



**J O I N T C E N T E R**  
AEI-BROOKINGS JOINT CENTER FOR REGULATORY STUDIES

## **Statement on Prediction Markets**

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## **Executive Summary**

Prediction markets are markets for contracts that yield payments based on the outcome of an uncertain future event, such as a presidential election. Using these markets as forecasting tools could substantially improve decision making in the private and public sectors.

We argue that U.S. regulators should lower barriers to the creation and design of prediction markets by creating a safe harbor for certain types of small stakes markets. We believe our proposed change has the potential to stimulate innovation in the design and use of prediction markets throughout the economy, and in the process to provide information that will benefit the private sector and government alike.

## Statement on Prediction Markets<sup>1</sup> AEI-Brookings Joint Center

### Introduction

Prediction markets are markets for contracts that yield payments based on the outcome of an uncertain future event, such as a presidential election, the release date for new software, or the action taken by the Federal Reserve on short-term interest rates. A key benefit is that the market price of these contracts can potentially provide more accurate forecasts of future events than other methods. Using these markets as forecasting tools could substantially improve decision making in the private and public sectors. They also can help manage risk more efficiently. It is precisely because prediction markets have great potential that we think the government should facilitate rather than hinder the introduction of these markets.

There are significant regulatory barriers to establishing prediction markets in the United States, in part because they are potentially subject to gambling laws. We argue that U.S. regulators should lower barriers to the creation and design of prediction markets by creating a safe harbor for certain types of small stakes markets. We believe our proposed change has the potential to stimulate innovation in the design and use of prediction markets throughout the economy, and in the process to provide information that will benefit the private sector and government alike.

### A Brief Introduction to Prediction Markets

Prediction markets go by a number of different names, including information markets and event markets. An example will help clarify what we mean by a prediction market. Suppose a contract pays \$1 only if candidate “X” wins the presidential election in 2008, and the market price of an X contract is currently 53 cents. That means the market “believes” X has a 53% chance of winning the election. This is a simple example of a binary outcome prediction market that was pioneered by professors at the University of Iowa in the late 1980s.

Prediction markets have already been used in a variety of contexts with remarkable success. For example, prices of economic derivatives predict economic variables better than professional economists; prices in Iowa political markets are typically more accurate than the polls in forecasting elections; and prediction markets at Hewlett-Packard Labs beat official forecasts of printer sales most of the time.

Prediction markets reflect an old thought that underlies the price system: Information is widely dispersed in society, and it is highly desirable to find a mechanism to collect and aggregate that information. These markets work for several reasons: First, almost anyone can participate. Second, people think hard when they have to back up their predictions with money; buy the right presidential contract and you win, buy the wrong one and you lose. Third, the profit motive encourages people to look for better information.

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<sup>1</sup> The views in this paper represent those of the authors and do not necessarily represent the views of the institutions with which they are affiliated.

## Legal and Regulatory Issues

Current laws and regulations affecting the use of prediction markets in the United States are likely to stymie innovation, and thus reduce economic welfare. At the same time, these restrictions deprive the private and public sectors of valuable information.

It is now very difficult to set up a real-money prediction market for U.S. participants. A firm has a number of options for limiting its regulatory and legal risk. These include: obtaining a special “no action” letter from the staff of the Commodity Futures Trading Commission (CFTC); giving traders money to trade on a particular event, so none of their own money is at risk; listing the prediction market on a traditional futures exchange; or developing a market that is excluded or exempt from CFTC regulation because it involves large, sophisticated investors. A firm can also open up a prediction market outside the United States and allow U.S. participants to trade its contracts, but this approach could introduce additional legal risks.

At the federal level, the CFTC regulates a number of prediction markets. Only one academic group in the U.S., the Iowa Electronic Markets, is operating a real-money prediction market. That is, in part, because its researchers were able to obtain a letter from the CFTC that permitted them to do so under certain limited conditions.

Both the states and the federal government have laws pertaining to Internet gambling that may affect prediction markets. Currently eight states have bans on Internet gambling, and the president recently signed the Unlawful Internet Gambling Enforcement Act of 2006, designed to crack down on such gambling.

Increasingly, researchers and firms have come to understand that prediction markets can yield better forecasts, which could improve decision making in the government and private sector. At the same time, many researchers and firms wishing to start a prediction market do not want to be subject to a variety of different state laws and regulations that are often ambiguous and may be quite costly. Thus, we think that it is worth exploring alternatives to the existing regulatory approach that could increase the social benefits of prediction markets while still meeting the legitimate concerns of regulators.

### A Possible Solution

The strategy we suggest below would involve creating a safe harbor for selected small stakes prediction markets.

Recommendation 1: The CFTC should introduce a safe harbor for selected small stakes markets in the not-for-profit sector, the private sector and the government.

One kind of safe harbor is a no-action letter from the CFTC. This letter basically says that the CFTC’s enforcement division will not take action against the party granted the letter if it conducts business in the manner stated in a written request that the division has approved. The only prediction market to receive such a letter was the Iowa Electronic Markets in 1992. One effect of the letter may be to lower the risk of prosecution under other laws, such as state and

federal gambling laws. While we would like to see this risk eliminated for the markets specified here, the CFTC may lack the authority to insulate prediction markets from state officials or from other federal regulators.

We suggest that three types of entities be eligible for a no-action letter. The first would be research institutions that are not-for-profit. These institutions would include universities, colleges and think tanks. If one of these institutions received a no-action letter, it would be allowed to operate an exchange that would be similar in nature to the Iowa Electronic Markets, although focused on an array of interesting public policy and research issues. The second group of entities that could apply for a no-action letter is government entities in the United States. These entities would be allowed to implement markets similar to research institutions. The third group of entities that would qualify is private firms and other not-for-profit firms. Initially, these entities should only be allowed to use internal markets that included their employees.

In all cases, markets would involve “small stakes.” While the definition of small stakes is somewhat arbitrary, we use the term to mean an exchange in which the total amount of capital deposited by any one participant may not exceed some specified amount, such as \$2,000.

Exchanges would be not-for-profit. Although many exchanges may choose to subsidize trading activity for research or information generation purposes, they would be allowed to charge modest account and transaction fees if needed to recoup administrative and regulatory costs. There would be no brokers or paid advisors, reducing the risks that particular contracts would be sold to inappropriate customers and that customers would be charged excessive commissions. The exchange would be self-regulated, so it would be the responsibility of the exchange to make reasonable efforts to ensure that its markets were free from fraud and manipulation.

The safe harbor provided by the CFTC should apply to a broad range of contracts where there could, in principle, be opportunities for price discovery about economically meaningful variables. The CFTC should allow contracts that price an economically meaningful risk or uncertainty. We expect that this definition could allow for contracts on political events or economic indicators, such as those used by the Iowa Electronic Markets. We think that this definition would eliminate sports markets.

The contracts qualifying under this safe harbor would also create opportunities for more efficient risk allocation through hedging. While the small stakes nature of these markets will necessarily limit their utility for hedging, they can serve as proofs of concept for larger-scale markets that may eventually be developed under alternative regulatory arrangements.

We understand that issuing a no-action letter is only one of many ways that the CFTC could provide a safe harbor. We would urge that the CFTC consider exploring other possibilities that might ensure a more secure safe harbor. Examples include commission guidance or a rule that would be approved by the commission.

**Recommendation 2:** The CFTC should allow researchers to use experiments to learn more about the properties of prediction markets so they can improve their design.

A key reason for introducing more small stakes prediction markets is to allow researchers to learn more about how they work and when they work, so they can improve their design and provide benefits to both the private and the public sectors. We think that researchers should be allowed to conduct experiments that shed light on the possible role of fee structure, liquidity, manipulation, and other factors that affect market performance. Such research could shed light on the efficiency of particular markets, which could be helpful in designing markets that are more liquid and less susceptible to manipulation. All participants in markets in which experiments are conducted would need to be informed so that they are aware of the risks and benefits of participating in that market.

Recommendation 3: Congress should support the CFTC in its efforts to promote innovation in prediction markets.

To the extent that the CFTC incurs greater costs in helping to promote prediction market innovation, Congress should provide extra funds to the commission to cover these costs.

In addition, Congress should explore alternatives for providing a more extensive safe harbor if the CFTC is unable to provide a reasonably safe harbor under current law. In particular, it should enact legislation specifying that a no-action letter, or other suitable regulatory mechanism, will serve to preempt other state and federal anti-gambling laws, so that a qualified party would not be at risk of liability under these laws.

### Conclusion

We believe prediction markets can significantly improve decision making in both the private and public sectors. One of the clear benefits of allowing small stakes, non-profit markets to operate would be the greater use of prediction markets to inform both public and private decision making. A second benefit would be that access to better information could promote greater transparency and accountability in decision making. A third benefit might be that other countries and regions would promote prediction markets with more sensible regulation. Finally, we think there would be benefits from the development of new knowledge on how to design prediction markets.

We are aware that Congress did not intend the CFTC to regulate gambling and we believe that it is important to design this safe harbor in such a fashion that socially valuable prediction markets can get in, but gambling markets cannot.

Prediction markets have great potential for improving economic welfare and the decisions of private and public institutions alike. To help achieve that potential, the regulatory impediments to the use of prediction markets in the U.S. should be lowered. Here, we have suggested one approach for reducing those regulatory barriers.



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