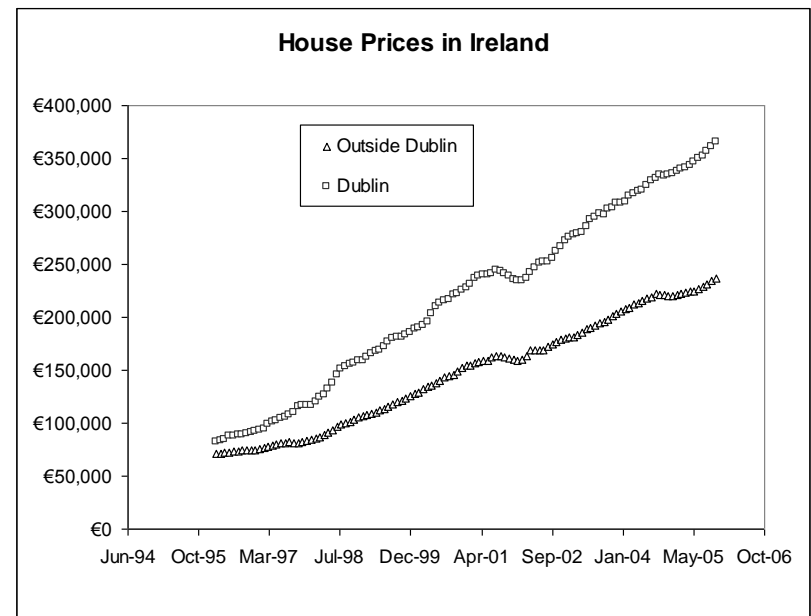


House price dynamics in London and Dublin

Peter Richmond
CASL
University College
Dublin Ireland
and
Open University
UK



Summary

- Background
- House prices
 - Who remembers 2006?
 - Historical nature of house prices
 - Predicting 2008
 - What actually happened in London and Dublin?
 - Base rate, RPI and their fluctuations
 - Conclusions

Dublin house prices heading for 100 times rent earned

- **Frenzy in Irish property market intensified**
 - price inflation accelerated to 15%.
 - Dublin prices now rising at 20% per annum, up from only 3% less than year ago.
- **Since April 2001, house prices up 52% on average nationwide but rents down 2%!**
 - Rents only recently recovered after three-year period in which they were in decline.
- **Rental yields of 1.5%, commonplace in Dublin,**
 - **compare with:**
 - **3.5% risk-free rate on ten-year gilts.**
 - **7% on ISEQ index**
 - Irish listed companies' profits are growing three times as quickly as rents in Dublin.

Rossa White

Davy Research 29th March 2006

Old acquaintances

Veteran dealmakers set to reclaim the spotlight, Focus, page 3

Shop local

How Irish retailers can break the chains, page 7

THE SUNDAY TIMES
www.timesonline.ie/business December 31, 2006

Ryanair fears €20m pilot hit

By Brian Carey

LOW-FARE airline Ryanair faces sanctions and damages in excess of €20m if it loses a series of cases to be taken by Irish pilots and due to be decided in the coming year. The decision could also see future pay claims adjudicated by the Labour Court rather than the airline.

Court and the Labour Relations Commission have jurisdiction over industrial disputes at the airline. The Supreme Court rules in favour of the pilots, it will lead the way to a strategic grievances being adjudicated.

The airline agreed to pay the cost of retaining pilots on new Boeing aircraft at a cost of €15,000 but only if the pilots signed a bond agreeing not to leave the airline for five years.

The bond also stipulated that the pilots would have to repay the training costs if the company was forced to negotiate with any trade union during the same period.

A supreme court ruling in favour of the pilots in January could also result in the Labour Court deciding on compensation and working conditions for Ryanair pilots.

Salary is payable through bonuses. The filing also says the airline agreed to a basic salary increase of 1.8% for pilots at 13 of its bases last April. Pilots at Dublin "chose not to participate in these negotiations and as a result received no pay increase".

In-depth coverage of Ireland and the world

Analysis
At your service: some of Ireland's most successful companies, from Ryanair to Quinn Direct, operate in the services sector, so why is the state so hung up on supporting manufacturing, asks Damien Kibred, page 4.

Profile
The write stuff: Riverdeep chief executive Barry O'Callaghan has been selected as the Sunday Times Irish Business Person of the Year. It took a slice of serendipity, a good sense of timing and an appetite for debt to complete the second-largest deal in Irish corporate history, the former investment banker tells Brian Carey, page 5

Small Business
Frame academy: building relationships with his artist suppliers and establishing integrity are vital in the gallery business, Hilborno Fine Art's director John Daily reveals. Rose Costello, page 7

Money
Boost files: The Sunday Times business reporters pick their fave stocks for the year and look back on how the chosen shares of 2006 fared. Page 9

Features
Driving force: this year could be a make or break for the Ford Parsachad in both Ireland and in the US. Being Alan is clearly boosting the Irish motor giant, writes Ray Hutton, page 12.

House prices 'can't defy the laws of physics'

By Joe Brennan

Economists at Allied Irish Banks expect house prices to rise 5% across the country next year, albeit at a much slower level than the 12% it had pencilled in for 2006.

The bank expects that new home completions will decline next year to 85,000 from an all-time peak of 88,000 estimated for this year.

Davy, the stockbroker, also expects house prices to rise on average next year. "But we reckon year-on-year house price inflation will dip below 10% by February and will drop to less than 5% by June and (be running at) close to 2% by the year-end 2007," a Davy analyst said recently.

The broker noted that, after a buying frenzy, the Irish market has been slowing down since the middle of this year. "The prospect of SSIs may have contributed to the acceleration in house price inflation, but the market was affected well in advance of any payouts."

Pointing out that rising interest rates usually hurt demand, the broker noted that Irish house-buyers were being somewhat counter-intuitive earlier this year. "Knowing that borrowing costs were set to rise (further), buyers took advantage of mortgages while they still qualified," he said.

PHYSICISTS have cracked many mysteries over the years, but now they claim to have worked out the seemingly imponderable question of where the Irish housing market is headed. And the answer doesn't make good reading. Dublin house prices have peaked and are set for a strong downturn, relative to inflation, according to Professor Peter Richmond of Trinity College Dublin, who has used mathematical physics to study the market — a discipline known as "econophysics".

Richmond said the capital's property market is now akin to global hot spots like London, Los Angeles, New York, Paris and Sydney, and may, in the future, face the same housing peaks and troughs that these cities experience.

"One can speculate that another peak will begin around 2011-12 and will last through to 2016," said Richmond. His study has already been published in the scientific press and will be presented at various economic conferences this year.

The view is at odds, however, with what seasoned property watchers are predicting.

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Home game: Tom O'Sullivan and Kerry Katona in the FE drama Showbands, which raised €1.3m in the first series

Investors still love going to movies

THE movies may not always do terribly well at the box office, the television series might not generate huge ratings, but Irish investors are still flocking to a wealth of tax breaks to support the "Irish" film industry, writes Brian Carey.

The Homeymonters, a Hollywood film shoot here in O'Connell Street doubled as an avenue in New York — raised €10m from Irish tax investors in 2004, accounts

just filed in the Cipriani Office reveal. Filpa, a non-UK company that holds shares for so-called "Irish" tax investors, channelled all of €46m of funds into films such as The Homeymonters and Breakfast on Pluto.

The investor return was made up entirely on the tax break. The film, which had a budget of \$250 (£19m), grossed just \$1.8m at the US box office.

Tesco takes up half of UK retail space growth

By Jenny Davy

TESCO snipped up half of all new shopping space in Britain this year, says the company's annual report, which was unveiled on Tuesday.

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The revolution is likely to spark renewed controversy about Tesco's role in the Competition Commission's preparations next month to investigate its impact on its retail products.

At the start of the year, said: "There is an indication of the extent to which we are leading over our towns and cities."

A spokesman for Asda said new plans to open up 100 new shops in 2007. "We are looking at the possibility of opening up 100 new shops in 2007."

production and are not dependent on the commercial success of the project. Investors in the Homeymonters, for example, only received 78% of their money back. The investor return was made up entirely on the tax break. The film, which had a budget of \$250 (£19m), grossed just \$1.8m at the US box office.

Western US 1963-2005 (1980 prices)

B. M. ROEHNER

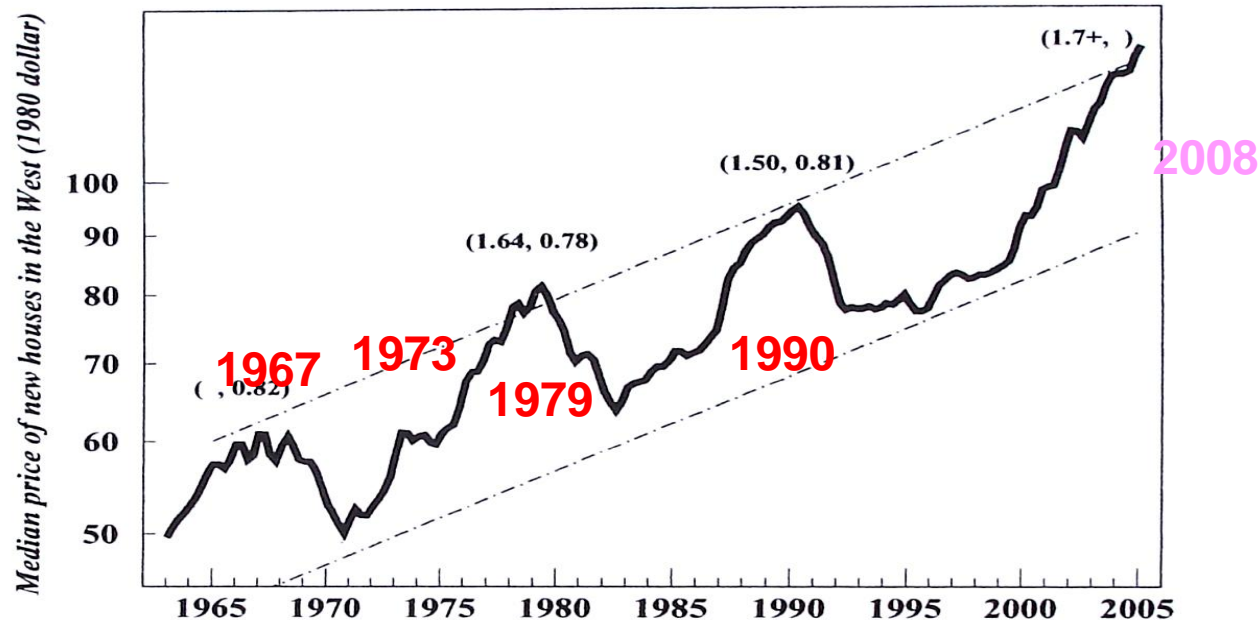
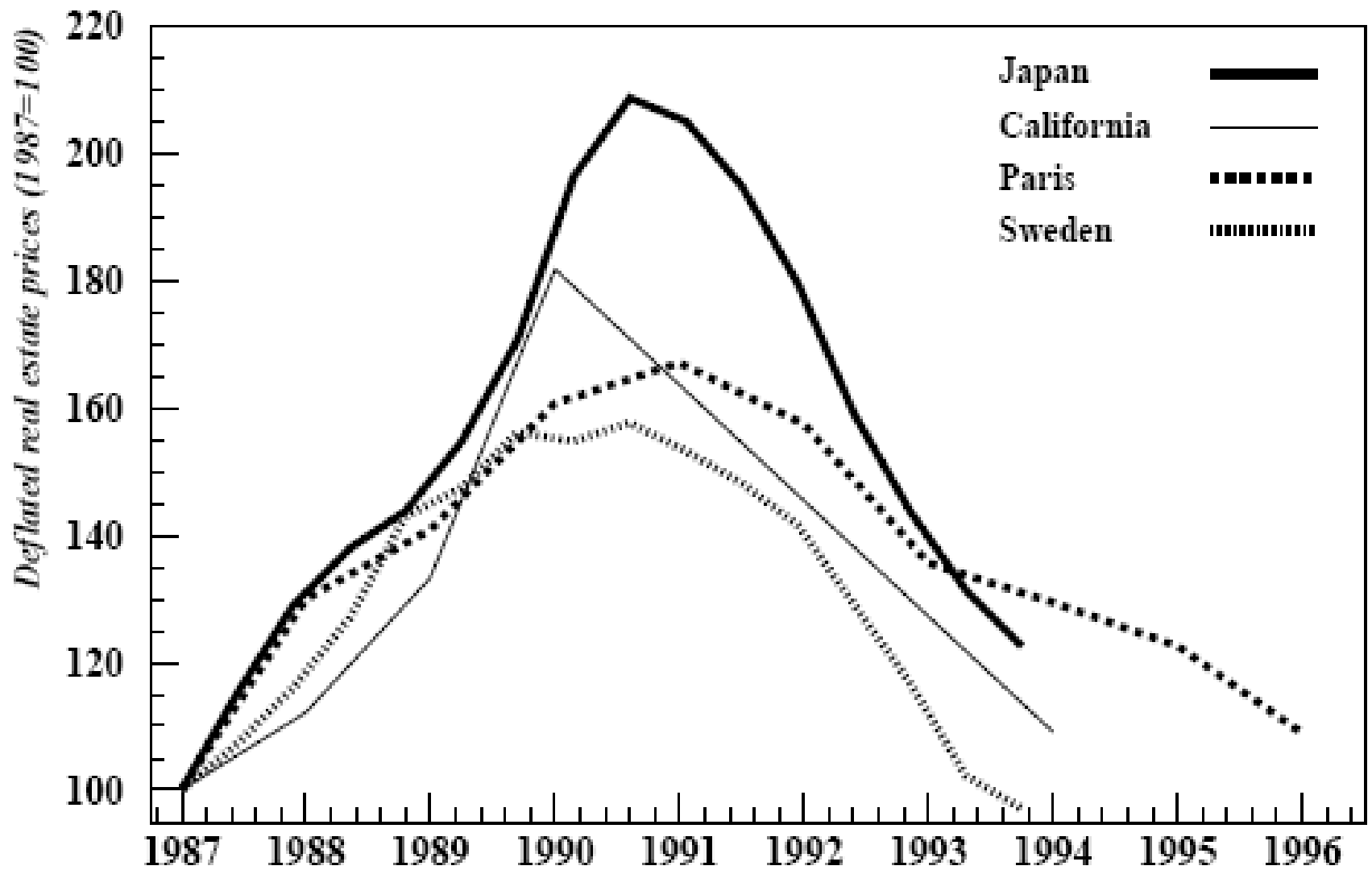
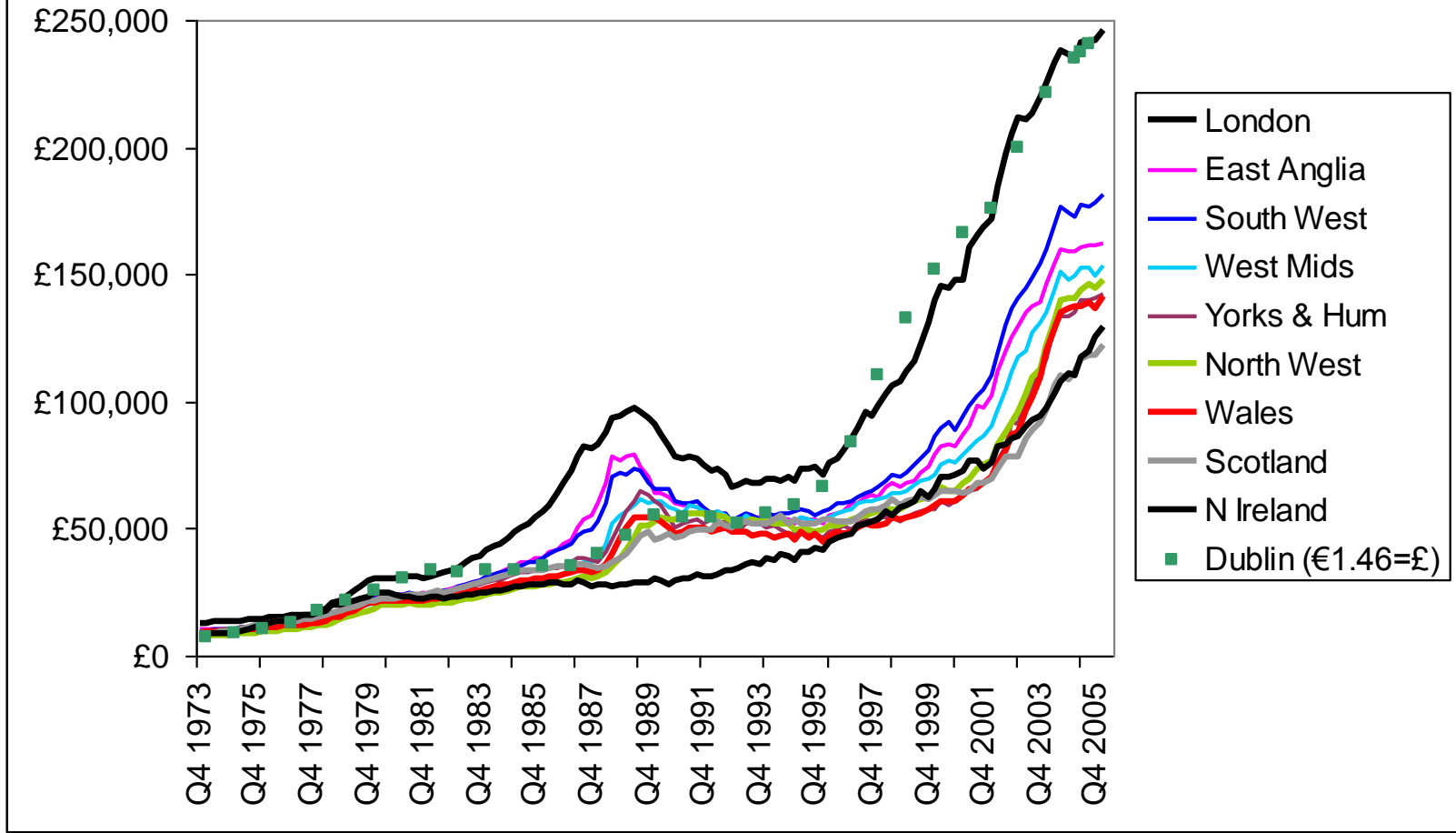


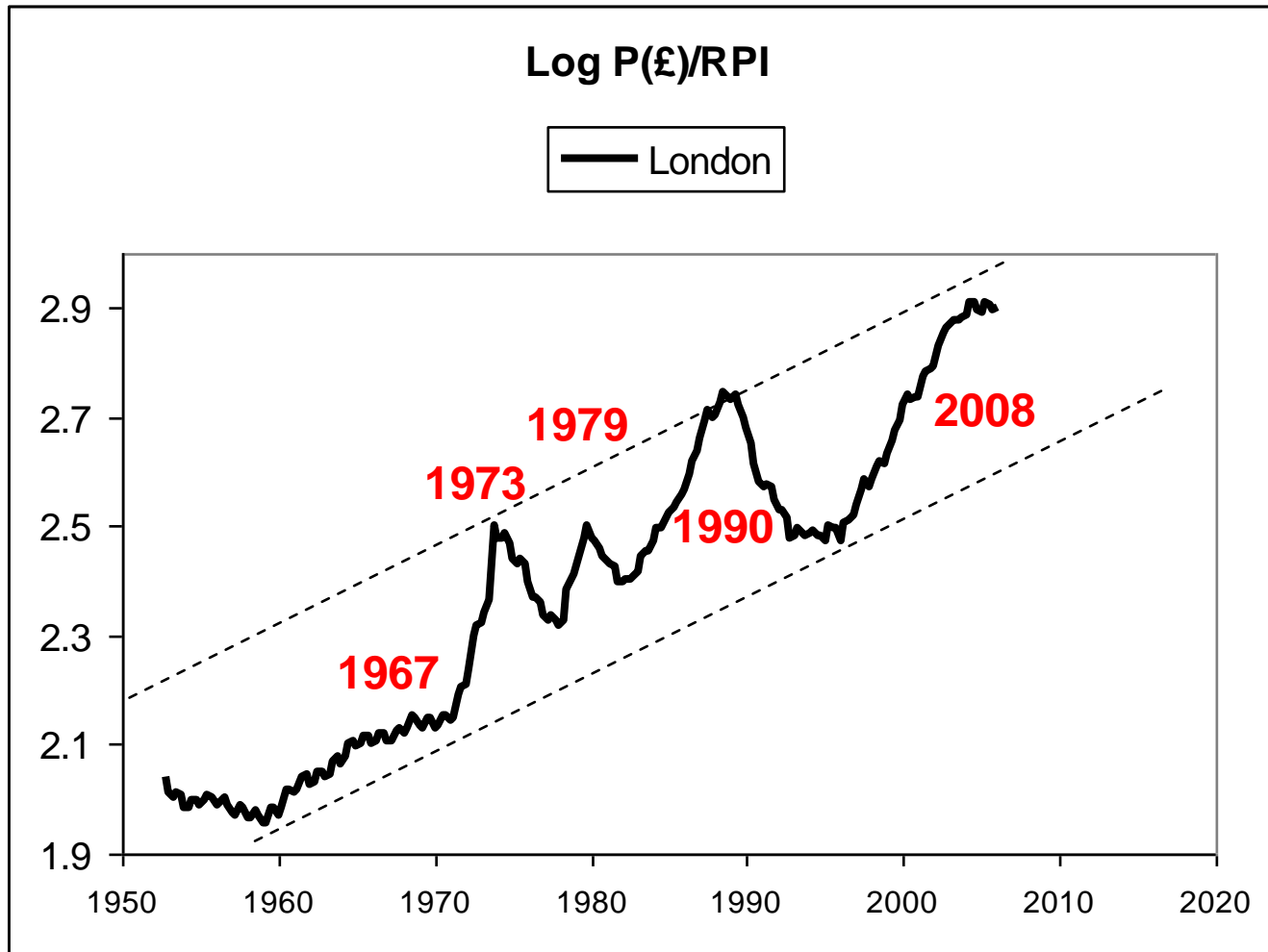
Fig. 1. Median price of new houses in the West of the United States. The two numbers above the peaks give the amplitude of the peak (the ratio of peak price to initial price) and the amplitude of the fall in the downgoing phase (ratio of trough price to peak price). The notation 1.7+ shows that the current peak is still in its upgoing phase and will have an amplitude larger than 1.7. The whole curve has been smoothed using a three-year centered moving average. *Source: U.S. Bureau of Census.*



House Prices (UK & ROI)



London 1952-2006 (1980 prices)

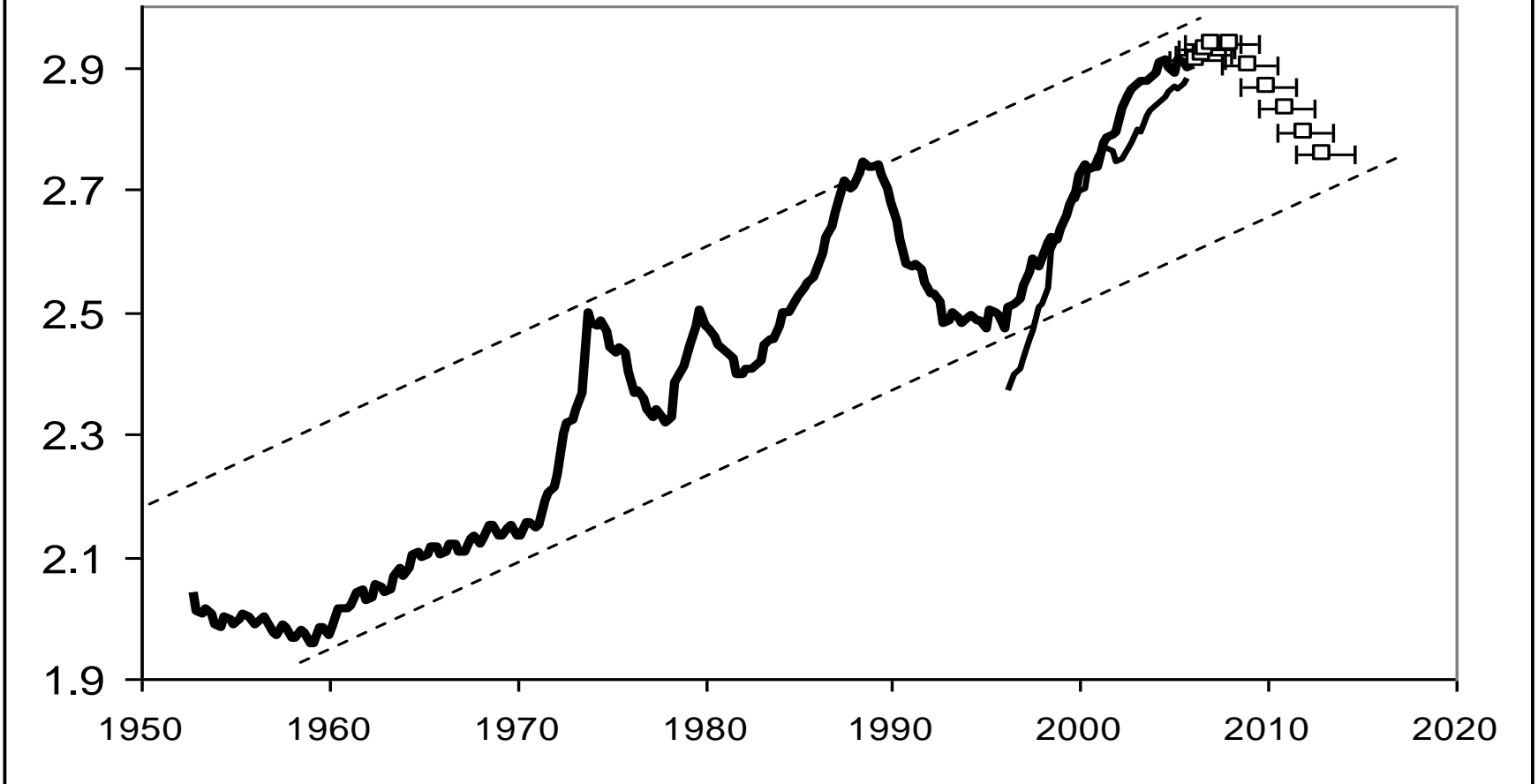


2006



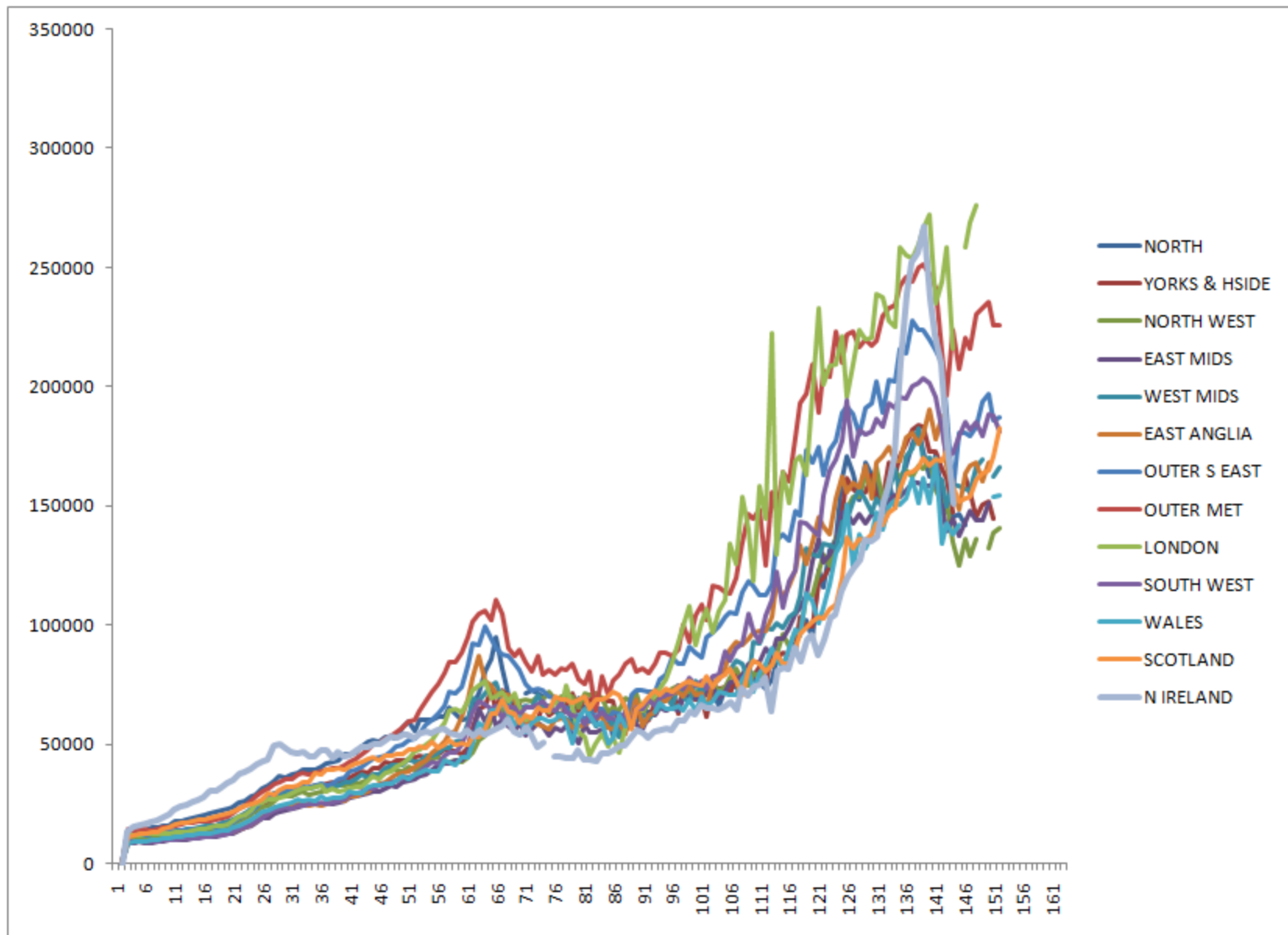
Log P(£)/RPI

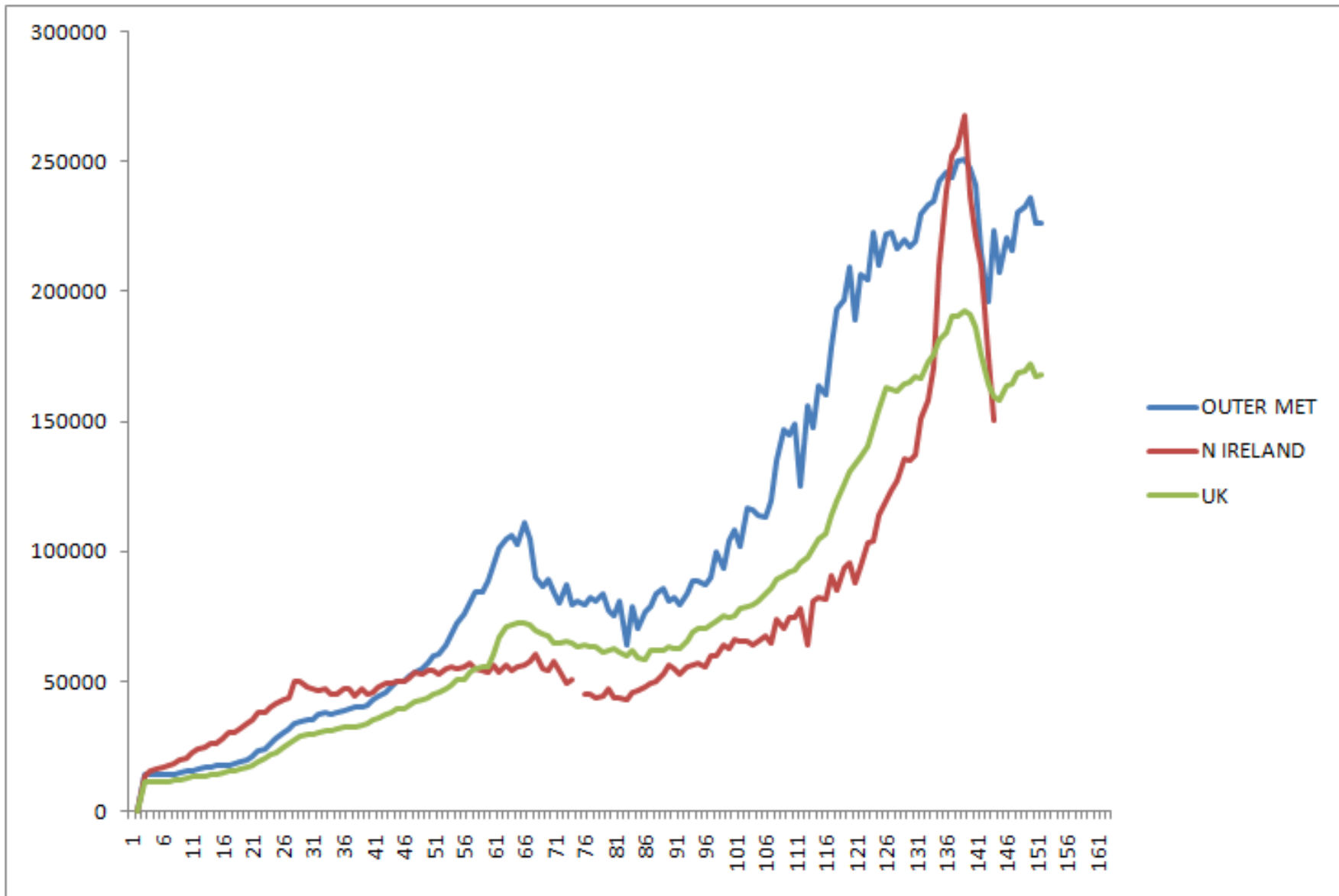
— London □ Projection — Dublin



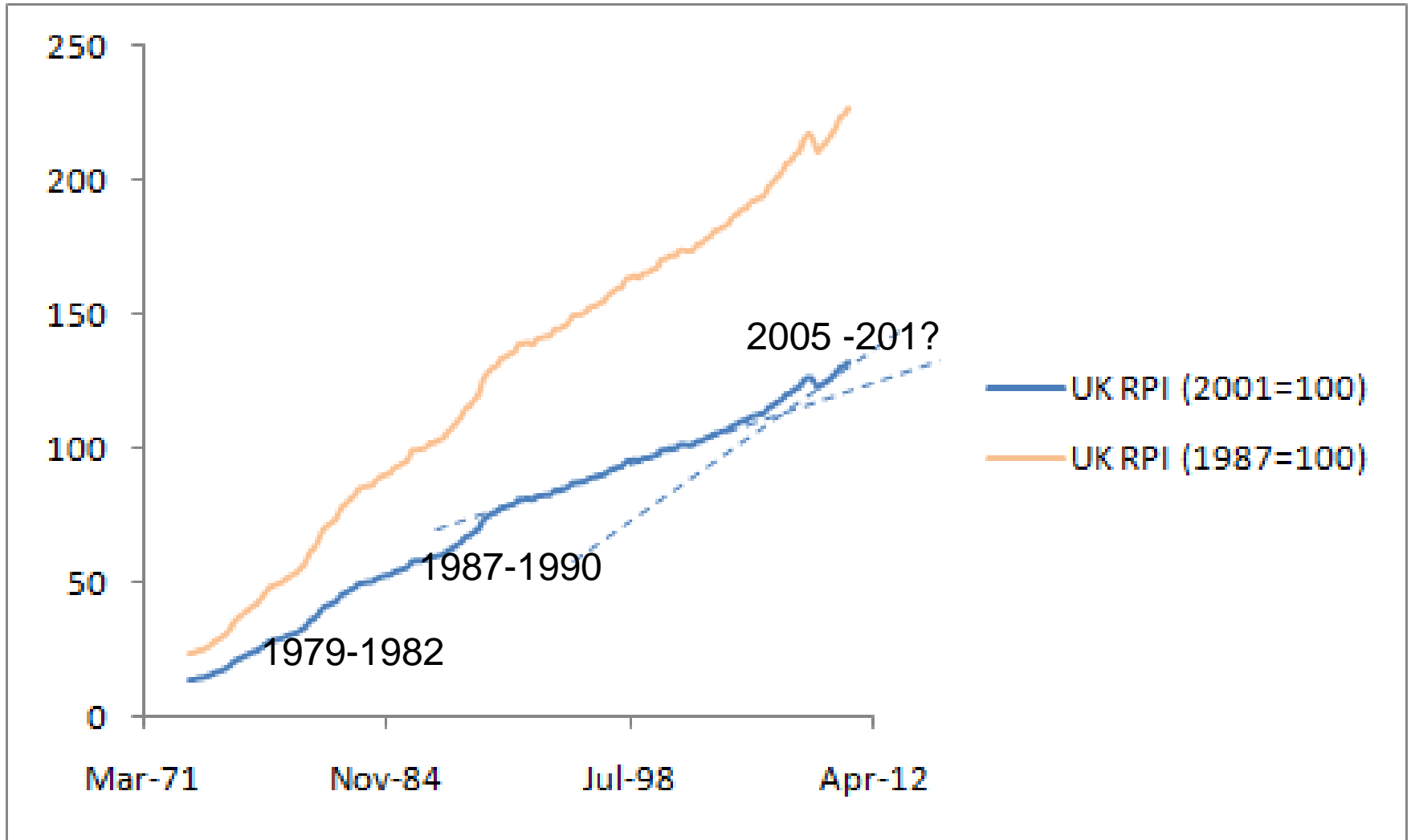
2011



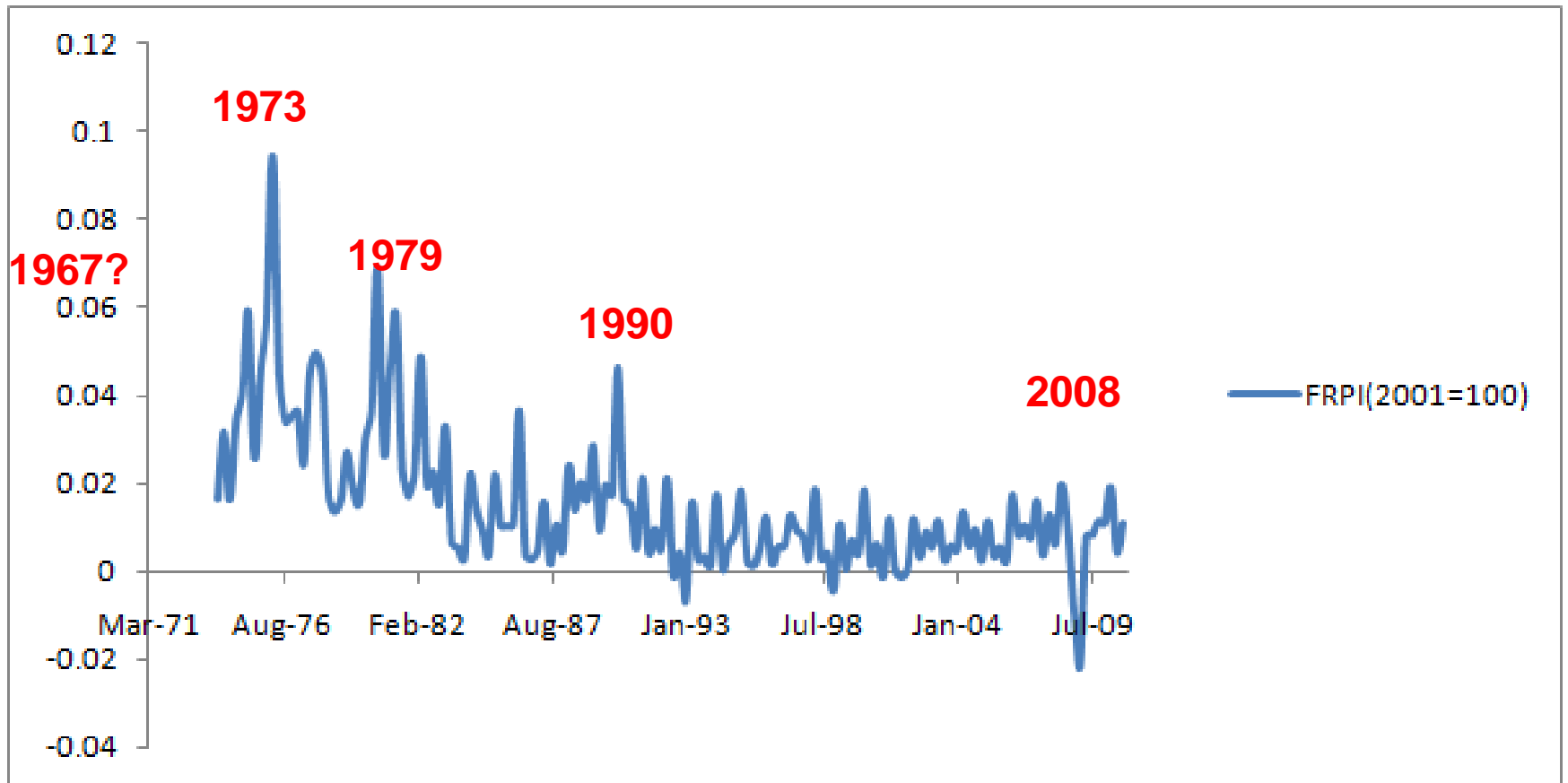




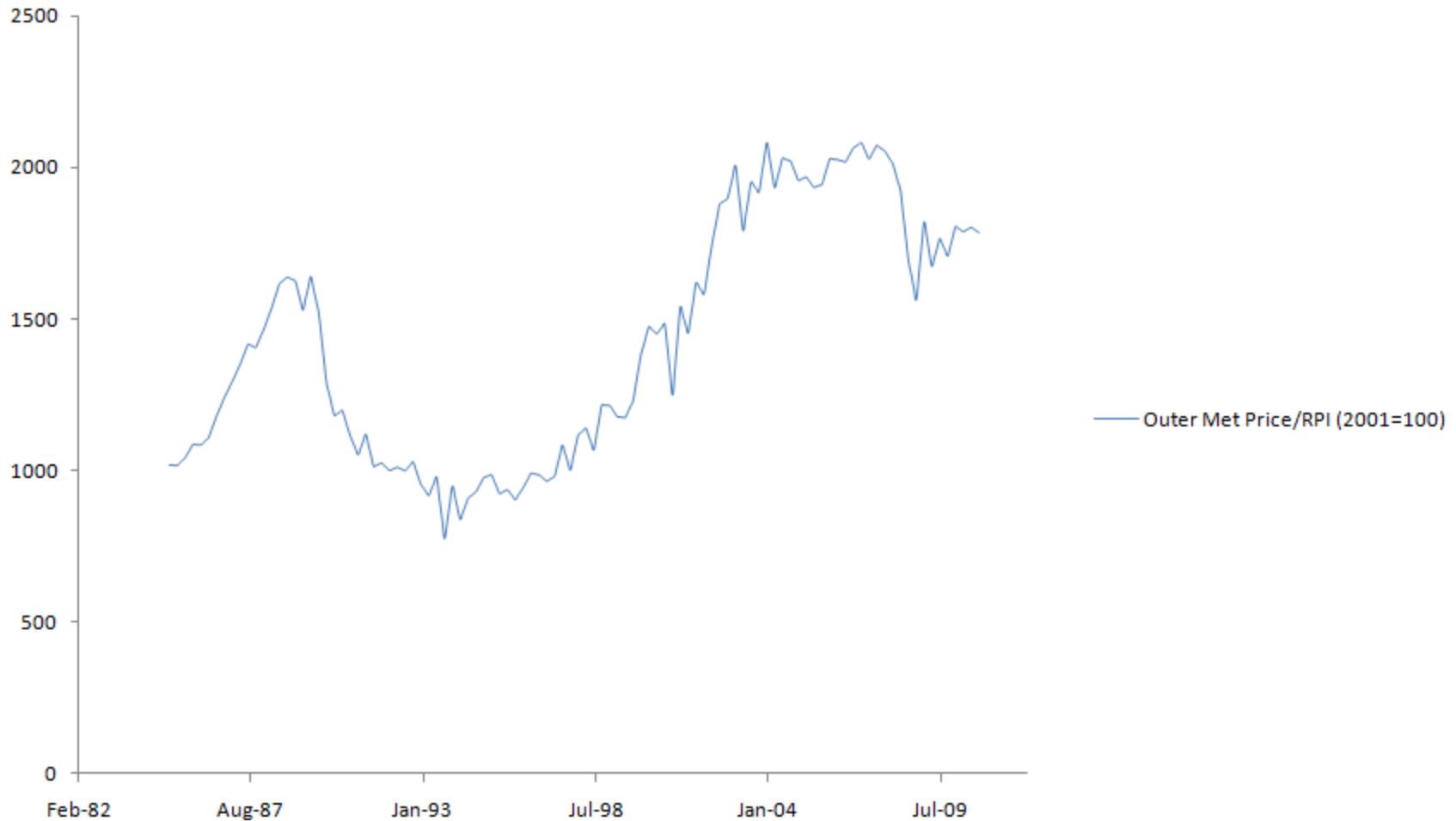
UK RPI

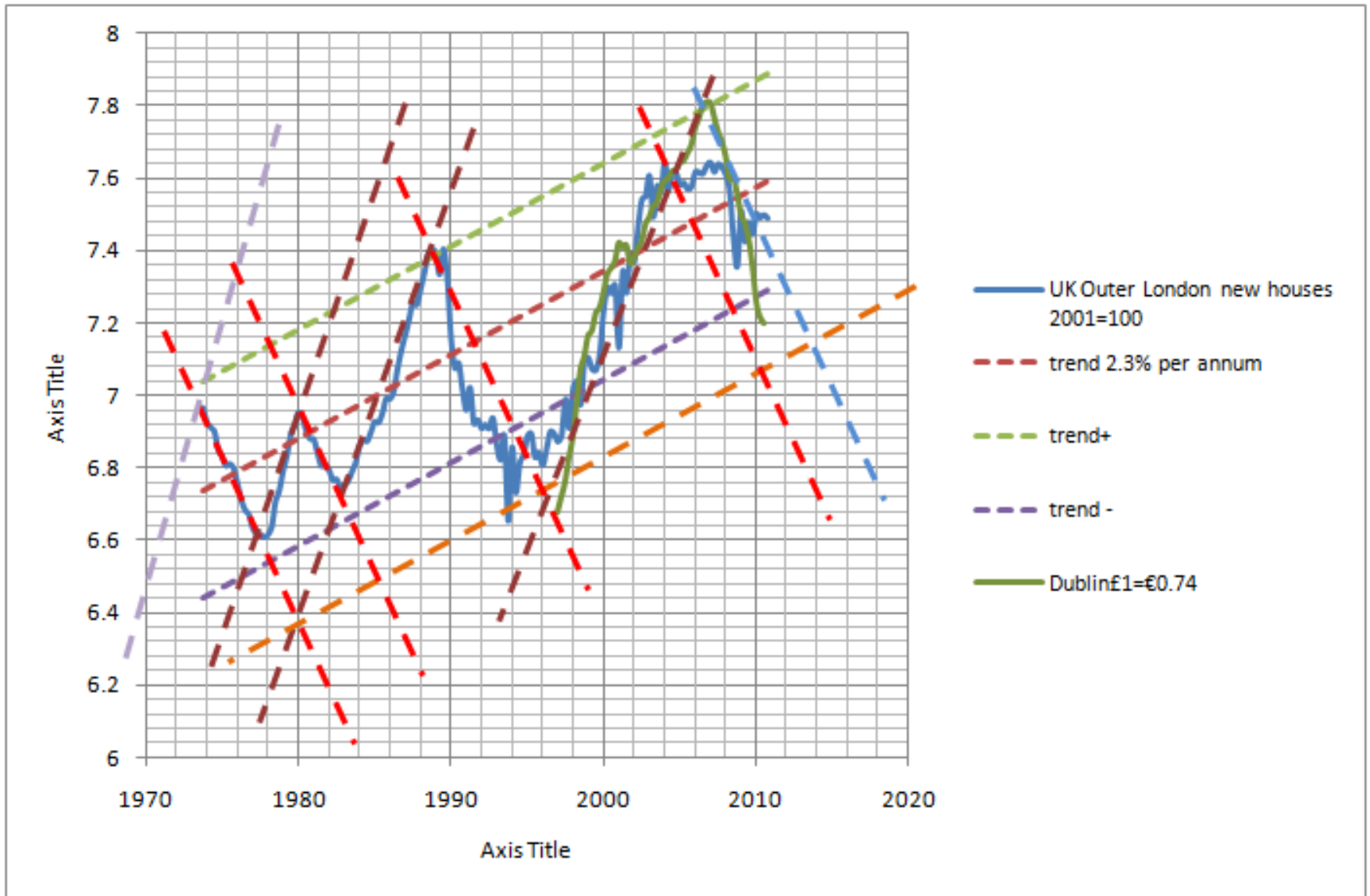


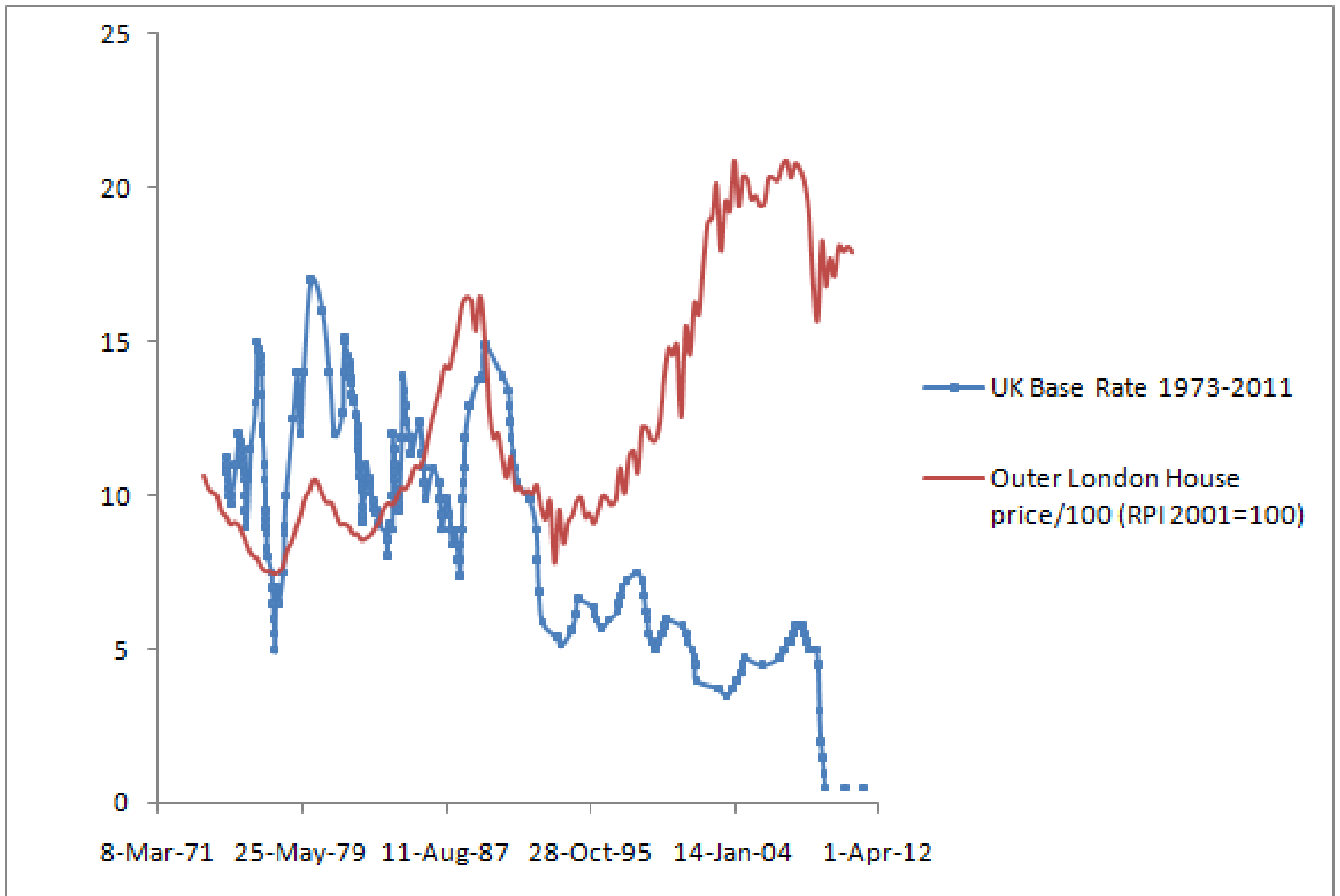
RPI Fluctuations



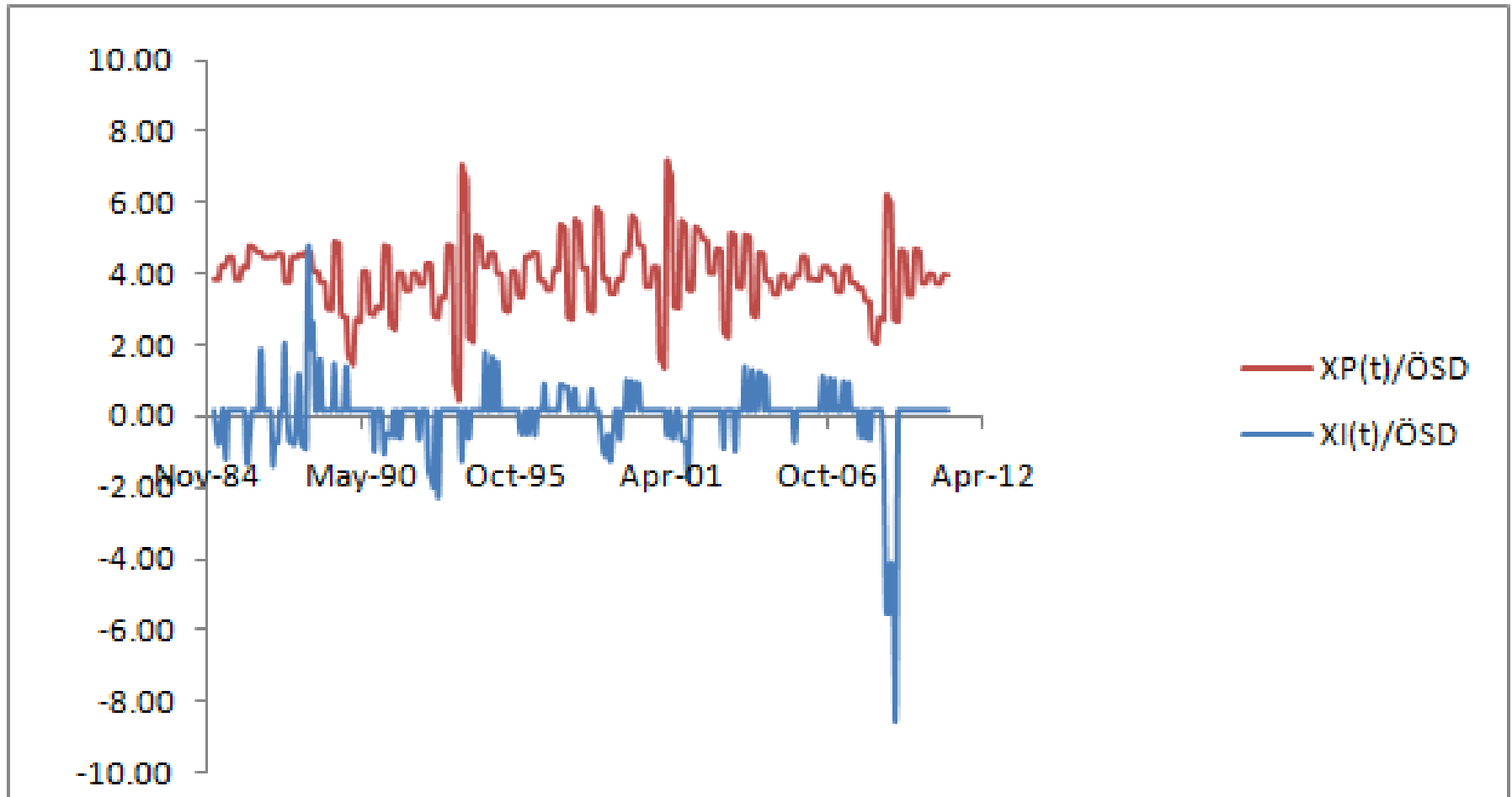
Outer London metropolitan house prices/RPI (2001=100)





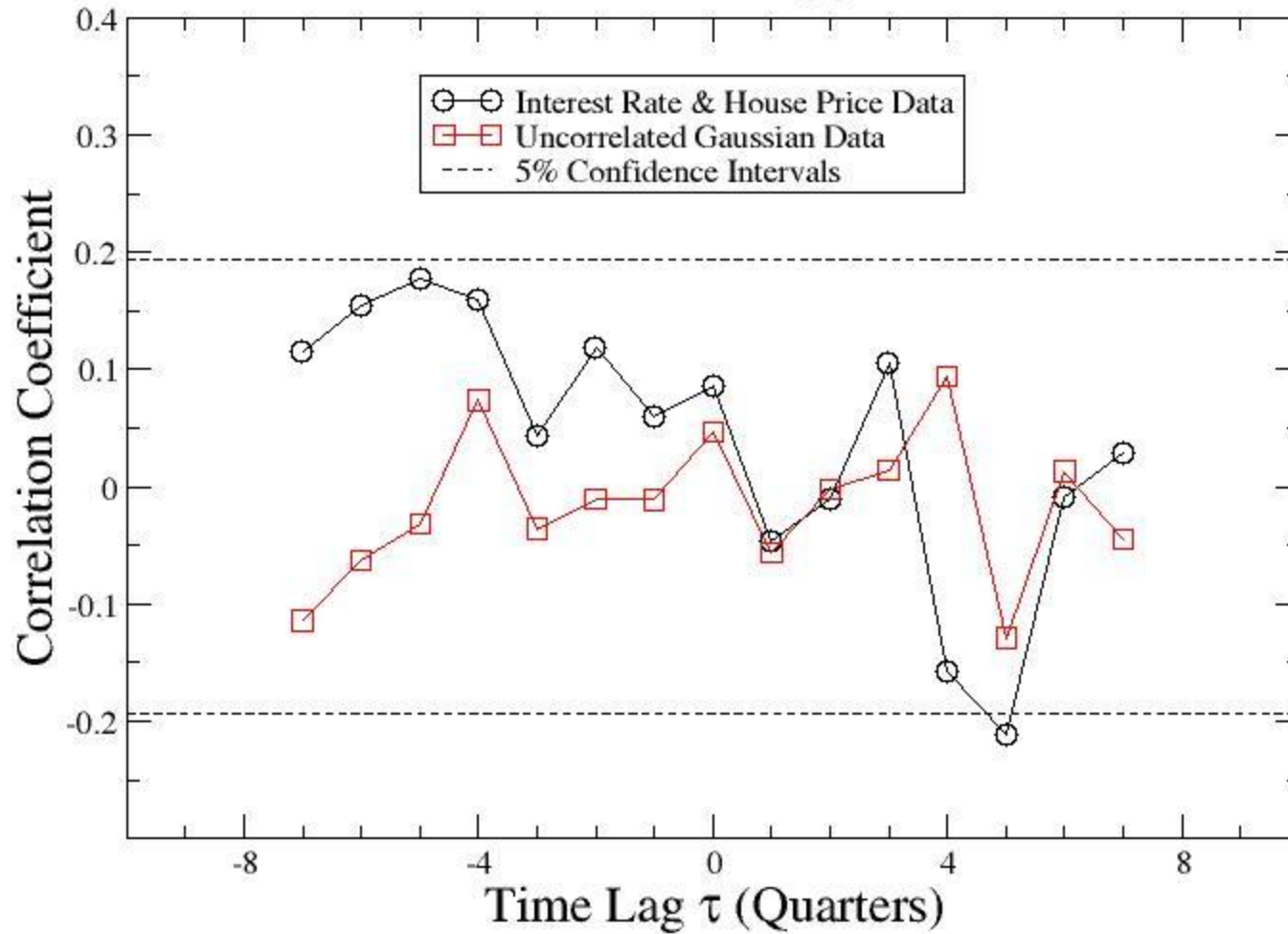


Fluctuations: price, base rate



Lagged Cross-Correlation

$$\langle R(t+\tau)\Delta I \rangle / (\sigma_R \sigma_I)$$



Conclusions

- ‘Real’ house price bubbles exhibit degree of universality
 - Rise before ‘bubble’ peak
 - Less so, fall after ‘bubble’ peak
- Interest rate fluctuations weakly correlated with price returns
- RPI and inflation are more important factors

Acknowledgments

Discussions

Prof Bertrand Roehner,
University of Paris
Stephen Hardiman, Stefan Hutzler
Trinity College Dublin Physics

Data

Nationwide BS UK
Bank of England
Office for National Statistics

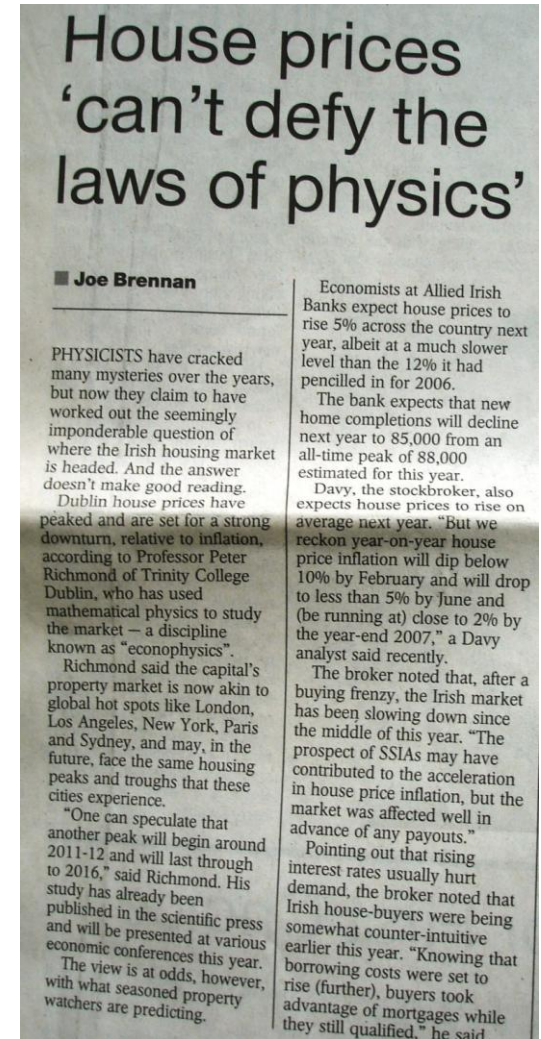
Publications

Will house prices rise in 2007? A comparative assessment of house prices in London and Dublin
In 'Coping with the complexity of economics'
Springer New Economic Windows ISBN 978 88 470 1092 6 (2009) 131-145

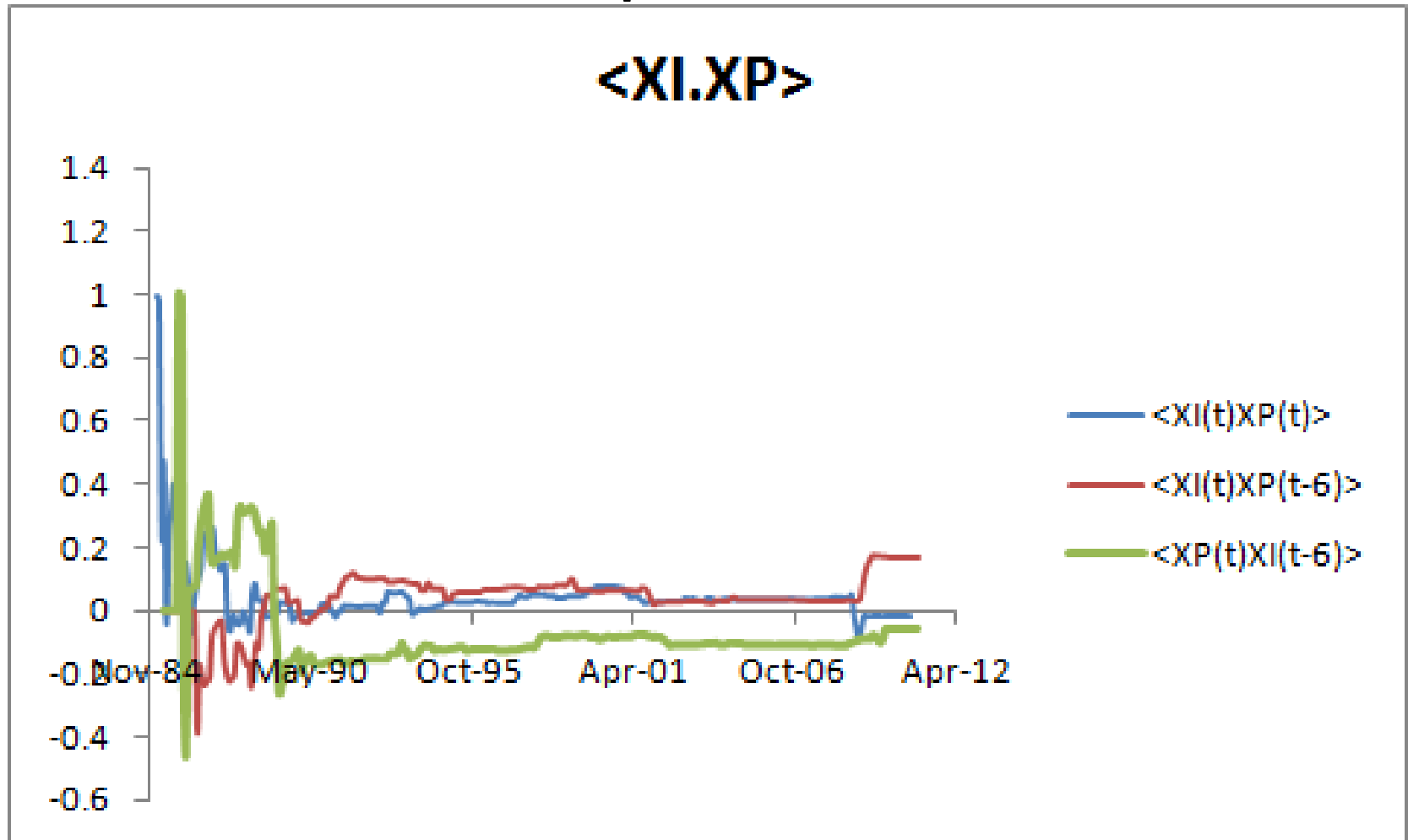
A Roof over your Head; House Price Peaks in the UK and Ireland
Physica A 375/1 (2007) 281-287

Funding

COST MP0801; IRCSET



Correlations: fluctuations base rate, price



Shape of the peaks (Roehner)

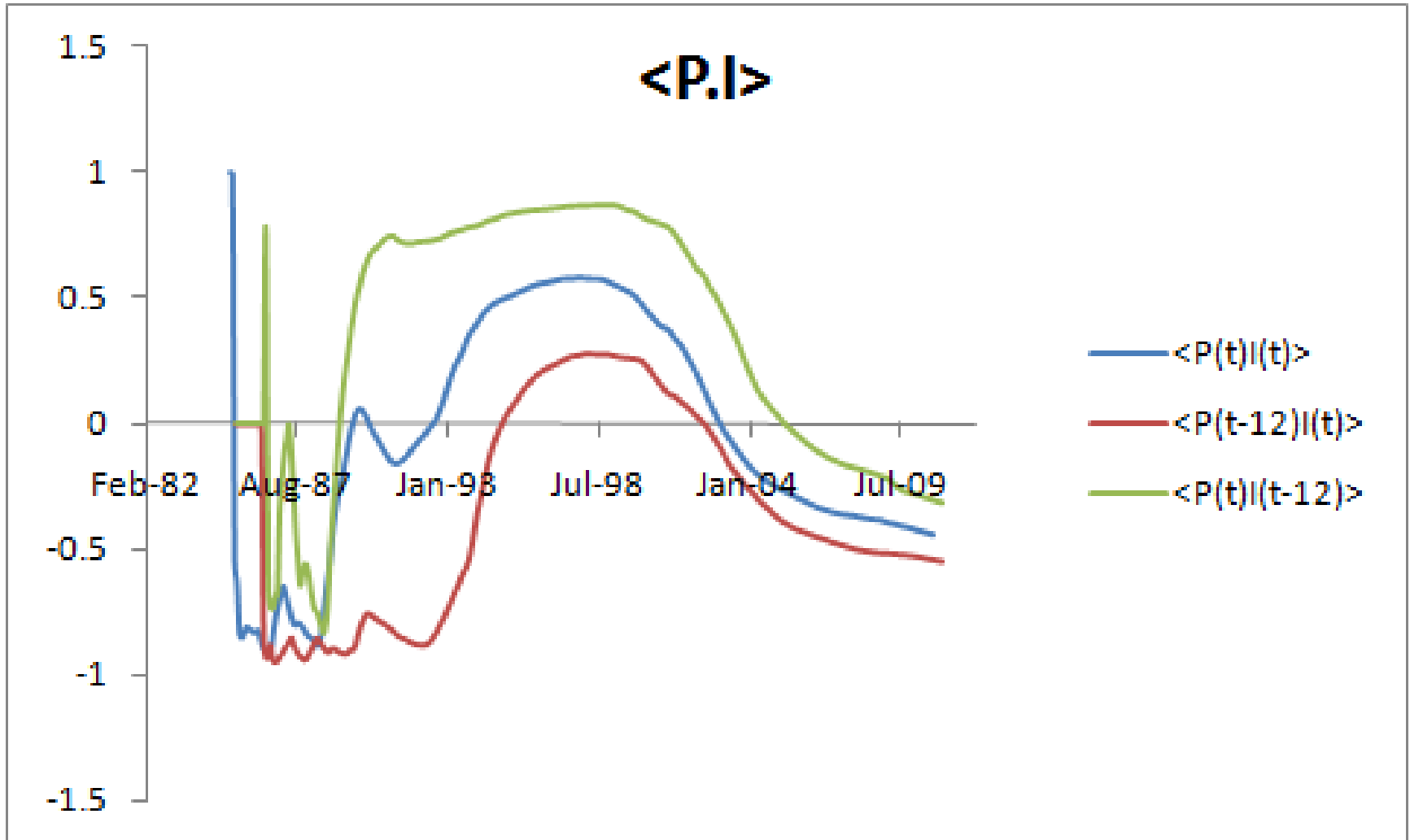
$$h(t) \sim B(t_0 - t)^{1-\beta}$$

$$\log p(t) \square \log p_0 - \frac{\kappa B}{\beta} |t_0 - t|^\beta; \quad \beta \in (0,1)$$

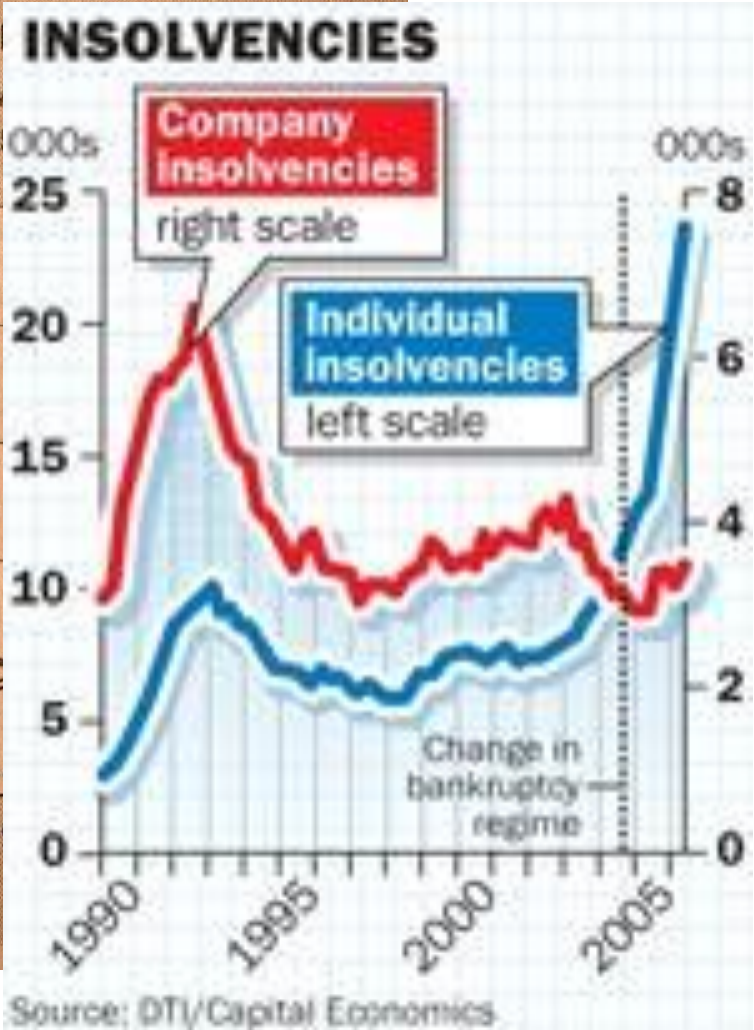
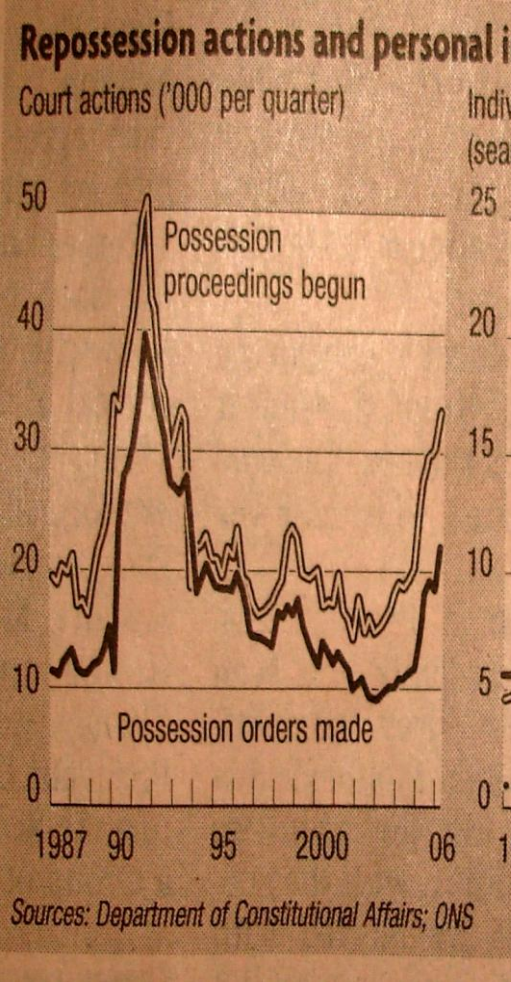
Ignore higher order corrections

→ logperiodic oscillations

Correlations: price, base rate



Insolvencies up across UK



House price bubbles

- Google → 17,800,000 hits in 0.19 seconds!
- [House prices | After the fall | Economist.com](#)
 - there is a troubling similarity between the **house-price boom** and the dotcom **bubble**:
 - investors have been buying houses even though rents will not cover interest payments
 - ... **house prices have reached dangerous levels..**
 - ...**house-buying mania has been plastered on the front of virtually every American newspaper and magazine over the past month...**

House Prices

