Behavioural Biases in the Acquisition of Multiple Properties by Investors during the Irish Residential Real Estate Bubble

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Introduction

- This paper examines the behaviour of Irish people who purchased one or more residential properties for investment purposes prior to the global financial crisis in 2007

Background

- During the period that constituted Ireland's residential property bubble, many people were not satisfied with acquiring a house solely as a dwelling and they acquired other properties for investment purposes.
- In many cases the prices paid for these properties were uneconomical vis-a-vis the rental income stream associated with them.
- In the case of overseas properties many investors made purchase decisions without even gathering the most basic information on the suitability of these properties as potential investments.

Biases

- We consider the behavioural and psychological factors that drove Irish residents in the acquisition of one or more residential property for investment both in Ireland elsewhere.
- The biases we examined were, Representativeness, Overconfidence Availability, and Herding /Bubble Markets
- 3 Studies (Auction Data, Survey Data, Review of Newspaper Articles)

The representativeness heuristic

- Judgements based on stereotypes – herd mentality

The availability heuristic

- The likelihood of an event depends on how easily it can be brought to mind, remembered or imagined
- Events which are vivid, I.e., familiar, recent, in the media are easily recalled or imagined


WELCOME TO
HERD
MENTALITY
POPULATION:
NEARLY EVERYONE

Social Contagion

- People are interdependent
- Herd Behaviour; tendency for people to move with the herd but not consciously

Social Contagion

- People are interdependent
- Herd Behaviour; tendency for people to move with the herd but not consciously
- Opinions of what is happening is formed by a collective understanding of what is going on;
- We have a tendency of thinking that we have a common sense processing of facts;
- But our views are shared with many other people; antidotes are circulating; *spirit of the times*

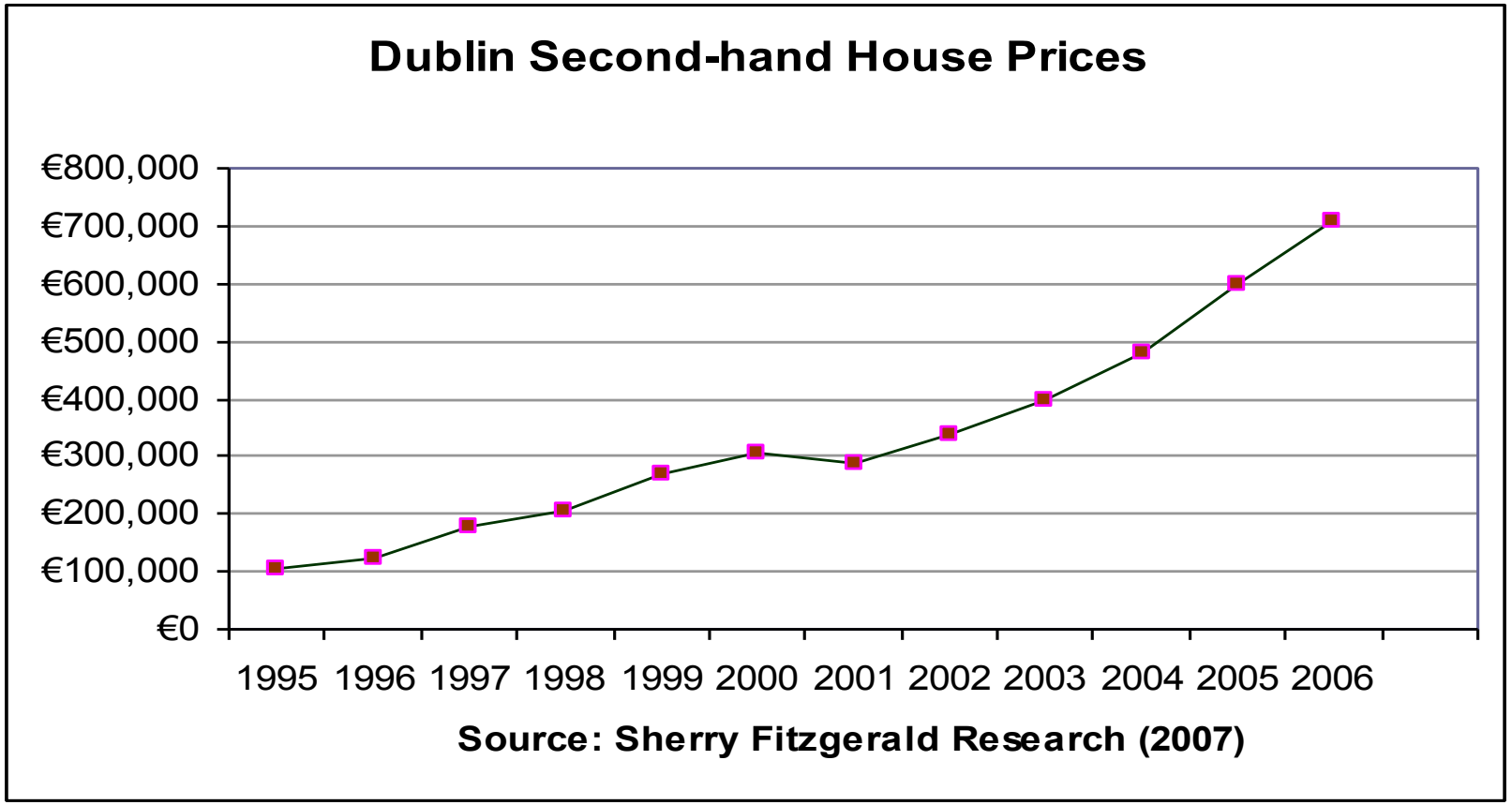
Bubbles and Herding

Familiarity with phrase "bubble market" but what is the actual meaning or definition

- An economic bubble / market bubble / speculative bubble is trade in high volumes at prices that are considerably at variance with intrinsic values. It could also be described as a situation in which asset prices appear to be based on implausible or inconsistent views about the future.
- Because it is often difficult to observe intrinsic values in real-life, markets bubbles are often only conclusively identified in retrospect when overvaluations have been 'corrected' by the market.

The Irish Property Bubble

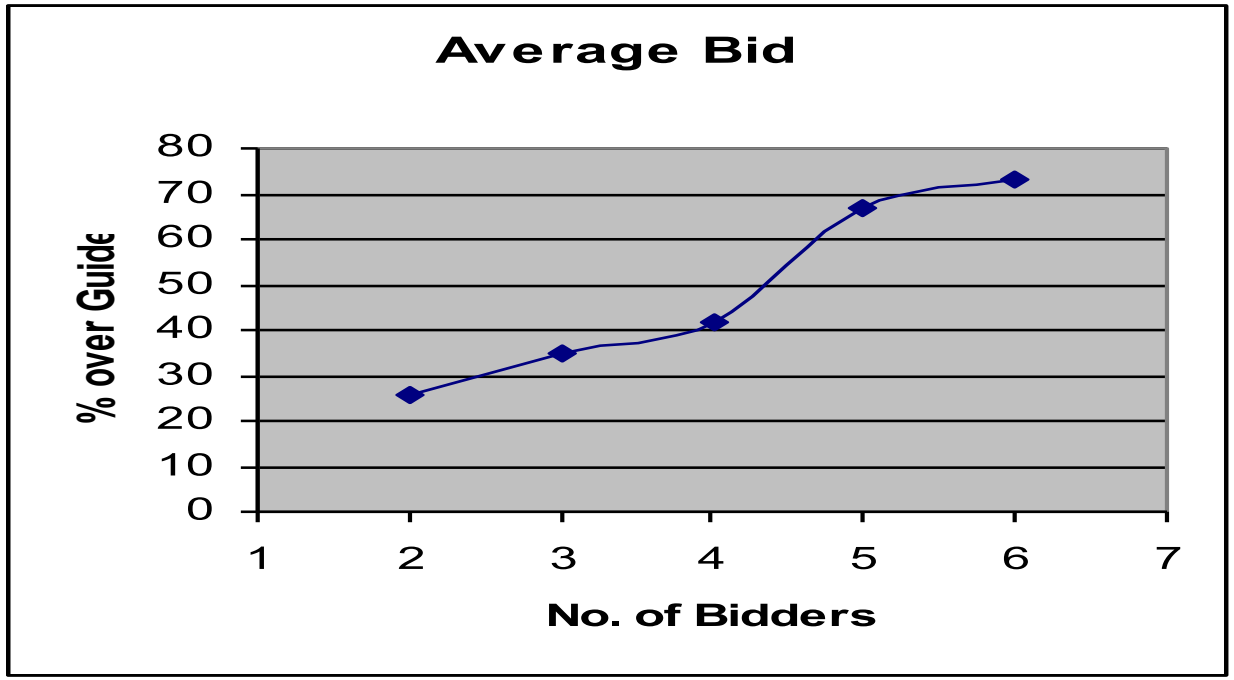
- The Irish property bubble is one of the most discussed and widely reported upon in recent times.
- People might view this bubble and crash as the product of an economic collapse and like most other bubbles it was only identified after the disaster and was dealt with through fiscal and monetary policy.
- It can be argued that the event was influenced by behavioural heuristics. Irish people were the victim of "herd mentality" in the belief that they were acting rationally.
- In terms of Availability, the Irish media were almost without exception cheerleaders for the booming property market


Dublin Second-hand House Prices
€800,000
€700,000
€600,000
€500,000
€400,000
€300,000
€200,000
€100,000
€0
1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006
Source: Sherry Fitzgerald Research (2007)

Auction Study

- Between Sept 04 and November 05, observed 200 auctions
- 100 were sold at auction, by an average of 40% over the guide price

Result


Average Bid
% over Guide
80
70
60
50
40
30
20
10
0
1
2
3
4
5
6
7
No. of Bidders

Variables

- Guide Price
- Sale Price
- Price announced on the market
- No. of Bidders
- Progression of Bids
- Previous Advertisement and Newspaper Editorials
- Characteristics of House
- Comparable Sales
- Agent
- **Bidder (home owner vs. Investor)**

Results from Auction Data

- Property Investors paid 61.5% over the guide price vs. average 40%

Survey

- Survey 110 people; 86% responded

Sample Survey Questions

- On what basis did you buy a second home?
  - 25% Good Long Term Investment
  - 41% Easy to get a loan
- Did you consider maintenance costs
  - 56% no
- Did you consider a time when property values would be in negative equity ?
  - 67% no

Sample Survey Questions

- Why did you purchase this second property?
  - 41% said they would have to pay more next year

Biases -Representativeness

- Due to the representativeness heuristic, investors may have been over-extrapolating the past growth into the future.
- In addition, lenders also over-extrapolated the increase in house prices and made credit easily available, largely financed by deposits from financial institutions in other euro area countries.
- People over estimated the precision of their forecasts, when for example, in an effort to estimate an asset's value, they become overconfident about the usefulness of this information gathered for this purpose.

An advertisement for 100% mortgages seen outside Dublin (17 July 2007).

Irish Times Newspaper Study

- We conducted a study of the Irish Times newspaper between 2003-2006.
- 1123 articles reviewed which were property related; 25% of these recommended purchasing foreign property.

Role of the Media (Bubble Markets)

- In the Dot.com bubble, Shiller (2000) argued that the media had become more involved in reporting stock market news, and in generating an investment culture.

- The media made the subject of investment more entertaining and exciting to many people and focused on the rise in share prices.

- This substantial and prolonged coverage lead to members of the public believing that prices would continue to rise. People who did not normally invest began to buy shares in the belief that prices would continue to rise. More and more people, typically even people who had no knowledge of financial markets, bought shares.

- Pepper and Oliver suggest that this herd trading, can overwhelm any tendency for price trades to restore 'efficient' prices.

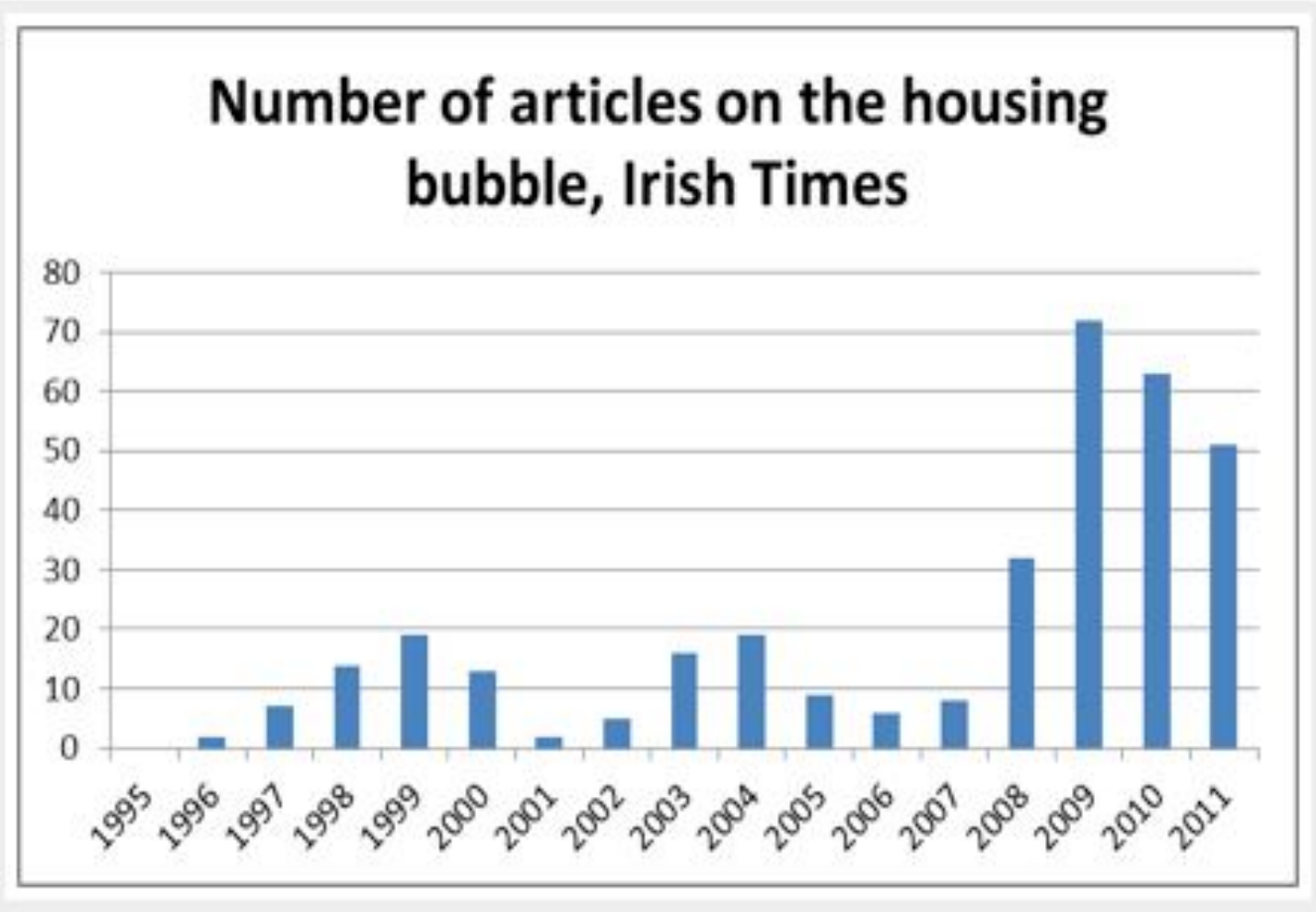
Biases -Availability

- In terms of Availability, the Irish media were almost without exception cheerleaders for the booming property market, only dampening their enthusiasm months after prices had started to decline in late 2007.

Role of the media (Availability)

- Most Irish newspapers had a glossy property supplement & weekend papers were often equally filled with property ads, reviews of new developments, stories of successful purchases, makeovers, and many columnists relating their property experiences.
- TV and radio schedules were filled with further property shows - house-hunting programs & house makeover programs were regular features.

- Gerow & Keane (2011). By analysing 17,000 newspaper articles from the Financial Times, BBC and New York Times they showed that leading up to the 2007 stock market crash there was convergence in the distributions of words used by reporters. This study illustrates that financial reporters expressions resemble each other more when positive mood is increasing and less when negative mood is increasing.
- Mercille's paper 'The Role Of The Media In Propping Up Ireland's Housing Bubble' upset a number of journalists/commentators about how they had failed to ask the right questions and had been far too supportive of the property market during the bubble.
  - It concludes that news organisations largely sustained the bubble until the property market collapsed. In fact it claims that prior to the bubble's collapse, the media made little mention of it, remained vague about it or tried to refute claims that it even existed.
- Nyberg also pointed the finger at shortcomings in the media during the boom years. "Much of the media enthusiastically supported households' preoccupation with property ownership… the long upswing in the property market, accompanied by relentless media attention eroded the risk-awareness of both of banks and their customers in Ireland."


Number of articles on the housing bubble, Irish Times
80
70
60
50
40
30
20
10
0
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011

Before 2008-2009, there were comparatively few articles that stated the market may be in a bubble

Irish Times had 5.5 times more articles on the bubble per year in 2008–2011 than in 1996–2007.

Irish Independent had 12.5 times more articles mentioning the bubble in 2008–2011 than in 1999–2007.

Very few articles published before the crash warned of a bubble— most only talked about it to attempt to reassure readers that in fact, it didn't exist.

Quotes

- '***Bricks and Mortar Unlikely to Lose Their Value***' *(11 December 2002),*
- '***Prices to Rise as Equilibrium is Miles Away***' *(18 March 2004),*
- '***House Prices "Set for Soft Landing"***' *(22 November 2005),*
- '***Property Market Unlikely to Collapse, (****Danske Chief, 2 February 2006)*

  '***House Prices Rising at Triple Last Year's Rate***' *(29 June 2006)."*
- "***There are those who believe that our recent successes are an illusion.*** *(Bertie Ahern (Taoiseach),* 4 July 2007)
- ***"Irish Banks are among the best capitalized in the world."*** Former Financial Regulator Patrick Neary,"*(RTE Prime Time,* 2 October 2008 *)*

Sample

- In 2006, a site in Dublin 4, sold for €36 Million.
- This equates to €95 Million per acre, or almost €240 Million per hectare.

Sample

Guide: €750,000

Semi-detached
1356 sq ft (126 sq m)

4 Bidders

Guide: €750,000

Sale Price:
€ 1,315,000

4 Bidders

Samples: Priory Grove, Blackrock

March 05,
Guide:
€650,000

1385 sq ft
129 sq m

Sold €730,000

2 bidders

Priory Grove, Blackrock

April 06
?

Priory Grove, Blackrock

April 06
?

Priory Grove, Blackrock

April 06
€1.8m

- Kilternan Hotel, South Dublin
  - Loan €171

- In August 2014, sold for €7m
  - 96% discount

Conclusion

- Findings show that "herd mentality" was in existence and that in times of increasing social mood, the herd is happily scribing together in many similar ways. When negative mood is increasing, the herd is panicking together in many diverse ways.

- When the phenomenon appears, commentators try to find a rationale so they are not seen to be going against the crowd. As a result they may:
  - dismiss concerns about overpriced markets by citing a new economy where old stock market rules may no longer apply.
  - cite the wisdoms of crowds and say that price movements really do reflect rational expectations of fundamental returns.

References

- Arkes, H., Blumer, C. (1985). "The Psychology of Sunk Costs." Organizational Behaviour and Human Decision Process 35: 124-140.
- Avery (1997), "Strategic Jump Bidding in English Autions," Review of Economic Studies 65, 185-210
- Bazerman, M., Sameulson, W. (1983). "I Won the Auction but Don't Want the Prize." The Journal of Conflict Resolution 27(4): 618-634.
- Diaz III, G. P., Levy, D. (2002). "Residential valuation behaviour in the United States, the United Kingdom, and New Zealand." Journal of Property Research 19(4): 313-326.
- Diaz III, H., A. (2001). "Behavioural Research into Real Estate Valuation Process: Progress Toward a Descriptive Model." Research Issues in Real Estate 8: 3-30.
- Diaz III, J., Hansz, A. (1997). "How valuers use the value opinions of others." Journal of Property Valuation & Investment 15(3): 256-260.
- Filiz-Ozbay, E., and Ozbay, Erkut (2007). "Auctions with Anticipated Regret." American Economic Review 97(4).
- Galinsky, A., Mussweiler, T. (2001). "First offers as anchors: The role of perspective-taking and negotiator focus." Journal of Personality and Social Psychology 81: 657-669.
- Gerow & Keane (2011) "Mining the Web for the "Voice of the Herd," *Proc. of the 22nd Intl. Joint Conf. on A.I. (IJCAI '11), Barcelona, Spain, 16-22 July, 2011*.

References

- Kagel, J. H., Levin, D (1986). "The winner's curse and public information in common value auctions." American Economic Review 76: 894-920.
- Kagel, J. (1995). "Auctions: A survey of experimental research in J.H. Kagel & A. E. Roth (Eds.), The handbook of experimental economics (pp.501-585). Princeton, NJ:Princeton University Press
- Sinha A., Greenleaf, E, (2000)"The Impact of discrete Bidding and Bidder Aggressiveness on Sellers' Strategies on Open English Auctions: reserves and Covert Shilling," Marketing Science, Vol 19, No. 3 Summer 2000.
- Kahneman, D., Slovic, P., Tversky, A. (1982). Judgement under Uncertainty: Heuristics and Biases. Cambridge, Cambridge University Press.
- Ku, G., Galinsky Adam, Murnigham Keith (2006). "Starting Low but Ending High: A Reversal of the Anchoring Effect in Auctions." Journal of Personality and Social Psychology 90(6): 975-986.
- Mackmin, D. (1994). The Valuation and Sale of Residential Property. London, Routledge.
- McAfee, R., and McMillan, J. (1987). "Auctions and Bidding." Journal of Economic Literature XXV(June 1987).
- McGreal, S., Adair, A., McBurney, D. Patterson, D. (1998). "Neural networks: the prediction of residential values." Journal of Property Valuation & Investment 1196(14): 1.

References

- Mercille , Julien 'The Role Of The Media In Propping Up Ireland's Housing Bubble,' The Journal of Political Economy, 19 October 2014
- Nofsinger, J. (2005). The Psychology of Investing. Upper Saddle River, New Jersey, Prentice Hall.
- Northcraft, G. B., Neale M. A. (1987). "Experts, amateurs and real estate; An anchoring-and-adjustment perspective on property pricing decisions." Organizational Behaviour and Human Decision Process 39.
- Ozbay, Emel, Ozbay, Erkut (2007). "Auctions with Anticipated Regret: Theory and Experiment." The American Economic Review, Vol. 97
- Schick, F. (1992). "Allowing for Understandings." The Journal of Philosophy 89(1): 30-41.
- Sinha A., Greenleaf, E, (2000)"The Impact of discrete Bidding and Bidder Aggressiveness on Sellers' Strategies on Open English Auctions: reserves and Covert Shilling," Marketing Science, Vol 19, No. 3 Summer 2000.

  Shiller, R. (2000). Irrational Exuberance. New Jersey, Princeton University Press.
- Thaler, R. (1988). "Anomalies: The Winner's Curse." Journal of Economic Perspectives 2(1): 191-202.