## Housing price peaks in comparative perspective

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Contents:

- Price peaks: pattern and mechanism
- Early warning signs of a possible downturn
- Role of the media
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- Resolving multifaceted phenomena into "simple" effects
- The crucial role of cross-national comparative analysis



## Inflation-adjusted price of new houses in Western states.

In (1.64,0.78) the first number gives the amplitude (ratio of final price to initial price) of the upgoing phase whereas the second number gives the amplitude of the downgoing phase. As defined by the Census Bureau, the western United States includes 13 states (Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming), but as far as real estate is concerned the most significant states are Arizona, California, Hawaii and Nevada.

Source: Adapted from Roehner (2005): Evolutionary and Institutional Economic Review 2, 2,167-182.
The data are from the website of the US Bureau of the Census.


## Inflation-adjusted price

In the pairs of numbers such as $(2.5,0.63)$ the first number gives the amplitude (ratio of final price to initial price) of the upgoing phase whereas the second number gives the amplitude of the downgoing phase.

Source: Halifax


## Respective changes in property price and rent during a speculative episode.

Price earning ratio means price of property divided by annual rent. Left-hand scale: price expressed in Hong Kong dollar per square meter. Right-hand scale: Ratio of price to annual rent. During the 3.5 years for which rent data are available the rent has remained stable. As a result, the rise of the PER paralleled the increase in price.

Source: Website of the Rating and Valuation Department of the Hong Kong Government.


## Role of the media in spreading real estate exhuberance.

Solid line: Yearly number of articles published in newspapers and other periodicals which contain the expressions "Property prices" and "Hong Kong" (scale on left-hand side). Broken line: Property price in Hongkong (scale on right-hand side). The correlation is 0.51

Sources: Number of articles: Lexis-Nexis newspaper data base; property price: Website of the Rating and Valuation Department of the Hong Kong Government.


## Stock price of building companies versus volume of sales.

Solid line: monthly stock prices for the following companies: DHI, PHM, TOL, other building companies have a similar behavior. Broken line: semestrial number of new houses sold (in thousands), scale on the right-hand side.

Sources: Stock prices: http://biz.yahoo.com; sales: US Bureau of the Census.


## Stock price of building companies versus volume of sales.

Solid line: monthly stock prices for the following companies: KBH, LEN, MDC, NVR, RYL; it can be noted that the prices are much less correlated than in the epiode 2003-2007 (this is why we have taken a larger sample). Broken line: semestrial number of new houses sold (in thousands), scale on the right-hand side.

Sources: Stock prices: http://biz.yahoo.com; sales: US Bureau of the Census.


## Monthly stock price of British home building companies.

The solid line is the average of three companies: UK-BVS, UK-BWY, UK-RDW.

Website of the London Stock Exchange.


## Monthly stock price of US Real Investement trusts (REIT)

The solid line is the average of three companies: AVB, BRE, EQR
Source: http://biz.yahoo.com.


The two companies are: AHM (a REIT) and TARR (renovator and seller of apartments and houses.

Source: http://biz.yahoo.com.


## Real estate prices: projection for 2005-2011

The graph superposes the episodes for 1970-1982, 1982-1992 and the current episode; for the latter, it proposes a projection based on the characteristics of previous cases.

Mortgage chain: from providers to end users of mortgage loans


## Machinery for financing mortgage loans.

This is a complicated machinery but it can be broken up into different mechanisms much in the same way as the working of an automobile engine is better understood when it is decomposed into different parts: battery, ignition, carburettor, etc.

Various mechanisms


## Resolution of the mortgage machinery into "elementary" effects.

