Do Estate Agents Influence the Market?

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Presentation to the National Association of Estate Agents Conference, 22 March 2007
Introduction

• Relatively little research has been done on the nature and role of estate agents, particularly in the UK.
• But in last couple of years, estate agents have started to attract significant research interest
  – a debate is beginning to emerge in the dusty halls of academia…
  • Just what are those pointy-headed boffins saying about you?
Aim:

• Aim of this presentation:
  – To summarise two recent research studies from the US and UK and my own work on the respective topics with a view to answering the following 2 questions:

Q1/ Are EAs to blame for the frequency of extreme bids during booms?

Q2/ Does the peculiar parlance of property peddlers have any effect on the market?
• Hopefully of interest to you because:
  – It will provide an update on what the academic gossip mags* are saying about estate agents
    • Not quite Hello magazine, but…
  – The research may help inform your professional practice and strategy.
    • OK, unlikely, but you never know...
  – You may be able to help further the research:
    • Provide data – currently the main ceiling to EA research
    • Provide feedback – are these academics talking nonsense again?

* “Academic gossip mags”: otherwise known as Peer Reviewed Journals
Two recent developments:

• 1. Smith et al:
  – social anthropology of EAs

• 2. Levitt:
  – the Language of selling
1. Smith et al: Social Anthropology of E.A.s

- Part of a larger project trying to understand the “microstructures of markets”
  - Booms & busts not just the inevitable outcome of impersonal market forces
  - Markets are made up of people who make decisions based on their social conditioning, limited knowledge and gut feeling

- Suggest that price instability may be caused or exacerbated by estate agents:
  - Interviewed agents and house buyers/sellers during boom period in Edinburgh
    - Agents lack of knowledge appeared to add to the uncertainty of bidders => extreme bids.
Media Allegations of market fixing:

- E.g. EAs accused of suggesting that difference between asking and selling price greater than it really is,
  - Or creating this situation by adopting a strategy of setting asking price artificially low:

"It would be worrying if undervaluing a property was a tactic that was increasingly being used. Certainly the ESPC would not support that. The notion that the upset price should be a minimum that the seller should wish to realise is a good one. However, there may very well have been incidences where prices have been underestimated - it is not a science, it’s an art."

But are extreme bids simply inevitable due to the laws of statistics?

• Work by Levin & Pryce:
  – Attempt to demonstrate that a world without strategic behaviour by estate agents would not be a world free from extreme bids during boom periods.
  – This is due to laws of probability, and the fact that:
    • Selling price is not the average bid, but the maximum bid…
– If the selling price *did* equal the *average* bid:

- ↑ in the no. of bidders would *not* systematically affect the selling price.
  - Rather like taking a sample of buyer valuations: the larger the sample, the closer will be the sample average to the population average
  - » I.e. as the number of bidders rises, average bid in each auction converges to the average valuation of that house in the population as a whole.

– But because the selling price = *maximum* bid (not the ave):

- ↑ in no. of bidders *does* systematically increase the selling price because the laws of sampling distributions are different for the maximum:
  - the larger the sample, the closer will be the sample maximum to the population maximum
  - » I.e. as the number of bidders rises, average bid in each auction converges to the *maximum* valuation of that house in the population as a whole (not the average valuation).
Hypothetical Simulations:

- **Population** of buyer values for a particular house:
  - Population = 30,000 potential buyers
  - mean = £100,000 (sd = £11,962)

- **Definition of Extreme bid:**
  - one that is in the top 5% of bids that the population of potential buyers would offer for a given property.
    - i.e. any bid over £119,681

- **Goal of the simulation exercise:**
  - To estimate how the chances of observing an extreme bid in a particular auction change as number of bids rises from 1 to 4 per auction.
Population Distribution of bids

% potential bids > £119,681 = 5.00%

Kernel-Density Estimate
Distribution of Potential Bids
Result: The chances of the successful bid exceeding £119,681 in an auction increases from 5% to 18% when the number of bids rises from 1 to 4.
Implication?

• It is inevitable that extreme bids will be more common during booms
  – because of shifts in the distribution of the maximum bid as the number of bids rises.

• So when gauging the impact of strategic behaviour by estate agents (either hypothetically or empirically):
  – one has to measure it against a baseline regime where extreme bids are inevitable,
  – not against a world that is free from extreme bids.
    • i.e. our theory shifts the baseline against which the outcome of strategic interventions by estate agents must be compared.

• Empirical verification?
  – Need data on unsuccessful bids…
2. Levitt & the Language of selling

• “Freekonomics” best seller
  – Levit & Syverson (2005)
  
  • homes owned by agents sell for more, and have longer TOM (time on the market).
    – Follows a long tradition in the economics literature of quantifying the effect of incentives on broker behaviour.

• Also include a selection of estate agent hyperbole from property adverts in their price equation
  – Fairly crude and atheoretical
    » no real explanation re the selection of words or why they should have an effect
  – But interesting…
• Interesting because it contrasts with the usual portrayal of EAs in the housing economics literature:
  – Usually assumed to have a impartial role as info disseminators.
    • Language = neutral medium by which information disseminated.

• Surprising because:
  – It contrasts with the public perception of agents where language is one of their defining characteristics…
Language as a defining characteristic of Estate Agents

• Demonstrated by the humorous “dictionaries” of estate agent euphemism:
  
  – ‘Benefits From:
    • Contains a feature you may expect to be the bare minimum for the extraordinary price you are paying.
      Example: "Benefits from roof, floors, walls". ’
      (BBC News Online, 2002)
  
  – ‘Bijou:
    • Would suit contortionist with growth hormone deficiency.’
      (Ibid)
  
  – ‘Compact:
    • See Bijou, then divide by two.’
      (Ibid)
• ‘Convenient For:
  – A deceptive term with two possible definitions depending on the object of the phrase: Eg "Convenient For A40" means your garden doubles as the hard shoulder. Whereas "Convenient For local amenities" means you can run to the shops. If you are Paula Radcliffe.’ (Ibid)

• ‘In Need of Modernisation:
  – In need of demolition.’(Ibid)

• ‘Internal Viewing Recommended:
  – Looks awful on the outside.’ (Ibid)

• ‘Original Features:
  – Water tank still contains cholera bacterium.’ (Ibid)

• ‘Studio:
  – You can wash the dishes, watch the telly, and answer the front door without getting up from the toilet.’ (Ibid)

• “Secluded location"
  – It was in the middle-of-nowhere - barren and desolate. Suitable film set for Mad Max 5.’(Houseweb, 2006)
Stigmatisation of EAs:

• Alleged misleading use of language leads to:
  ⇒ EAs being characterised as dishonest and greedy;
  ⇒ a more brutal type of humour:

  Question:  How can you tell when an estate agent is lying?
  Answer:  His lips move. ‘

  (Booth, 2006)

  Question:  Why won't a shark bite an estate agent?
  Answer:  Professional courtesy!

  (ibid)
But does the language thing really matter?

- So long as agents are consistent in their use of language, consumers can simply “translate”
  - A few property viewings will provide buyers with the Rosetta Stone they need to decode the language of selling

- However, if agents are not uniform in their use of language (over time or space) then decoding more difficult
  - The underlying principle of modern encryption!
    • I.e. Keep changing the decode rule.
How can we measure change in language?

• Need some method of categorisation
• We draw on Aristotle’s theory of Rhetoric
  – divides the act of persuasion into three categories:
    – 1. *Ethos* (appeal based on the character of the speaker),
    – 2. *Logos* (appeal based on logic or reason)
    – 3. *Pathos* (appeal based on emotion)
Data
(Research paper by Oates & Pryce, 2006)

• 50,000 GSPC property transactions since 1999:
  – Each record includes the short description used to advertise the property.
  – We attempt to decompose this description into Aristotle’s 3 categories of language.
    • (And then into more detailed categories of pathos)
Initial findings from Broad categories:

- **Ethos** does not, in fact, play a significant role in the language of selling
  - we found no examples of the type, “the trusted firm of John Smith Realtors brings this property to the market”, etc.

- **Pathos** occurs frequently in the language of house selling, but not as much as logos:

- **Logos** dominates our short descriptions – the mundane listing of features
Hypotheses:

• **Hypothesis 1:**
  – The use of pathos will increase as the wider urban housing market booms and during the selling season. This is possibly due to
    • the need to ‘shout louder’ during frenetic market activity.
    • the increasing risks to buyers of not finding a property as TOM falls and/or their search deadline (e.g. school term/Xmas) looms:
      ⇒ Increases the incentive for buyers to bid on a viewed property even if it doesn’t live up to the description.
      ⇒ Increases the incentive for EAs to maximise viewings
• **Hypothesis 2:**
  – The use of pathos, and the type of pathos, will vary over space due to **local conventions** in language and selling practice
    • conventions may be perpetuated by the dominance of local moves and the traditions of particular firms.

• **Hypothesis 3:**
  – There will be a price effect of pathos
H1: Variation over time

House Prices and the Incidence of Pathos in the Language of Selling

Pathos Words as % of No. Words Used in Each New Description

Constant Quality House Prices

Quarter

Time on the Market and the Incidence of Pathos in New Descriptions

Pathos Words as % of No. Words Used in Each New Description

Inverse of Time on the Market

Quarter
Number of GSPC Sales and the Incidence of Pathos in New Descriptions

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Pathos Words (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999q1</td>
<td>6.50%</td>
</tr>
<tr>
<td>1999q2</td>
<td>7.00%</td>
</tr>
<tr>
<td>1999q3</td>
<td>7.50%</td>
</tr>
<tr>
<td>1999q4</td>
<td>8.00%</td>
</tr>
<tr>
<td>2000q1</td>
<td>8.50%</td>
</tr>
<tr>
<td>2000q2</td>
<td>7.50%</td>
</tr>
<tr>
<td>2000q3</td>
<td>7.00%</td>
</tr>
<tr>
<td>2000q4</td>
<td>6.50%</td>
</tr>
<tr>
<td>2001q1</td>
<td>6.00%</td>
</tr>
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<tr>
<td>2001q3</td>
<td>7.00%</td>
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<tr>
<td>2001q4</td>
<td>7.50%</td>
</tr>
<tr>
<td>2002q1</td>
<td>8.00%</td>
</tr>
<tr>
<td>2002q2</td>
<td>8.50%</td>
</tr>
<tr>
<td>2002q3</td>
<td>7.50%</td>
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<tr>
<td>2003q3</td>
<td>5.50%</td>
</tr>
<tr>
<td>2003q4</td>
<td>5.00%</td>
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<td>2004q1</td>
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<tr>
<td>2005q3</td>
<td>1.50%</td>
</tr>
<tr>
<td>2005q4</td>
<td>1.00%</td>
</tr>
<tr>
<td>2006q1</td>
<td>0.50%</td>
</tr>
<tr>
<td>2006q2</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

Log of Number of Sales

Legend:
- Pathos Words (%)
- Log of number of sales
H2: What about Variation across space?
Spatial Variation of Pathos as % of No. Words (1999)
Spatial Variation of Pathos as % of No. Words (2005)
Cross-Section of the Pathos Surfaces from Bearsden to Renfrew

- 1999
- 2005
Fractional Logit Regressions

After controlling for type we find:

**H1:** Incidence of pathos changes over market cycle
  
  Pathos↑ as market buoyancy↑ (TOM↓)

**H2:** Persistence in Spatial Patterns of Pathos:

  Pathos↑ as average local Pathos↑

### Table: Independent Variables

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Pathos (all)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Time-on-the-market (months)</td>
<td>0.980 §</td>
</tr>
<tr>
<td></td>
<td>(-9.995) †</td>
</tr>
<tr>
<td>Average Pathos in the area</td>
<td>1.126</td>
</tr>
<tr>
<td></td>
<td>(34.086)</td>
</tr>
<tr>
<td>deprivtn</td>
<td>1.004</td>
</tr>
<tr>
<td></td>
<td>(2.902)</td>
</tr>
<tr>
<td>cbd_glas_km</td>
<td>0.998</td>
</tr>
<tr>
<td></td>
<td>(-4.613)</td>
</tr>
</tbody>
</table>
H3: But Does Pathos affect Price?

• No-one bids without viewing, so why should pathos affect what buyers are willing to bid?
  – But:
    • If the potential buyer does not offer a bid immediately after viewing, there is a risk that he/she will not find a property within their search deadline (e.g. school term/Xmas):
    • So:
      – viewing shifts the probability of a buyer submitting a bid from zero to a positive value,
      – the more bidders on a particular property, the greater the final selling price, other things being equal
Log(Price) Regressions on Glasgow Submarkets

<table>
<thead>
<tr>
<th>Variable</th>
<th>Strathclyde</th>
<th>West End</th>
<th>East End</th>
<th>South Side</th>
<th>North Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative Pathos (Core)</td>
<td>0.029</td>
<td>0.035</td>
<td>0.022</td>
<td>0.025</td>
<td>0.007</td>
</tr>
<tr>
<td></td>
<td>(23.683)</td>
<td>(15.886)</td>
<td>(7.147)</td>
<td>(8.661)</td>
<td>(2.612)</td>
</tr>
<tr>
<td>Number of rooms</td>
<td>0.215</td>
<td>0.25</td>
<td>0.197</td>
<td>0.205</td>
<td>0.149</td>
</tr>
<tr>
<td></td>
<td>(74.607)</td>
<td>(46.312)</td>
<td>(27.394)</td>
<td>(41.243)</td>
<td>(15.91)</td>
</tr>
<tr>
<td>Flat</td>
<td>-0.057</td>
<td>0.016</td>
<td>-0.245</td>
<td>-0.028</td>
<td>-0.226</td>
</tr>
<tr>
<td></td>
<td>(-8.566)</td>
<td>(0.995)</td>
<td>(-14.425)</td>
<td>(-2.285)</td>
<td>(-11.373)</td>
</tr>
</tbody>
</table>

- 10% point \( \uparrow \) **Relative Pathos** in the West End, \( \Rightarrow \uparrow \) selling price by 0.35%.
  - Small effect, but there are around a quarter of observations with **Relative Pathos** of over 50%:
    - property advertised with 50% more Relative Pathos will sell for an 18% higher price.
  - But likely to be diminishing returns
    - as EAs use more pathos, buyers catch on and become more sceptical
Alternative Interpretations:

• **The Power of Marketing**
  – Aristotle: pathos is a potent element of persuasion
  – G.K. Galbraith: marketing shapes our notion of value
    • Not mutually exclusive: price effect could be capturing both opportunity cost of viewing effects and malleable perceptions of value effects.

• **Unmeasured Quality Effects**
  – *Relative Pathos* is actually a potentially useful to buyers as a signal of quality.
    • signal true differences in quality
  – But why the variation over time?

• NB The various interpretations are not mutually exclusive: Reality = some combination of all 3?
Conclusion: Do Estate Agents Influence the Market?

Q1/ Are EAs to blame for the frequency of extreme bids during booms?
   – Probably not:
     • Likely to occur anyway
     • Need data on unsuccessful bids to compare actual distribution with expected.
Q2/ Does the peculiar parlance of property peddlers have any effect on the market?

- No:
  - Buyers simply translate.
  - Any apparent price effect just reflects unmeasured, but genuine, quality effects.

- Yes:
  - Variation in language (over time and space) hinders precise translation, particularly for inexperienced buyers.
  - Evidence of a small positive price effect for relative pathos.
    - Aristotle and Galbraith can’t both be wrong!
    - And what’s the point of marketing if it doesn’t work?
Call for Data & Feedback

• Data needed:
  – Unsuccessful bids
  – Transactions data with advert text
  – Sales of properties owned by agents
  – Feedback on theories, conjectures, findings

• Get in touch by:
  – Responding to the email survey
  – Reply form on homepage of www.gpryce.com
  – Or email me directly: g@gpryce.com

• More details of the analysis so far:
  – Housing Resources page of www.gpryce.com
Annex:
Method used to model Relative Pathos

Relative Pathos = \( \frac{Pathos_i - Pathos_{\text{hat}_i}}{Pathos_{\text{hat}_i}} \)

\( Pathos_i = f(DA_i, LMB_{kt}, LMQ_k, LMC_k, UTV_{it}, \text{Charcount}_i) \)

where,

\( DA_i \) = Vector of Dwelling Attribute variables of dwelling \( i \).
\( LMB_{kt} \) = Vector of Local Market Bouyancy variables (e.g. selling time) at time \( t \) for postcode sector \( k \) where \( i \in k \)
\( LMQ_k \) = Vector of Local Market Quality (e.g. deprivation scores, distance to city centre)
\( LMC_k \) = Vector of Local Market Convention
\( UTV_{it} \) = Unexplained Time Variation (year dummies).
\( \text{Charcount}_i \) = Character count in the description (to control for the fact that the incidence of Pathos may vary simply because of random variations in the length of description).