfers and Dartmouth economist Eric Zitzewitz wrote regarding previous political contracts, "none of these attempts at manipulation had a discernible effect on prices, except during a short transition phase."[122] This finding was also supported by over two dozen economists in their 2012 Nadex letter and by many letters supporting Kalshi's submission.[123][124]

Importantly, the fact that these contracts are already traded on Commission-sanctioned unregistered trading venues in the United States by Americans should demonstrate that they do not cause manipulation and that the markets are safe. In 2014, PredictIt, a new unregistered

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[119] Paul Rhode and Coleman Strumpf. 2003. "Historical Prediction Markets: Wagering on Presidential Elections".

[120] Paul Rhode and Koleman Strumpf. 2005. "Manipulating Political Stock Markets: A Field Experiment and a Century of Observational Data."

[121] Robin Hanson and Ryan Oprea. 2008. "A Manipulator Can Aid Prediction Market Accuracy." *Economica*.

[122] Justin Wolfers and Eric Zitzewitz. 2006. "Prediction Markets in Theory and Practice".

[123] *Nadex* public comment by Zitzewitz et al. Available at https://www.cftc.gov/sites/default/files/stellent/groups/public/@rulesandproducts/documents/ifdocs/ericzitzewitzltr020312.pdf.

[124] For example, the public comment by David Rothschild and company. Available at: https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=69735&SearchText=.

trading venue dedicated to election and political event contracts, received a no-action letter. Since then, it has hosted more than $1B in contracts traded and has more than a quarter of a million registered users.[125]

This information – that hundreds of millions of dollars can be traded on political control contracts without triggering manipulation – was not available to the Commission the last time it considered similar event contracts in 2012. Although another political contract trading venue, the Iowa Electronics Market, received a no action letter in 1992, IEM is smaller and harder to access by individuals not associated with the University of Iowa. Now, far more money is known to have been traded on election outcomes.

2: It would improve election integrity and the perception of election integrity.

It would also improve election integrity, and the perception thereof, by providing a useful tool for voters, the media, and the public that would fight disinformation and improve election integrity.

Shifting trading to a regulate house

Americans can also readily access offshore platforms using a virtual private network such as Betfair.[126] Betfair had more than $500 million traded on the 2020 election.[127]These platforms are not registered with the Commission as DCMs, but frequently host such markets. There are no indications that the markets caused or induced an attempt to manipulate elections, let alone a successful manipulation. However, if the Commission is concerned that election markets could nevertheless create election integrity threats, it is imperative to shift trading to an exchange compliant with the Core Principles, with insider trading protections, surveillance, and KYC. In this way, among others, approving the contracts would improve, not harm, election integrity and the perception of it.

As part of the Exchange's KYC verification and monitoring system, the Exchange also cross-checks applicants against comprehensive databases. In particular, the Exchange will check whether any Members trading on these contracts are on databases of Politically Engaged Persons. The Exchange further cross checks applicants against databases of family members and close associates of Politically Engaged Persons. These checks help to further reduce the potential for trading violations and further increase the integrity of this Contract.

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[125] LinkedIn profile of former PredictIt employee: "Oversaw company growth of nearly 400% - from roughly 50,000 registered users to more than 250,000 registered users, and over 1.2 billion shares traded on PredictIt's market exchange." https://www.linkedin.com/in/will-jennings-pi/

[126] Comment letter by policy commentator Matt Bruenig. Available at https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=69670.

[127] See end of document.

Disrupting Disinformation

The preponderance of the academic literature suggests that existing media information has grossly misaligned incentives when it comes to reporting on a candidate's chances. These misinformed incentives tend to come from three sources: first, pundits may want to hype up a preferred candidate's chances in order to flatter the sensibilities of their audience. Second, pundits may want to directly contradict a so-called "mainstream" line about a candidate winning in order to gin up controversy and draw more clicks or viewership. As a result, they may claim an underdog is actually the true favorite and, to further court controversy and viewership, claim that evidence to the contrary is a function of fraud and deception. Third, even when pundits attempt to be honest, viewers themselves may seek out information that confirms their own biases, thus rewarding a subset of relatively dishonest commentators with greater advertising revenue from the increased viewership or readership. In fact, we have empirical evidence of the dismal performance of media figures in the science of prediction. University of Pennsylvania professor Philip Tetlock decided to evaluate the statements made by pundits to see if they bore a relationship to reality--they did not. 15 percent of statements claimed to be "impossible" did indeed occur and 27 percent of statements claimed to be a "sure thing" did not.[128]

How can transparent, regulated election prediction markets help to ameliorate this situation? By providing an instant check against the ability of pundits to assert specific outcomes are "likely" when in reality they are long-shots. For the numerically-inclined or the financially-minded, a viewer can see that one commentator is asserting that candidate X is a "sure thing" but the prediction markets give them only (e.g.) a 20% chance of winning, they now know to view that commentator with suspicion. Unless that individual gives compelling reasons why thousands of highly informed individuals with money at stake are all systematically wrong, a viewer can understand that the content they are receiving is ideologically motivated and adjust accordingly.

Markets tend to be more accurate than any pundit or forecasting alternatives. The efficient, price-discovering nature of markets in a wide range of contexts is an extremely well-substantiated finding in academic research. The collective wisdom of many people who have a direct monetary stake in the outcome results in an incredibly valuable price signal. Weather derivatives and agricultural futures are better at predicting the weather than meteorologists. Markets trading on the reproducibility of scientific research are much better at discovering which papers will reproduce than experts, who do no better than chance. Most importantly, research studying IEM and PredictIt have confirmed that election markets provide more accurate information than traditional methods.

[128] Philip Tetlock. "Expert Political Judgment". 2005.

By creating a visible, well-trusted benchmark against which to evaluate a pundit's predictive power, Tetlock writes, "prudent consumers should become suspicious" when they confront a public record of poor performance relative to the market. In Tetlock's words, "Unadjusted ex ante forecasting performance tells consumers in the media, business, and government what most want to know: how good are these guys in telling us what will happen next?"[129]

Considering how destructive the scourges of misinformation and fake news have become to our Republic--and how critical a role the media has played in amplifying that misinformation--the need for prediction markets as a potential check only grows. Indeed, we would contend that the benefit of election prediction markets on reducing misinformation is large.

Decreasing Partisanship

Studies consistently show that polarization and partisanship has increased dramatically in the last few decades: every year, greater numbers of people say they believe people from the opposite party are "immoral" and express other hostile sentiments. More concerning than mere hostility is how partisan antipathy can create alternative sets of facts--voters from different parties simply believe two sets of facts about the world. It is from this miasma where conspiracy theories about stolen elections emerge that damage the electoral process.

Prediction markets can help remedy this problem. Economists John Bullock, Alan Gerber, Seth Hill, Gregory Huber conducted an experiment in 2013 and found that partisan gap in beliefs (e.g. if Republicans believe a statement is true with probability 80%, and Democrats believe it with probability 35%, then the partisan gap is 45 percentage points) shrunk by a shocking 55 percent when participants were given a financial incentive for being right.[130] If they were given a lesser financial prize for answering "unsure" (versus none for being wrong and a greater amount for getting it correct), the gap shrunk by about 80 percent.

The reasoning roughly tracks as follows: when no money is at stake, people conflate their beliefs as preferences. For example, a highly partisan liberal may say that a Democratic Party candidate is definitely going to win the 2024 presidential elections this year (a belief), when in reality they merely want the Democrat to win the championship (a preference). However, that same individual when challenged to trade money on that "definite" prediction will re-evaluate and calculate the odds and decide whether or not they should take that trade. In short, when no money is at stake, people express beliefs as mere signaling, lending itself to heavy partisan bias. When money is at stake, they are able to differentiate their beliefs from their preferences. In other words, the partisan reality gap shrinks, and individuals who trade on election markets become more attune to facts and less to partisan groupthink.

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[129] *Ibid*

[130] John Bullock, Alan Gerber, Seth Hill, Gregory Huber. 2013. "Partisan Bias in Factual Beliefs about Politics."

Empowering Researchers and Policymakers

One of the most exciting applications of election event contracts is their ability to provide powerful new causal inference tools to researchers and policymakers. Right now, estimating the effect of elections is rather difficult--one cannot merely compare economic outcomes during one presidential administration versus another because the underlying conditions have dramatically changed. Likewise, comparing forward-looking financial indicators before and after Election Day runs into several problems, including that many markets are closed overnight and that the market has already priced in some probability of the eventual victor winning.

Enter political control contracts. If Party X has a 80 percent chance of winning and then when they actually win on election night, a stock goes up 1%, we can say that the total effect of the election was 5 percentage point (if going from 80 to 100 is 1%, then going from 0 to 100 is roughly 5%). But it can get even stronger: since researchers would now have a time series of how the probabilities change over time, they can use other events like debates, prominent speeches and the revelation of major scandals to regress forward-looking financial variables on election outcomes in a way impossible without prediction markets.

These tools are far from hypotheticals. Economists Justin Wolfers and Eric Zitzewitz have already conducted several studies that used previous prediction markets (like the Iowa Electronic Exchange) to discern the effects of political outcomes on economic variables.[131][132] However, the lack of liquidity on their underlying markets makes their studies relatively under-powered. Having a transparent, regulated exchange with greater liquidity could dramatically expand the universe of questions researchers could answer with this data.

Beyond researchers, a transparent, regulated exchange would create a large incentive for traders to develop sophisticated and accurate models about election outcomes in order to gain an edge. The 2016 and 2020 elections were famous for the failure of (most) published models, often attributed to systematic non-response bias in polls. A liquid prediction market would create an incentive for trading firms to develop solutions to these hard issues in order to make more money. Fortunately, there are substantial positive externalities to these investments: learning how better to model, poll and understand the population would help policymakers better understand their constituents so they can figure out what they actually want. Voting is a noisy signal of preferences--the financial incentive to create models to discern voter intentions could thus make our democracy even more responsive.

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[131] Erik Snowberg, Justin Wolfers and Eric Zitzewitz. "Partisan Impact on the Economy". *Journal of Economic Perspectives.* 2004.

[132] Erik Snowberg, Justin Wolfers and Eric Zitzewitz. "Party Influence in Congress and the Economy." 2006.

The demand for accurate information surrounding elections is enormous, and valuable. This is why so many Americans turn to election models and updates offered by *FiveThirtyEight*, *The New York Times*, and *The Economist* come election time for advanced models that incorporate information. On election night 2020, PredictIt's website crashed because of so much incoming traffic. Its markets being consistently referenced as informative and useful by major, credible news organizations like *CNN*, *CNBC*, *Politico*, *Bloomberg*, *The Economist*, *The Wall Street Journal*, *The Washington Post*, and *The New York Times*, across sections like *The Upshot*, *DealBook*, opinion columns, and the technology section. In addition, it has repeatedly been cited by prominent political officials and thinkers. Examples include economists like Jason Furman, previously President Obama's Council of Economic Advisors Chair (who submitted a comment letter detailing election markets use while he was in the Administration); Nobel Laureate Paul Krugman, a Professor at The Graduate Center and a columnist for *The New York Times*; and data scientists/reporters like Nate Silver, founder and editor-in-chief of FiveThirtyEight.[133][134]

16. Could the contracts be used to influence perception of a political party or its candidates' likelihood of success? To this end, could the contracts be used to manipulate fundraising or voting?

No. This concern has been tested several times by researchers on far smaller markets (which would be more susceptible to manipulation than a large, liquid market hosted by a regulated DCM) who have concluded that all attempts at manipulation have failed. The Commission should be evidence-based in its decision, though this also makes sense in theory.

Koleman and Strumpf examined American political prediction markets and found that no previous effort at manipulation was capable of sustaining anything more than fleeting price movements. They wrote, "we find little evidence that political stock markets can be systematically manipulated beyond short time periods."[135] Moreover, the markets examined were much smaller and thus even more prone to manipulation than a fully regulated, liquid market like one offered by a Designated Contract Market. As a result, manipulation on Kalshi's market is even less plausible. Indeed, as George Mason University professor Robin Hanson and University of California at Santa Barbara professor Ryan Oprea found, one major reason why political contracts are resistant to manipulation attempts is that any attempt to manipulate prices induces informed counter-parties to enter on the other side of the market.[136] In fact, the greater the attempts to push up one side's prices, the greater the returns to becoming an informed trader. As University of Michigan economist Justin Wolfers and Dartmouth economist Eric Zitzewitz wrote

[133] For the sake of brevity, a full list of citations in this section can be found at the end of this document.
[134] Public comment letter 69708. Available at: https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=69708.
[135] Paul Rhode and Koleman Strumpf. 2005. "Manipulating Political Stock Markets: A Field Experiment and a Century of Observational Data."
[136] Robin Hanson and Ryan Oprea. 2008. "A Manipulator Can Aid Prediction Market Accuracy." *Economica*.

regarding previous political contracts, "none of these attempts at manipulation had a discernible effect on prices, except during a short transition phase."[137] This finding was also supported by over two dozen economists in their 2012 Nadex letter and by many letters supporting Kalshi's submission.[138][139]

This information–that billions of dollars have been traded on contemporary political control contracts without triggering manipulation–was not available to the Commission the last time it considered similar event contracts in 2012. Although another political contract trading venue, the Iowa Electronics Market, received a no-action letter in 1992, IEM is smaller and harder to access by individuals not associated with the University of Iowa. Now, far more money is known to have been traded on election outcomes without any adverse consequences.

Almost all claims that this is a possible threat are unsubstantiated, though the letter provided by Dennis Kelleher of Better Markets does try to provide some evidence. Specifically, it argued:

> The proposed event contract is readily susceptible to manipulation… In her 2009 Harvard Law Review article "Prediction Markets and Law: A Skeptical Account," Professor Rebecca Haw Allensworth detailed how bad actors might manipulate prediction markets: 'Prediction markets are vulnerable to manipulation…First, they could profit by artificially lowering the trading price temporarily and purchasing shares to be sold at a higher price when the market returns to 'normal'. Second, they could try to affect the informational value of the market. For example, a candidate's supporter could purchase his shares at an inflated value, raising the perceived odds that he would win the election, and (hopefully) getting more voters to jump on the putative bandwagon'.[140]

There are several issues with this line of reasoning:

1. Critically, this is a misapplication of the cited research.
    a. Allensworth only cites one incident of successful manipulation, on an online exchange called TradeSports, referencing the case study on the incident conducted by Paul W. Rhode & Koleman S. Strumpf's, "Manipulating Political Stock Markets: A Field Experiment and a Century of Observational Data." However, Rhode and Strumpf conclude the opposite of Allensworth/Better Markets: that even the attempt to manipulate TradeSports' small, unregulated market only succeeded in changing prices briefly, and conclude, "In the cases studied here, the speculative attack initially moved prices, but these changes were quickly undone and prices returned close to their previous levels. We find little evidence that

[137] Justin Wolfers and Eric Zitzewitz. 2006. "Prediction Markets in Theory and Practice".
[138] *Nadex* public comment by Zitzewitz et al. Available at https://www.cftc.gov/sites/default/files/stellent/groups/public/@rulesandproducts/documents/ifdocs/ericzitzewitzltr020312.pdf.
[139] For example, the public comment by David Rothschild and company. Available at: https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=69735.
[140] Public Comment by Dennis Kelleher. Available at: https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=70788

political stock markets can be systematically manipulated beyond short time periods."

b. The other study cited, by Deck et al., does find researchers successfully manipulate a small exchange of *their own creation, with made up assets, with a mere eight traders*. This clearly cannot be grounds to judge Kalshi's proposed contracts.

2. The vast majority of research on this issue demonstrates how shockingly resilient such markets are to manipulation even in spite of no regulation. This is discussed at length also in Appendix G, which details how the Contract is in compliance with Core Principle 3.

a. Like Allenworth, Deck et al. acknowledge this.[141] They wrote, "Wolfers and Zitsewitz (2004, p. 119) assert that 'The profit motive has usually proven sufficient to ensure that attempts at manipulating these [prediction] markets were unsuccessful.' Failed attempts at manipulating markets include political candidates betting on themselves (Wolfers and Leigh 2002) and bettors placing large wagers at horse races (Camerer 1998). Hansen, et al. (2004) did successfully manipulate election prediction markets, but the effects were short lived. In fact, Rhode and Strumph (2009, p. 37) provide an extensive discussion of attempts to manipulate political markets and conclude that 'In almost every speculative attack, prices experienced measurable initial changes. However, these movements were quickly reversed and prices returned close to their previous levels.'" They go on to cite more experiments that showed resilience to manipulation, including that of Ryan Oprea and Robin Hanson, two supportive commenters.[142] They do not find any research that shows any successful manipulation that is not short-lived.

3. The research cited by Better Markets only focused on small-scale, generally illiquid, unregulated online prediction markets. A highly regulated market that can onboard institutional clients is even less likely to be a victim of a particular manipulator, as markets incentivize speculators to reverse any potential price impact a manipulator could have. Indeed, Hanson and Oprea found, one major reason why political contracts are resistant to manipulation attempts is that any attempt to manipulate prices induces informed counter-parties to enter on the other side of the market. In fact, the greater the attempts to jack up one side's prices, the greater the returns to becoming an informed trader. As University of Michigan economist Justin Wolfers and Dartmouth economist Eric Zitzewitz wrote regarding previous political contracts, "none of these attempts at manipulation had a discernible effect on prices, except during a short transition phase." This finding was also noted by over two dozen economists in their 2012 Nadex letter and by many letters supporting Kalshi's submission.

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[141] Deck, C., Lin, S., & Porter, D. (2010). Affecting policy by manipulating prediction markets: Experimental evidence. ESI Working Paper 10-17.

[142] Hanson, R. and Oprea, R. "A Manipulator Can Aid Prediction Market Accuracy," Economica, 2009, 76, 304-314.

17. Could the contracts facilitate violations of, or otherwise undermine, federal campaign finance laws or regulations? For example, could the contracts make it easier to sidestep prohibitions governing coordination between candidate campaign committees and political action committees?

No. The concerns this question raises are completely unrelated to the contract's function or impact. It would not improve (or impact at all) the ability of PACs and campaigns to coordinate.

If the implication is that they could do so more easily by providing an accurate picture of the state of the race, then public polling would also help such parties sidestep federal law, a plainly untenable proposition.

As described earlier, it is not plausible for any actor to try and create 'momentum' for their party by buying up one side's shares. One may also imagine that a coordinated group of individuals may conspire to manipulate market prices to give the false impression of candidate "momentum", thus potentially harming the democratic process. This concern has been tested several times by researchers, with all attempts failing. Koleman and Strumpf in a later paper examined previous American political prediction markets and found that no previous effort at manipulation were capable of sustaining anything more than fleeting price movements. They wrote, "we find little evidence that political stock markets can be systematically manipulated beyond short time periods."[143] Moreover, the markets examined were much smaller and thus even more prone to manipulation than a fully regulated, liquid market like a DCM. As a result, the probability of manipulation is implausible. Indeed, as George Mason University professor Robin Hanson and University of California at Santa Barbara professor Ryan Oprea found in one paper, one major reason why political contracts are rather invulnerable to manipulation attempts is that any attempt to manipulate prices induces informed counter-parties to enter on the other side of the market.[144] In fact, the greater the attempts to increase one side's prices, the greater the returns to an informed trader. As University of Michigan economist Justin Wolfers and Dartmouth economist Eric Zitzewitz write regarding previous political contracts, "none of these attempts at manipulation had a discernible effect on prices, except during a short transition phase."[145] This finding was also supported by the 2012 Nadex letter by over two dozen economists in the field and many of the ones supporting Kalshi's submission.[146][147]

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[143] Paul Rhode and Koleman Strumpf. 2005. "Manipulating Political Stock Markets: A Field Experiment and a Century of Observational Data."

[144] Robin Hanson and Ryan Oprea. 2008. "A Manipulator Can Aid Prediction Market Accuracy." *Economica*.

[145] Justin Wolfers and Eric Zitzewitz. 2006. "Prediction Markets in Theory and Practice".

[146] *Nadex* public comment by Zitzewitz et al. Available at https://www.cftc.gov/sites/default/files/stellent/groups/public/@rulesandproducts/documents/ifdocs/ericzitzewitzltr020312.pdf.

[147] For example, the public comment by David Rothschild and others. Available at: https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=69735&SearchText=.

18. Do the contracts present any special considerations with respect to susceptibility to manipulation or surveillance requirements?

As discussed at length in other parts of this letter, Kalshi's contract is not readily susceptible to manipulation, and is outright less susceptible than other commodity futures contracts. Kalshi engages in extensive market surveillance and employs Know-Your-Customer authorization to prevent manipulation in compliance with the Core Principles. Accordingly, we believe the contemplated measures combined with Kalshi's robust market surveillance program and dedicated technology are appropriately calibrated to address the particular risks associated with these particular contracts. Kalshi's rules also prohibit trading on non-public material information.

As with other contracts that deal with publicly important information, such as on the monetary policy decisions of the Federal Reserve, the integrity of the decision-making process by the Federal Open Market Committee has not been eroded despite contracts that trade enormous volumes on their impact. This is no different.

For these contracts, Kalshi employs Know-Your-Customer authorization and would prevent trading by Politically Exposed Persons, including campaigns and PACs, as well as operator's close associates and family. It also has identified a long list of political actors who are specifically prohibited from trading.

Regarding informational advantages of market participants and private polling, a privately commissioned poll is not materially non-public information; any market actor can employ similar research strategies in many other markets. Every market has a discrepancy between its trading members' resources. For example, hedge funds have access to Bloomberg terminals that retail investors can't afford. Market participants have a financial incentive to gain access to better information; entire teams of meteorologists are hired to accurately predict agricultural futures prices. As then Commissioner Quintenz explained, "The goal of financial markets is not to protect or shelter the less informed. Rather, the market incentivizes being informed and executing on that knowledge. In other words, market efficiencies are earned - they are created through research, investment, and intellectual property."[148] This is a benefit of listing a market, not a harm; it results in more accurate pricing for the market, the benefits of which are discussed in detail in the questions regarding public interest.

Further, there are robust protections against manipulation. The Exchange has rules that prohibit manipulative trading, and the Exchange performs surveillance to detect manipulation. This serves as a deterrent to attempts to manipulate the market via manipulative trading. In addition, the Exchange's rules also prohibit trading on non-public information, and the Exchange performs

[148] See Statement of Commissioner Brian D. Quintenz on the Certification of ICE Futures U.S., Inc. Submission No. 19-119, May 15, 2019. Available at: https://www.cftc.gov/PressRoom/SpeechesTestimony/quintenzstatement051519

surveillance to detect violations of this rule. The Exchange is also adopting contract specific gating rules that further buttress this rule. Specifically:

a. Before being allowed to participate, market participants must certify that they are not implicated by the prohibition list in Appendix B
b. Before being allowed to participate, market participants must certify that they do not have access to material nonpublic information
c. The Exchange's surveillance staff will conduct manual background checks and interviews with the top traders in a market, as well as randomly selected participants, to monitor and enforce the gating rules

The Exchange will be surveilling its market for any sign of trading that is indicative of manipulative or fraudulent behavior. The Commission will have all of the necessary data to do the same, should it so wish.

As discussed at length earlier in this response and in Kalshi's original filing, American elections are not readily susceptible to manipulation. In fact, manipulation of which party controls the U.S. Congress has never occurred. This is in contrast to existing markets that the CFTC regulates. Indeed, the CFTC has brought numerous enforcement actions against market participants who either manipulated or attempted to manipulate markets in oil, precious metals, cattle, and other commodity spot and futures markets. The Commission regularly brings almost a hundred enforcement actions per year and orders billions in monetary relief. Then, of course, there are digital asset markets, where the Commission has brought dozens of actions in an incredibly short time. Contrast that with elections, where election or voter fraud is extremely rare, and never succeeds at flipping the outcome of which party controls Congress. Even in cases where election manipulation has been attempted, it has only succeeded in affecting extremely small, local elections.[149]

Any attempt to manipulate the contract would most certainly involve a high degree of speculation; the contract is in regard to the sum of hundreds of elections. It is not even possible to determine which elections will be the closest (and thus easiest to affect) in advance, even if some races are understood to be more close than others. As detailed in Appendix F, a large-scale conspiracy to coerce many individuals to vote a particular way across many different jurisdictions without being detected. A fraud of sufficient size would mean that this fraud is no *Ocean's 8*, or even *Ocean's 11*. You'd be looking at Ocean's-well-into-the-hundreds-if-not-hundreds-of-thousands. Manipulation of polling machines themselves is equally quixotic.[150] Taken all in all, it is very unlikely that a fraud pertaining to this contract will be attempted, and considerably less likely than in other areas that fall under the Commission's enforcement authority.

[149] https://www.brennancenter.org/our-work/research-reports/truth-about-voter-fraud
[150] https://www.washingtonpost.com/politics/2022/11/01/truth-about-election-fraud-its-rare/

Critically, there are already enormous stakes in U.S. elections, creating incentives for outcome manipulation; this contract will not change that fact. As discussed in extensive detail in Appendix B, in the public comments, and to anyone involved in industry, elections move prices and it is specious to presume that they do not. Wall Street firms and global finance all trade elections. The contract before the Commission is not novel in that regard; rather, it is a more efficient instrument than what firms currently use to take positions on elections.

19. What is the price forming information for these contracts while the contracts are trading? If the price forming information includes polling and other election prediction information, is that information regulated? How does the price forming information compare to informational sources (e.g. government issued crop forecasts, weather forecasts, federal government economic data, market derived supply and demand metrics for commodities, market-based interest rate curves, etc.) that are generally used for pricing commodity derivative products within the Commission's jurisdiction?

There is a plethora of information used by the public and market participants to help calculate the probability that a given party will take control of Congress. Some of these are regulated (e.g. federal government economic data) but some are not (e.g. polls). That being said, there is no requirement that such information be regulated, nor is it clear that regulated information is the primary source of pricing information for many commodity futures contracts compared to private market forecasts and data. As discussed at other points in this response, demand for accurate information on election probabilities is in incredibly high demand by the public, and as a result, there is a large, competitive market for such content.

With regard to whether polling would become regulated, the answer is not any more or any less than any of the other information that goes into pricing any commodity.

20. Should, and if so how would, the registered entity listing the contracts take steps to address possible manipulative and/or false reporting activity involving the price forming information for the contracts, while the contracts are trading?

The Exchange has already taken great steps to prevent and address manipulative behavior. As in some of the prior questions, it seems odd for the Commission to request *only* the public's input in this regard, but has not discussed this with Kalshi. Regardless, the Exchange has numerous safeguards in place to prevent manipulation.

Additionally, the Exchange notes that in particular, concerns regarding manipulating this contract are broadly unlikely. The market for credible information on elections and their probabilities is very competitive, and false information is equally as likely to impact Kalshi's market as reports regarding the production of oil do for oil futures. Should false information be reported, the

returns from being an informed trader who could sniff out so much information would grow commensurately.

That being said, the Exchange nonetheless is extremely focused on making sure that such concerns would not affect the market. For example, it has gated out polling organizations, and employees thereof, from trading. Kalshi engages in extensive market surveillance and employs Know-Your-Customer authorization to prevent manipulation in compliance with the Core Principles. The contemplated measures combined with Kalshi's robust market surveillance program and dedicated technology are appropriately calibrated to address the particular risks associated with these particular contracts. Kalshi's rules also prohibit trading on non-public material information.

As with other contracts that deal with publicly important information, such as on the monetary policy decisions of the Federal Reserve, the integrity of the decision-making process by the Federal Open Market Committee has not been eroded despite contracts that trade enormous volumes on their impact. This is no different.

It is also important to note what the correct legal standard is, which is not "free from attempted manipulation." Indeed, one need only to peruse the annals of the CFTC's enforcement actions to find many contracts that were manipulated (e.g. LIBOR) or the subject of an attempted manipulation. These event contracts, such as oil contracts, interest rate swaps, etc. are significantly more likely and susceptible to be manipulated than this contract. Indeed, the fact that a contract like this on a regulated market is so unlikely to be manipulated successfully is one of the reasons that the public is so keen on seeing the data from the market which will be far more reliable than many other data sources currently available.

21. Do Kalshi's limitations on market participation affect the susceptibility of the contracts and/or markets for the contracts to manipulation? Do the limitations affect the extent to which these markets could be used to influence perception of a political party or candidate or otherwise be implicated in attempted election manipulation? Are the limitations reasonably enforceable?

In practice, few to no parties have access to material insider information on the contract's outcome. Any potential information an actor could have is highly unlikely to be material regarding the outcome of–in total–several hundred Congressional races. It is important to keep in mind that the argument that Congressional Control can come down to the outcome of a handful of races, and some races can be decided by a margin of several thousand, hundred, or even individual votes, has little to no bearing on the contract's susceptibility to manipulation. The margin of victory before an election is unknown. If a nefarious actor attempted to manipulate the election in order to manipulate the contract, which is what the CFTC is asking in this question,

the actor would not know beforehand what the margin of victory would be. That nefarious actor would have to assess the size of the electorate, which is in every instance going to be large. Accordingly, it is hard to conceive of the definitive piece of material non-public information that will swing the outcome of the contract.

However, like all contracts on Kalshi, there is a prohibition to trade on material nonpublic information. This contract is no different in that regard. In response to various indications from the Commission, however, the Exchange adopted contract-specific rules for this contract to gate out certain people who would be more likely to have information that could be considered material nonpublic information. This gating itself is the proverbial "safeguard on a safeguard".

As in other questions, Kalshi notes the incongruity of asking the public for input on how Kalshi will enforce a rule, without having asked Kalshi. Regardless, this rule is enforceable.

22. Should the Commission be responsible for surveilling, and enforcing against, possible manipulative and/or false reporting activity involving the price forming information for the contracts, while the contracts are trading?

It should be responsible for surveilling and enforcing against manipulative and false reporting activity while the contracts were live as much as it is responsible for doing so with other listed contracts, no more, no less.

Further, the Exchange notes that one of the benefits of having this activity on a regulated exchange is that the Commission will, for the first time, gain insight into the amount and level of activity of trading on congressional control. Currently, if, for example, Congress would invite the CFTC to the Hill and ask the CFTC to describe the current financial activity on congressional control, the CFTC will have nothing to say beyond there is activity, some on OTC, some on unregulated markets, some overseas. When pressed for details on who is participating, the CFTC will have to confess its utter ignorance. However, if the contract were to trade on regulated exchanges, the CFTC will not only know precisely what positions are being taken on the regulated markets, they will know who is taking them.

23. Could trading in the markets for the contracts obligate the Commission to investigate or otherwise become involved in the electoral process or political fundraising? If so, is this an appropriate role for the Commission?

There is no reason for the Commission to believe it will be responsible for policing attempts at, or successful, election fraud. No more and no less than the CFTC is responsible for any other type of underlying fraud that has impacts on a contract. Earlier this year, there were two individuals who were arrested for attempting to destroy power stations with the ultimate goal of

destroying the city of Baltimore.[151] If successful, the sabotage would have impacted electricity prices significantly. Is the CFTC "obligated . . . to investigate or otherwise become involved in the" prosecution of these two individuals? Is the CFTC "obligated . . . to investigate or otherwise become involved in the" protecting of America's power grid? OPEC+ impacts the prices of global oil, including the futures markets that the CFTC regulates. Is the CFTC therefore "obligated . . . to investigate or otherwise become involved in the" OPEC+ meetings? Is the CFTC "obligated . . . to investigate or otherwise become involved in the" determination of corporate dividends that underlie the CME's contract? The answer to all of these is that the CFTC will get involved to the extent that it is necessary for it to administer and enforce the CEA. The CFTC does not, in any of these cases, assume the role of the "cop on the beat". This application here is no different.

Election manipulation is a crime.[152] There are law enforcement agencies who police elections, and elections are policed much more effectively than other markets that have CFTC derivative products trading on them. The Commission is not the only "cop on the beat" with regard to election fraud. Elections, unlike many other reference markets or events that have CFTC-derivatives trading on them, are governed by multiple law enforcement agencies whose very existence is to prevent and detect election manipulation and fraud. This includes the Federal Election Commission, the federal Department of Justice, state election commissions, state Secretaries of State, and state ethics commissions. History has shown that these agencies are very good at their job. The other day, the CFTC brought an enforcement charge against Alexander Mashinsky and Celsius Network, LLC, where the CFTC acknowledged the role that was played by both the SEC and the U.S. Attorney's Office for the Southern District of New York.[153] Similarly, Cody Easterday committed fraud that was discovered by Tyson foods and prosecuted by the Department of Justice. The CFTC *also* charged Easterday, presumably after cooperating with the relevant criminal authorities. These are two examples of many. The CFTC is well-versed in cooperating with the relevant law enforcement agencies, be it the FBI or DOJ or any other relevant federal or state authority. There is no reason to assume that the CFTC would somehow lose that competency in this case.

24. What other factors should the Commission consider in determining whether these contracts are "contrary to the public interest?"

The Commission has never fully defined the full extent of the factors it considers under the public interest standard in Section 5c(c)(5)(C). Even the Nadex Order admits that the Commission can consider factors other than the economic purpose test. The Commission is not an expert in all areas, such as election law or integrity, voter confidence, or how to foster

[151] https://abc7chicago.com/power-grid-attack-sarah-clendaniel-brandon-russell-baltimore-plot/12777303/.
[152] https://www.fbi.gov/how-we-can-help-you/safety-resources/scams-and-safety/common-scams-and-crimes/election-crimes-and-security#:~:text=Intentionally%20deceiving%20qualified%20voters%20to,%2Fhow%2Dto%2Dvote.
[153] https://www.cftc.gov/PressRoom/PressReleases/8749-23

democracy, and the Commission should instead focus on what it knows: the value of a contract as a hedging interest and the value of a contract's price to market participants. As we noted in response earlier, these contracts are not contrary to the public interest because they have a large economic purpose, would serve as a useful tool for voters, the media, and the public that would fight information and improve election integrity. We note that the evidence supporting the contracts is wholly consistent with the stated findings and purpose of the CEA found in 7 USC 5. The contracts provide "a means for managing and assuming price risks, discovering prices, or disseminating pricing information through trading in liquid, fair and financially secure trading facilities."[154] These contracts and their trading on Kalshi would "protect all market participants from fraudulent or other abusive sales practices and misuses of customer assets."[155] Finally, allowing these contracts to trade on a CFTC-regulated DCM would "promote responsible innovation and fair competition among boards of trade, other markets and market participants."[156] In sum, these contracts are consistent with the CEA and its purposes and Kalshi has shown that they should be traded on a CFTC-regulated exchange with all of the protections that the CEA makes available to market participants.

The Commission should hold a contract is contrary to the public interest if it:

- Has no economic purpose
- Has no hedging utility;
- Has no price basing utility - meaning it has no effect on the prices of other commodities, assets, services, or commodity interests, which must therefore include *affecting the probabilities of* other events on which event contracts are now or in the future trading.
- *And* has no forecasting value to the public.

[154] 7 USC 5(a).
[155] 7 USC 5(b).
[156] *Ibid*