Research Proposal for NBER Household Finance Working Group

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The role of superstitious belief in financial or housing market has been studied widely. Using the belief in Friday 13th or lucky/unlucky numbers in Chinese culture, papers find rich evidence on the effect of superstitious belief on investor's return, i.e. Agarwal et al (2014) on housing market, Bhattacharya et al (2015) on financial market. However, none of the papers studies on the potential speculation by non-superstitious participants against the effect of superstition. In the research project with Sumit Agarwal (NUS), Jia He (Nankai), and Tien Foo Sing (NUS), we study the effect of Hungry Ghost tradition on Singapore housing market and we investigate potential speculation by non-superstitious households.

In the Chinese culture, the 7th month in the lunar calendar is typically called as Hungry Ghost month, which is around July and August of the western calendar. There are some taboos for superstitious Chinese during the Hungry Ghost month and we are particularly focusing on the belief that it is inauspicious to buy, renovate, and move houses during the month. Our main question is 1) whether there exists a reduction in home price during the Hungry Ghost month, 2) who are the main drivers of the results, 3) and whether there exist any speculative market participant on the phenomena.

We use private non-landed property transactions in Singapore from 1995 to 2012. Rich diversity in ethnicity and religious belief allows us to test the Hungry Ghost effect since it only affects on some part of Chinese population who are old enough to follow the tradition strictly. We first find that there exists significant price reduction for Hungry Ghost month. By comparing housing transactions in 7th lunar month to the other transactions within same western calendar month, we find 1.4% lower transaction price for 7th lunar month than non-7th lunar month. 7th lunar month is the only lunar month with such reduction in price. We

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find that the effects are mostly coming from older Chinese group (above age of 40) who are more likely to follow tradition strictly and would not buy home unless the price is attractive enough.

We further analysis the behavior of market participants around the Hungry Ghost month. We expect that speculative demand would show up from non-superstitious investors who understand the temporary reduction in price during Hungry Ghost month. We expect that potential speculator would sell the purchased unit in Hungry Ghost month soon (shorter holding period) to realize returns from speculation and would earn higher return from the repeated transactions. Using proportional hazard ratio model, we first find that older Chinese buyers show significantly lower selling probability if they buy housing unit during Hungry ghost month but non-old Chinese buyers show significantly higher selling probability if they buy housing unit during Hungry Ghost month. That is, non-old Chinese seems to speculate on Hungry Ghost discount. For the realized return of speculative investors, we use Heckman selection model to test whether investors who are likely to speculate indeed earn higher return. We do not find significant results of high return for non-old Chinese than old-Chinese. It is not surprising since the price reduction happens mostly for older Chinese buyer and non-old Chinese are the ones with shorter holding period of unit who seem to speculate on superstition effect.

Proposed Budget

- \cdot Travel cost for presentations and conferences
 - · Most of the budget I need is for traveling to U.S. to present the paper in conferences and to interact with scholars for improving paper.
 - · Travel cost (airfare and living expense) to U.S. for 3 times about a week per trip.
 - \cdot \$4500 x 3 = \$13,500.
- · Total Budget: \$13,500.

Hyun-Soo Choi

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CURRENT POSITION

Assistant Professor of Finance, Singapore Management University, July 2012 - Present

EDUCATION

Princeton University, Ph.D., Economics, June 2012
Princeton University, M.A., Economics, May 2008
Seoul National University, B.A. in Economics and B.S. in Statistics, Summa cum laude, Feb 2005

FIELD OF INTEREST

Household Finance; Real Estate Finance; Banking; Behavioral Finance;

PUBLICATIONS

"Speculating on Home Improvements" (with Harrison Hong, Princeton University and Jose Scheinkman, Princeton University), Journal of Financial Economics, 111 (2014), pp. 609-624

WORKING PAPERS

"The Impact of the Anti-Predatory Lending Laws on Mortgage Volume"

"When Real Estate is the Only Game in Town" (with Harrison Hong, Princeton University and Jeffrey D. Kubik, Syracuse University and Jeffrey P. Thompson, Federal Reserve Board), NBER Working Paper No. 19798 "The Effect of Monetary Policy on Bank Wholesale Funding" (with Dong Beom Choi, NY Fed)

HONORS AND AWARDS

Research Grant, CASA, SKBI, Singapore Management University, 2013-2014 Graduate School Fellowship, Princeton University, 2006-2012 The Korea Foundation for Advanced Studies Fellowship, 2005 Taesung Kim Memorial Dissertation Scholarship, Seoul National University, 2005 Graduate School Fellowship, Seoul National University, 2005-2006 Scholarship for Academic Excellence, Seoul National University, 2003-2004

TEACHING EXPERIENCE

Teaching (at Singapore Management University):

Finance (undergraduate), Fall 2012, Fall 2013, Fall 2014, Fall 2015

Teaching Assistant to (at Princeton University):

Prof. Alicia Adsera, Introduction to Macroeconomics (undergraduate), Spring 2011

Prof. Harrison Hong, Financial Investment (undergraduate), Fall 2008, Fall 2009, Fall 2011

Prof. Sebastien Pouget, Behavioral Finance (undergraduate, master-in-finance), Spring 2010

Prof. Burton Malkiel, Financial Investment (undergraduate), Fall 2010

Prof. Wei Xiong, Financial Economics (Ph.D.), Spring 2009

Prof. Harrison Hong, Behavioral Finance (undergraduate, master-in-finance), Fall 2008, Fall 2009

INVITED PRESENTATIONS

2016: AFA (San Francisco, USA), SFS Cavalcade (Toronto, Canada), WFA (Park City, USA)

2015: University of St. Gallen, EFA (Vienna, Austria)

2014: Yonsei University, KAIST, Sungkyunkwan University, ABFER (Singapore), 4th Helsinki Finance Summit (Helsinki, Finland), Singapore Scholar Symposium (Singapore, Discussant)

2013: Econometric Society Asian Meeting (Singapore), NUS-IRES Symposium (Singapore, Discussant), UNIST, SMU-SUFE Summer Institute of Finance Conference (Shanghai, China), CICF (Shanghai, China), NBER Behavioral Finance Conference (San Diego, USA), National University of Singapore

2012: Princeton University, American University, UC Berkeley, Bank of Korea, Korea Institute of Public Finance, Korea Institute of Finance, Sungkyunkwan University, Korea Development Institute, University of Western Ontario, National University of Singapore, Singapore Management University, Federal Reserve Board

PROFESSIONAL ACTIVITIES

Yale Summer School in Behavioral Finance, Summer 2009 Korea Fixed Income Research Institute (Seoul, Korea), Researcher, 2005-2006 Military Service, Republic of Korea Army, 2001-2003

Adhoc Referee for Review of Finance, Journal of Central Banking, Real Estate Economics, Journal of Banking and Finance

LANGUAGES

English (fluent) and Korean (native)

Last Updated: Feb 2016