A new approach for regulating information markets

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Abstract Information markets are markets for contracts that yield payments based on the outcome of an uncertain future event, such as a presidential election. They have the potential to improve decision making and policies throughout the economy. At the same time, there are regulatory hurdles to establish such markets, largely arising from state prohibitions on Internet gambling. This paper reviews the current regulatory structure for information markets in the United States and offers recommendations for reform. We argue that the authority for regulating many information markets should be shifted from the states to the federal government. In addition, the Commodity Futures Trading Commission should administer an “economic purpose test”. That test would only allow information market contracts that are likely to provide significant financial hedging opportunities or valuable information for improving economic decisions.

Keywords Government policy and regulation · Futures pricing

JEL Classification G18 · G13
1. Introduction

Information markets are markets for contracts that yield payments based on the outcome of an uncertain future event, such as a presidential election. These markets go by a number of names, including prediction markets, event markets and betting markets. Suppose a contract pays $1 if Mr. Bush wins the presidential election, and the market price of a Bush contract is currently 53 cents. That means the market “believes” Mr. Bush has a 53% chance of winning the election. This is a simple example of an information market that was pioneered by professors at the University of Iowa in the late 1980s.\(^1\)

Information markets have already been used in a variety of contexts. The most well-known information markets are for small-stakes political contracts. Researchers at Iowa conduct electronic markets for political futures contracts. Hewlett Packard has experimented with information markets to forecast sales and Eli Lilly has used these markets to help predict successful drugs. TradeSports.com offers information contracts in a number of areas including sports, politics, finance, law, entertainment and even the weather. Goldman Sachs supports an over-the-counter (OTC) market called economicderivatives.com, which hosts call auctions for contracts based on economic indices. There are currently more than 23 web sites that offer information market contracts.\(^2\)

Information markets have outperformed experts in a number of settings. For example, Las Vegas odds and point spreads predict the outcomes of sporting events better than sports experts.\(^3\) The prices in Iowa political markets are more accurate than the polls in forecasting elections 451 out of 596 times.\(^4\) Information markets at Hewlett-Packard Labs beat official forecasts of printer sales 15 out of 16 times.\(^5\) Even Hollywood play-money markets perform better than 4 out of 5 columnists in predicting the Oscars.\(^6\)

These markets work for several reasons: first, almost anyone can participate; second, they allow a person to profit from buying contracts that forecast the future—buy the right presidential contract and you win, buy the wrong one and you lose; third, the profit motive encourages people, including speculators, to look for better information all the time. So the market price reflects a lot of information from diverse sources, resulting in what James Surowiecki calls “The Wisdom of Crowds”.\(^7\)

Several scholars have argued that information markets have widespread applications in both the public sector and the private sector. Robin Hanson suggests that governments use information markets to identify whether particular policies will improve national welfare.\(^8\) He also notes how they can be used for betting on the effect of firing a corporation’s chief

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1 See Gorham (2004). See also Iowa Electronic Markets (http://www.biz.uiowa.edu/iem/about/).
2 For a listing of leading information markets, see: http://www.aei-brookings.org/policy/futures.
3 For a comparison of experts, polls and the updated Las Vegas betting line in college and professional football and basketball, see http://tbeck.freeshell.org/. For a survey of the efficiency of Las Vegas sports betting markets in general, see Sauer (1998).
5 See Bingham (2003).
7 Surowiecki (2004).
8 Hanson (2003), at 14 (“The basic rule of government would be: When an approved betting market clearly estimates that a proposed policy would increase expected GDP+, that proposal becomes law.”) Hanson defines GDP+ as a measure of national welfare that incorporates national income and values such as “lifespan, leisure, environmental assets, cultural prowess, and happiness”. Hanson recognizes that GDP may be an imperfect measure, and suggests using other measures as they are developed.