Behavioural Real Estate

Diego A. Salzman
salzmand@lsbu.ac.uk
and
Remco C.J. Zwinkels
zwinkels@ese.eur.nl

ERES - July 2013
Agenda

- Lessons not learnt from financial crises
- Illusion of knowledge and unawareness states
  - Property ladder
  - Market efficiency and the informational content of prices
- Emotional nature of real estate and implications for consumption, appraisal, and investment
- Professional practice: Normative model Vs Reality
Illusionary finance [Hamadi, Reginfo Salzman (2006) - Salzman (2007)]

Illusionary finance is the use of emotes, psychological biases, and financial innovation in order to create a distortion of reality which cannot be perceived unless an incident occurs.

Our main concern in illusionary finance:

Is the perceived world a faithful representation of reality?
Real estate and the latest financial crisis

- Salzman (2008), and Ariely (2009): How much should you borrow? Vs How much can I borrow?
- IO mortgages: Increase flexibility or promote borrowing more than you can afford?
The illusion of knowledge

Following Modica-Rustichini (1999) and Salzman (2002), we define awareness in terms of knowledge certainty or (conscious) uncertainty:

\[ a \epsilon = k \epsilon \lor (\neg k \epsilon \land k \neg k \epsilon) \]

where \( a \epsilon \) means being aware of an endogenous illusion
The illusion of knowledge

Following Modica-Rustichini (1999) and Salzman (2002), we define awareness in terms of knowledge certainty or (conscious) uncertainty:

$$a \in \epsilon = k \in \epsilon \lor (\neg k \in \epsilon \land k \neg k \in \epsilon)$$

where $a \in \epsilon$ means being aware of an endogenous illusion

- Why should you be a homeowner?
The illusion of knowledge

Following Modica-Rustichini (1999) and Salzman (2002), we define awareness in terms of knowledge certainty or (conscious) uncertainty:

\[ ae = k \lor (\neg k \land k \neg k) \]

where \( ae \) means being aware of an endogenous illusion

- Why should you be a homeowner?
  - UK ⇒ Because you need to get into the property ladder
The illusion of knowledge

Following Modica-Rustichini (1999) and Salzman (2002), we define awareness in terms of knowledge certainty or (conscious) uncertainty:

$$a \epsilon = k \epsilon \lor (\neg k \epsilon \land k \neg k \epsilon)$$

where $a \epsilon$ means being aware of an endogenous illusion

- Why should you be a homeowner?
  - UK $\Rightarrow$ Because you need to get into the property ladder

- Can you clearly explain what is meant by the term property ladder?
The illusion of knowledge

Following Modica-Rustichini (1999) and Salzman (2002), we define awareness in terms of knowledge certainty or (conscious) uncertainty:

\[ a \varepsilon = k \varepsilon \lor (\neg k \varepsilon \land k \neg k \varepsilon) \]

where \( a \varepsilon \) means being aware of an endogenous illusion

- Why should you be a homeowner?
  - UK \( \Rightarrow \) Because you need to get into the property ladder

- Can you clearly explain what is meant by the term property ladder?
  - 600 students pursuing degrees in real estate at both PG and UG level, with 400 of them already working in the sector cannot
THE PROPERTY LADDER

‘Success’ measured by the progress, or rate of progress, made towards their aspirational house.
Market efficiency [Kouwenberg and Zwinkels, 2013]

\[ e_{j,t+1} = E[r_{j,t+1} - E(r_{j,t+1}|F_t)] = 0 \]

What is information?

- **The syntactic concept of information** is a formal notion where the theory of information is a mathematical theory, in particular, a chapter of probability theory.

- **The physical concept** is used in communication theory. Information is a physical entity that can be generated, transmitted and received for practical purposes.

- **The semantic concept** strongly links information with knowledge. Information is essentially something capable of yielding knowledge.
The informational content of prices

Guide price £340,000

**Studio for sale**
Judd Street, London WC1H

Studio apartment in luxury new development for sale in WC1...

Full details and 9 photos | Save to favourites | Arrange viewing | Contact agent
Marketed by Knight Frank, W1U. Call 020 3641 4734 (local rate)

£349,000

**1 bedroom flat for sale**
Rodmell, Regent Square, London WC1H

This one bedroom flat is located on the third floor of this local authority building. The flat benefits from a South facing aspect and comprises entrance hallway, kitchen, large reception room, one double bedroom and one bathroom/shower room, and ...

Full details | Save to favourites | Arrange viewing | Contact agent
Marketed by Carter Reeves, WC1X. Call 020 3318 6639 (local rate)

£360,000

**Studio for sale**
Judd Street, Bloomsbury WC1H

This delightful first floor studio flat offers bright interiors and modern living in a superb central location, surrounded by excellent transport links.

Full details and 4 photos | Save to favourites | Arrange viewing | Contact agent
Marketed by Foxtons - Clerkenwell, EC1M. Call 020 3318 6532 (local rate)

\[ F_t: \text{Price of delightfulness: GBP 20k} \]
Emotional nature of real estate

What is the value of this asset?

Does the value change if we are referring to it as:

- House
- Home
- Property
Speech by Chancellor of the Exchequer, RT Hon George Osborne MP, Mansion House 19 June 2013

Mortgage rates have fallen, again thanks to Funding for Lending.

But the average deposit required for a first time buyer is a staggering four fifths of annual income.

I suspect almost everyone in this room owns their own home.

But I ask this: how many of you could have afforded the kind of deposit on your first house that many young families are expected to provide today?

Very few of you.

Let’s be clear: the market is not functioning normally.

And that’s why we’ve introduced Help to Buy.

I want to make sure an entire generation doesn’t miss out on the reasonable aspiration to buy a home. The equity loan component has been operating since April and in the words of the House Builders Federation, it is already “an unqualified success”.

Source www.gov.uk
The inconvenient truth about homeownership

Is it real?

\[
\text{Assets} - \text{Liabilities} = \text{Capital}
\]

Capital is real ownership
Professional practice: normative model Vs reality

- Satisficing instead of optimising:
  - Valuers tend to look mostly to market and property specific data and regard inflation as the main macro influence on value (Diaz 2002)

- Availability bias:
  - Valuers put more weight on the more recent information due to the use of heuristics Gallimore (1994), Diaz and Hansz (1997)
  - In the face of greater market uncertainty, appraisers rely more heavily on their previous value estimates (Geltner 1993)
  - Get influenced by the asking price Black and Diaz (1996)

- Confirmation bias:
  - Information that confirms the current estimate gets more weight and may be searched for more intensively as evidence of the correctness of the appraisers own estimate Gallimore (1996)
Our Intention

- Awareness of the emotional nature of real estate
- Encourage researchers to expand our knowledge about the interrelation between behaviour and real estate
- Create awareness about real estate illusions

The greatest obstacle to discovery is not ignorance; it is the illusion of knowledge
Thank you very much for your attention!!