August 26, 2014

Request Under 7 U.S.C. Sec. 6(a)

Vince A. McGonagle

Director

The Division of Market Oversight

Commodity Futures Trading Commission

Three Lafayette Centre

1155 21st Street, NW

Washington, DC 20581

# RE: <u>VICTORIA UNIVERSITY OF WELLINGTON'S REQUEST FOR NO-ACTION LETTER FOR A</u> <u>SMALL-SCALE, NOT-FOR PROFIT, EVENT FUTURES MARKET FOR EDUCATIONAL</u> <u>PURPOSES</u>

## Requester:

Victoria University of Wellington

Macdiarmid Building, Am404

Kelburn Parade

Wellington, 6012, New Zealand

Phone:

Dear Mr. McGonagle:

On behalf of Victoria University of Wellington, New Zealand ("Victoria University" or "the University") I am writing to request a no-action letter from the Division of Market Oversight to permit the establishment and operation of a not-for profit, event futures market and offer event futures contracts to U.S. persons without registering as a designated contract market under Section 5 of the Commodity Exchange Act, or as a Foreign Board of Trade ("FBOT") under CEA Sec. 4 and Part 48 regulations.

# **Description of Applicant**

Victoria University was founded as Victoria College in 1897. Its governing body is the Victoria University Council. The University comprises more than 2,000 staff and 16,000 students. Victoria has four campuses:

- Kelburn Cam, s—home of schools with interests in scient, engineering, and humanities and social sciences, and of the University's administration.
- Te Aro Campus—home of the Schools of Architecture and Design.
- Pipitea Campus—home of the schools specializing in the study of law, government and commerce.
- Karori Campus—home of the schools specializing in teacher education and education studies.

See http://www.victoria.ac.nz/about/ for more information about the University's history, faculty, academic offerings, reputation, rankings, and related matters.

# <u>Proposal</u>

Victoria University proposes the creation of a small-scale, not-for-profit, electronic real-money event futures market in the U.S. for educational purposes. The venture will be modelled after the lowa Electronic Market (IEM), which has operated for more than 20 years under two no-action letters from the CFTC.<sup>1</sup> The University intends to establish a subsidiary (to operate on a not-for-profit basis) in the U.S. for the project.

Certain changes are proposed to the IEM model. These changes are intended to insure that the system produces more accurate results and fulfills the educational public interest purpose of the project. As more specifically described below, we intend to accomplish this by offering upgraded technology that is more user- friendly, eliminating any upfront user fee, increasing the number of participants, raising the 1992 dollar limits to 2014 levels, performing Know-Your-Customer authentications to strengthen the integrity of the system, requiring that users be at least 18 years old, and facilitating ease of registration, deposits and withdrawals.

Given the important academic and educational benefit we hope to be derived from this research and the purposes and manner of operation of the proposed market, the University believes that the market will be a valuable academic tool and entirely consistent with the public interest. However, because the proposed contracts would be available to U.S. persons, we are concerned that, absent the relief requested in this letter, the operation of the proposed market without obtaining designation as a contract market would be prohibited by the Commodity Exchange Act (the "Act") and the regulations promulgated thereunder.<sup>2</sup> Accordingly, the University seeks confirmation from the Division that it will not recommend enforcement action against the University or its agents for operating the proposed market and offering event contracts without contract market designation.

# Description of the Market:

Customized software will be used to operate a market-based political and economic forecasting system. The University's key employees overseeing the project will be three University professors and one administrator. Neither the professors nor the administrator will receive any compensation or other payment, directly or indirectly, for operating the markets. Neither Victoria University nor any of the key personnel operating the proposed markets is required to register with the Commission, nor is any of these persons or entities a business affiliate of any person required to register with the Commission.

The written and other descriptive materials concerning the Proposed Market will prominently disclose that this is an experimental, research-based market that is being operated for academic

<sup>&</sup>lt;sup>1</sup> See http://www.cftc.gov/ucm/groups/public/@lrlettergeneral/documents/letter/92-04a.pdf and

http://www.cftc.gov/ucm/groups/public/@Irlettergeneral/documents/letter/93-66.pdf

<sup>&</sup>lt;sup>2</sup> 7 U.S.C Sec. 1 *et seq.*, and Commission rules and regulations found at 17 C.F.R Part 34.

purposes, and is not regulate -y, nor are its operators registered with,  $t_1 = Commodity$  Futures Trading Commission or any other regulatory authority.

## Educational Purposes and Uses of Market Information:

The University proposes to utilize the results of the market information for educational and research uses and purposes, including: courses in statistical analysis, market theory, and trader psychology; and to publish related research papers and analyses. Like IEM, the results may be made available to other participating academic institutions for the same purposes.

### Examples of Contracts to be Offered

Political Event Contracts. As with IEM, we hope the market will be open to users worldwide.<sup>3</sup>

Political Event Contracts will include the following:

- Presidential Elections Submarket:
  - Winner-Take-All contracts to predict which presidential candidate will win their parties' primaries, the general election popular vote, and the Electoral College;
  - Winner-Take-All contracts to predict who will be the major party nominees for Vice President
  - A Vote Share contract to predict what percentage of the vote the two major party candidates will receive
- Congressional Control Submarket to predict which party will control the next Congress.
  - o Congress 2014 contract-- based on the composition of both houses of Congress
  - House2014 contract -- based on the composition of the U.S. House of Representatives
  - $\sigma$  Senate2014 contract -- based the composition of the U.S. Senate
- Other Significant U.S. Elections Submarket
  - Contracts to predict the outcome of other significant U.S. Elections not falling within the other markets
- International Elections Submarket
  - Contracts to predict the outcome of certain foreign elections, such as the Canadian elections described in the 1993 IEM no-action letter.

## Economic Indicator Contracts

- Federal Reserve Monetary Policy Winner-Takes-All.
  - The Federal Reserve Monetary Policy Submarket B (FedPolicyB) is a real-money event contract. Contract payoffs are determined by monetary policy decisions of the Federal Open Market Committee regarding the federal funds target rate.

The market may list additional event-driven contracts based on significant Political Events. It may also list additional Economic Indicator Contracts. However, no Economic Indicator Contracts shall compete with any contracts that are listed by a regulated contract market at the time of listing by the market.

The market shall not list more than 5 Economic Indicator Contracts at any one time. Participation in Electronic Indicator Contracts shall be limited to students, faculty and staff at any

<sup>&</sup>lt;sup>3</sup> See http://tippie.uiowa.edu/iem/faq.html#who ("The IEM is operated for research and teaching purposes. All interested participants world-wide can trade in our political markets.")

participating universities. The market will not list any contracts that involve, relate to or reference terrorism, assassination or war.

## Structure of Contracts

Shares are initially priced at \$1. Contracts for the correct outcome pay off at \$1. All other contracts pay off at zero. As a result, the price of the contract at any given time is the probability that the traders believe that event will happen. There will be no additional fees other than those necessary to cover the basic expenses of running the market, including the University's expected costs and those of any service providers as described herein. Participants will execute their own trades, and no brokerage service will be available or allowed. Participants will invest their own funds, buy and sell listed contracts, and bear the risk of loss.

# Know Your Customer Requirements

The University intends that an age and identity verification process be employed that will follow Know Your Customer Requirements ("KYC"). The KYC process, performed by an established and credible third party, is a critical and essential component of our proposed system, and a major difference from IEM's structure. KYC will be implemented to strengthen the overall integrity and stability of the system and to improve the accuracy of the results, by reducing the likelihood of fraud, market manipulation, use of the system by minors, and excessive amounts being deposited by individuals using multiple accounts. This process will be operated by a third party, Aristotle International, Inc., whose Integrity authentication service is a leading global provider of age and identity verifications for government and business, having successfully performed over 50 million authentications. Aristotle is also one of only 6 Federal Trade Commission-approved Safe Harbors for compliance with the Child Online Privacy Protection Act COPPA. A description of Aristotle and its Integrity Service can be found at http://integrity.aristotle.com/.

# Number of Traders in Each Market

IEM is limited to 2000 total traders in any particular election. We propose raising the limit to 5000 total traders in any particular election.

As the purpose of the market is an academic and educational tool, restricting the number of participants too greatly is likely to result in a market that is not as close to an efficient and effective a prediction tool as it could be and therefore impacts the value of the academic research generated by the project.

Specifically, there is nothing in the way of academic or comparative study to justify or even suggest that IEM's limitation is needed to optimize the accuracy of the market. What is known is that there are compelling reasons to raise the limit on the number of traders participating in a market:

- 1. Prediction markets work because they aggregate information from "a group of traders, and groups are almost always smarter than the smartest people in them."<sup>4</sup>
- 2. Thinly-traded contracts give single users an outsized voice in the market, creating the potential for results that skew in one direction or the other.<sup>5</sup>

*<sup>&</sup>lt;sup>6</sup> See* http://www.utsandiego.com/news/2010/feb/01/1c01prediction/ quoting James Surowiecki in his 2004 book, *"*The Wisdom of Crowds".

<sup>&</sup>lt;sup>5</sup> See, e.g., Betting on a future market, http://www.nbcnews.com/science/betting-future-market-6C10405016?franchiseSlug=sciencemain; See also, Betting on Politics--and Getting it Right, CNN November 16, 2011 http://tippie.uiowa.edu/iem/media/story.cfm?ID=2718 :

- 3. A limited trader k, i.e will restrict the number and nature of p. Liction questions, as there will be too small a trading base for specialized questions or regional questions. Prediction questions with few participants are illiquid and have limited appeal to participants. Greater market liquidity is linked to market accuracy. Without liquidity there is less incentive to trade and therefore less information sources available to the market. In our experience this concentrates trading into a small number of prediction stocks and limits the market scope.
- 4. Limiting participant numbers limits informational sources for the market. The purpose of the market is to bring into the public domain private information. Prediction markets are successful because they are informationally efficient. Restrictions on participation may lead to the market not factoring in some available information, directly reducing accuracy.
- 5. When there is too small a cap as with IEM, people who sign up, but who do not participate or who participate very infrequently, are effectively blocking legitimate participants who could better help the market to realize its beneficial educational purpose.
- 6. Although IEM has frequently been praised for beating the polls a large percentage of the time, this does not mean that the IEM market is as accurate as it could be, or that IEM is beating the polls as often and by as large a margin as it could.
- 7. In a letter written by 22 professors who are experts in prediction markets (including those professors who operate IEM), although a "modest" annual cap on deposits by an individual was proposed, they specifically did not propose a limit on the number of participants.<sup>6</sup>
- 8. Limiting the maximum number of traders too severely can greatly limit the ability to add additional sponsoring universities, a consequence that severely undercuts the educational reach and purpose of the market.
- 9. We do not anticipate that more than a few thousand traders will participate in any particular election, other than for U.S. President. We expect that the level of public interest in a particular contract will in fact be the strongest and most natural limiting factor.

"Many of the markets are thin, and that's a problem," Fair said....Thinly traded contracts give single users an outsized voice in the market, creating the potential for results that skew in one direction or the other. And around the margins—when a candidate stands very little chance of winning, or has already locked up the race—the market becomes far less perfect," Fair said.

# See also, Prediction Markets Are Hot, But Here's Why They Can Be So Wrong (May 19, 2008) Wired Magazine, http://archive.ls/eZ0E5#selection-1877.9-1877.691 :

Like financial markets, prediction markets are big information processors, distilling the collective wisdom of their traders. But the success of any market depends upon the stakes and the pool of traders. Most prediction markets aren't anywhere near as robust as those they emulate on Wall Street. "They are thin, trading volumes are anemic, and the dollar amounts at risk are pitifully small," market analyst Barry Ritholtz wrote in January. That opens them up to all kinds of problems as information processors. Political markets, for example, have a lot of political junkies but few real insiders or outsiders, so they're not very good at catching something the polls might miss.

## <sup>6</sup> See The Promise of Prediction Markets., Science 16 May 2008,

http://www.sciencemag.org/content/320/5878/877.full .

See also, Betting on a future market, NBC News, Science, http://www.nbcnews.com/science/betting-futuremarket-6C10405016?franchiseSlug=sciencemain. The Researchers making this request, and their affiliations at the time, were: Kenneth J. Arrow, Paul Milgrom and Erik Snowberg of Stanford University; Robert Forsythe of the University of South Florida; Michael Gorham of the Illinois Institute of Technology; Robert Hahn of the American Enterprise Institute; Robin Hanson of George Mason University; John O. Ledyard of the California Institute of Technology; Saul Levmore and Cass R. Sunstein of the University of Chicago Law School; Robert Litan of the Kauffman Foundation; Forrest D. Nelson and George R. Neumann of the University of Iowa; Marco Ottaviani of Northwestern University; Thomas C. Schelling of the University of Maryland at College Park; Robert J. Shiller and Paul C. Tetlock of Yale University; Vernon L. Smith, Philip E. Tetlock and Hal R. Varian of the University of California at Berkeley; Justin Wolfers of the University of Pennsylvania; and Eric Zitzewitz of Dartmouth College However, where — are is a particularly significant event control in which many thousands more would want to participate, then rejecting those participants would utterly defeat the educational purpose of the project.

We therefore propose that the number of traders in any particular election be increased to 5000. We are of the strong opinion that greater limits on participants will significantly undermine the academic utility of the project. We anticipate that the higher cap proposed, coupled with a slightly higher maximum deposit limit (discussed below), will make the proposed markets more efficient by minimizing the likelihood of thinly-traded contracts, while preserving the small-dollar, educational purpose of the project, similar to IEM.

### Markets Open to Non-Academic Traders

We also propose that Political Event Contracts not be limited to a fixed minimum percentage of "academic traders", such as the students and staff of educational institutions. There is nothing to suggest that any such limit used by IEM is in any way related to the educational purpose or the accuracy of the market, or has been justified by any comparative studies. Many of the same reasons stated above for expanding the number of traders would also logically apply to this issue as well.

There is simply no reason to believe a fixed minimum of academic participants will help with educational and research purposes of the market. In fact this is likely to bias the markets and reduce access to a broader range of informational sources therefore reducing accuracy. The primary educational and research purposes of the market rely on the market being informationally efficient and accurate. We also foresee a number of questions that will provide useful information for researchers, in which questions one would not want a quota for academic participation especially where the public debate is already led or heavily influenced by academics.

#### Amount of Trader Investment

Under the 1992 and 1993 no-action letters addressing the original IEM proposals<sup>7</sup>, the "maximum investment by any single participant in any one Submarket is \$500." IEM continues to use that limit. However, using the Consumer Price Index, \$500 in 1992 had the same buying power as \$844.99 in 2014<sup>8</sup>. Therefore, we propose raising the limit to \$850, to allow participants the ability to participate in several more contracts than they might otherwise if limited to 1992 levels. This will make the proposed markets more efficient by minimizing the likelihood of thinly-traded contracts, while preserving the small-dollar, research and academic purpose aspects of the IEM. This \$850 limit also compares favorably with the \$2000 annual investment limit recommended by 22 researchers (including two of the IEM's co-founders) in their 2008 request to Congress and the CFTC to clear up uncertainty in the regulation of prediction markets.<sup>9</sup>

### Methods of Registration

The system will be employed to allow electronic registration to facilitate trader participation, while simultaneously safeguarding against duplicate or multiple accounts for the same user, or registration by minors. These registrations will be verified and authenticated through the KYC process to be provided by Aristotle's Integrity, and can take place in real-time.

### Methods of Deposit/Withdrawal

<sup>&</sup>lt;sup>7</sup> See http://www.cftc.gov/files/foia/repfoia/foirf0503b002.pdf

<sup>&</sup>lt;sup>8</sup> See, e.g., http://www.dollartimes.com/calculators/inflation.htm

<sup>&</sup>lt;sup>9</sup> See n. 7, supra.

Complementing the ensigency of electronic registration, and to over, wise make the proposed market system easier to use, the system will allow credit card deposits and withdrawals for those authenticated through the Integrity KYC process. Those transactions will be processed through Aristotle, which has years of experience handling such transactions. For example, Aristotle's Integrity service has processed over 50 million authentications using a database of government-issued ID and other government records. Aristotle also is an experienced processor, well versed in regulatory reporting and compliance, having handled millions of dollars in campaign contributions over the years for hundreds of candidates and political action committees through its service at www.campaigncontribution.com .

## User Fees/Covering Costs

Neither the University nor its key personnel operating the market will receive any compensation or other payment for operating it. The pricing for the project will be set to cover anticipated regulatory compliance and operating costs. At this time, it is projected that, unlike IEM, the market terms will not require any upfront charge or fee. The only user fees will be those designed to cover for costs of credit card processing of deposits and withdrawals, fulfillment of the KYC process, and all other regulatory compliance and operating costs.

# Marketing

We understand that one aspect of the IEM, as spelled out in the no-action letters, was that no one involved in the operation could engage in any "advertising" of the IEM. However, the IEM market would be less efficient and therefore less valuable from a research standpoint, if the markets draw an inadequate pool of participants as a result of the marketing restrictions. It is the University's view that, in order to reach a pool of widely dispersed but interested political users, one must do limited advertisement to attract sufficient and diverse users to the market. The University believes that the reason that significant research based upon the data derived from prediction markets has been limited is due to a failure to reach a wider audience. Moreover, although IEM may not do "advertising", it does appear that it engages in promotional activity such as press releases<sup>10</sup> and links to earned media<sup>11</sup>. In short, we believe that the limitations on the modest amounts to be invested, together with efficient KYC controls to prevent multiple accounts and participation by minors, will be sufficient to preserve the noncommercial nature of the proposed markets without prohibiting limited efforts to publicize our activities. Any such promotional activities would contain a disclosure that the market is unregulated, and would be limited by targeting only media outlets where there is a high likelihood of reaching those interested in the subject matter of the contracts at hand. Promotional activity would not be directed at the general retail investing public.

## Experimental Nature of Prediction Markets

Finally, as noted above, although IEM is reported to perform generally better than polls, this does not mean that the structure developed for IEM in the late 1980's and approved by the CFTC in the 1992 and 1993 no-action letters, is optimal for an educational market. As the 22 leading academics wrote in their 2008 letter to the CFTC:

The CFTC should allow researchers to experiment with several aspects of prediction markets—fee structures, incentives against manipulation, liquidity requirements and the like—with the goal of improving their design. Prediction markets are in an early stage, and if their promise is to be realized, researchers should be given flexibility to learn what kinds of design are most likely to produce accurate

<sup>&</sup>lt;sup>10</sup> See, e.g., http://tippie.uiowa.edu/iem/media/releases.cfm

<sup>&</sup>lt;sup>11</sup> See, e.g., http://tippie.uiowa.edu/iem/media/news\_current.cfm

predictions. Of cours. Exchanges would need to inform their cus. Eners so that they are aware of the risks and benefits of participating in these markets.

Given that the market we propose is a small-money market, and has far greater safeguards than IEM to preserve the integrity of the operation, we believe that the design we have proposed will be in the public interest.

If you have any questions or require additional information, please do not hesitate to contact the undersigned.

Respectfully submitted,

Victoria University of Wellington

By: \_\_\_\_/s/\_\_\_\_

Neil Quigley

Deputy Vice-Chancellor, Research

## THE UNIVERSITY OF IOWA



319/335-0850 G. Neumann <gneumann@umaxc.weeg.ulowa.edu> Internet FAX 319/354-5774

March 16, 1993

Ms. Tina P. Shea, Esq. Division of Trading and Markets **Commodity Futures Trading Commission** 2033 K Street, N.W. Washington, D.C. 20581

Dear Ms. Shea:

In previous telephone conversations we discussed the continued operation of markets for research and education along the lines of the 1992 Iowa Presidential Stock Market (the "IPSM"). As you will recall, the IPSM operated as a non-profit market strictly for experimental and academic purposes. It was sponsored and operated by faculty of the University of Iowa, and neither the IPSM nor the University of Iowa charged commissions or received a return in connection with its operation. The IPSM was an outstanding success in 1992, judged either by its accuracy in predicting the outcome of the election, by the favorable attention that it generated in the popular and scientific press, including coverage in *Scientific American* and *The Wall Street Journal*, or by the educational value it provided to over 100 colleges and universities in the U.S. and to at least 4 high schools.

Since the 1992 IPSM we have run markets in the South Korean Presidential elections and the Australian Parliamentary Elections with favorable results. 'We also have operated markets in earnings futures of several corporate stocks and on several economic indicators with an audience of business students at several universities in the U.S. and abroad. Enclosed is a description of these markets and their rules of operation.

For the 1992 IPSM the Division of Trading and Markets issued, in a letter dated February 5, 1992 from Director Andrea M. Corcoran to Professor George R. Neumann, a "no-action" letter based on the operation of the IPSM, in particular its non-profit, experimental, and academic status. As

Department of Economics College of Business Administration 679 Phillips Hall Iowa City, Iowa 52242-1323 Graduate Programs in Economics 319/335-0830 Department & Chairman 319/335-0829 we discussed, there is ambiguity in this letter whether continued operation of this market under the same guidelines is covered. Rather than petitioning to the Commission each time a new experimental market is opened (for example, we envision opening a market in the Canadian elections in 1993, and in the U.S. House and Senate races in 1994) we believe that it would be most efficient to have operation of the Iowa Electronic Markets (the "IEM") recognized on the same basis that the 1992 IPSM was. It would be the burden of the IEM to immediately notify the Commission of any change in operations from those described in the Ms. Corcoran's letter of Feb. 5, 1992. At all times the IEM will remain non-profit, experimental, and serve educational purposes.

On behalf of the IEM I request that you recognize that it serves the public purpose that we not seek designation as a contract market or otherwise comply with the Commodity Exchange Act and the regulations promulgated thereunder, and that we are not required to register as Operators.

If I can provide further information to you, please do not hesitate to reach me at : Phone-319-335-0850; Fax -- 319-335-1956 [office] --319-354-5774 [home]

Sincerely,

Very R. Neum

George R. Neumann Professor of Economics

w/encl.