Exaggerated Collapses after Irrational Exuberance- A behavioural finance view on how the recent financial crisis emerged

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Abstract

Based on theories of irrational expectation, this paper examines how the global financial crisis emerged through the view of behavioural finance. By reviewing related literature and looking into the conduction process, this paper finds that there were four stages through which the recent financial crisis emerged, during each of which some behavioural biases stood out predominantly, namely, availability bias, agent conflicts, loss aversion, as well as social contagion, explanation in detail also follows.

Keywords

Exaggerated collapses, irrational exuberance, behavioural finance, financial crisis.

1. Introduction

With irrational expectation theories gaining more and more affirmation, it may be more sensible to combine traditional macro perspectives with insights of micro behaviours to explain financial crises. As a matter of fact, it is the accumulation of quantities of micro behaviours that makes a macro difference. However, the sum of micro behavioural biases does not necessarily result in economic fluctuations, concerning the usual diversification of individual behaviours. Only systemic behavioural biases give rise to macro turbulence, with herding behaviour being the core explanation. By reviewing related literature and looking into the conduction process of the recent financial crisis, I came to the conclusion that there were four stages through which the recent financial crisis emerged, during each of which some behavioural biases stood out predominantly.

2. Availability bias and cascades – irrational optimism

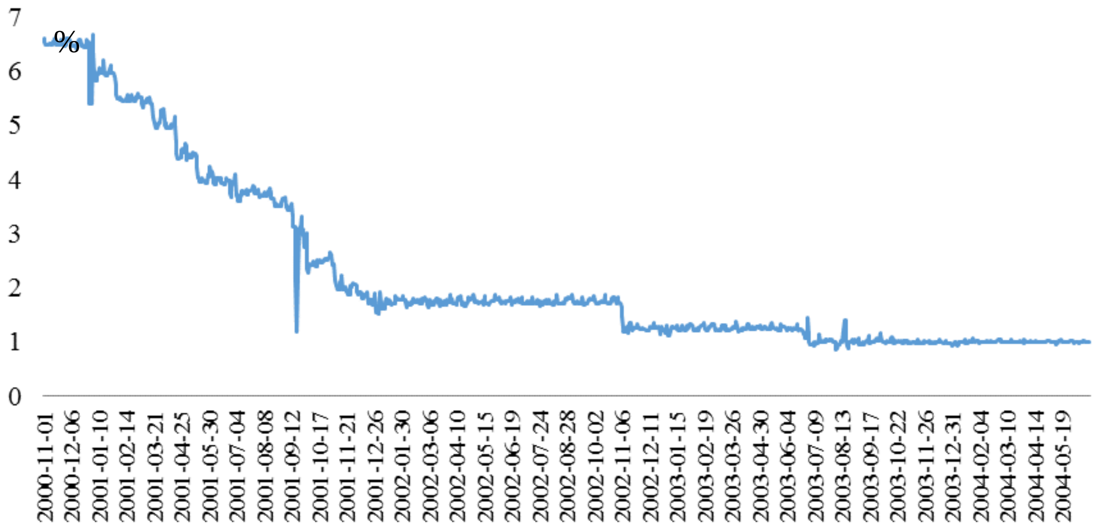

Fig. 1 Federal Funds Effective Rate (Daily: 01/11/2000-22/06/2004)

Source: Federal Reserve Board.

When it comes to the recent financial crisis, even outsiders might well tell you with fervour and assurance that it was the over-credited real estate market of the US that pulled the trigger. Nevertheless, how could the world's most developed financial market have made such a misjudgement? It's necessary for us to trace back to the origin of the crisis.

From 2001 to 2004, federal funds effective rate slid all the way from 6.5% to 1% (Fig. 1) in order to stimulate consumption and economic growth.

On the ground of such friendly monetary condition, the real estate price of the US kept rising with average speed over 10% per year, all REITs price index climbed from 91.72 in Jan, 2001 to 154.73 in Dec, 2005(Fig. 2).

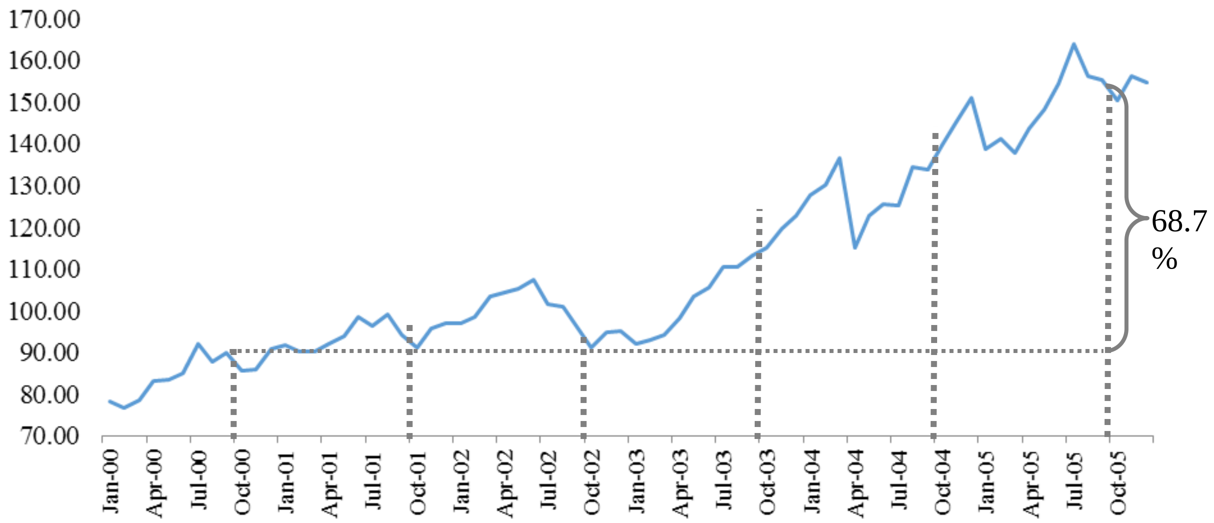

Fig. 2 FTSE NAREIT US Real Estate – All REITs Price Index (Monthly: 01/2000-12/2005)
Source: REIT.com

As individual attention and effort were limited (Kahneman, 1973), information easily accessible during that period was nothing but flourishing real estate market, on the basis of which some investors fell in the cognition that real estate prices would always rise.

Apart from individual biases, social interaction brought about availability cascades (Kuran et al., 2007). Individual cognition was strengthened and in turn deepened social influence. As a consequence, irrational optimism about the real estate market accumulated, even impacted some of agencies rating the derivative securities.

3. Agent conflicts – enlarging the bubble

There was a point which should not be ignored that institutions even like Goldman Sachs and Morgan Stanley were involved in the credit crisis, implying top institutional investors confronted disorders? The answer may not be simple. What make institutional investors different is that they mostly invest for others, which protects agents like fund managers in a situation of unlimited payoff prospect and limited responsibility, shifting risk to clients when their investment encounters huge losses. Such conflicts, to some extent, resulted in the change of agents' risk preference. Hence investment choices proved wrong might have been aroused by risk shifting, rather than 'disorders play'. Agent conflicts enlarged the bubble by providing agents with fearless investment prospects, leading the market to unprecedented confidence. Combined with earlier researches on agents' risk preference and herding behaviour(Grinblatt, et al.,1989, Scharfstein, et al., 1990), we can see that institutional investment is not only about techniques, agent conflicts brought by self-interest may well crowd out professional accomplishment. Consequently, a mass of borrowers with poor credit histories got credited. What's worse, a good deal of derivatives backed by those loans were created and transacted by well-trusted institutional investors.

4. Loss aversion – overreaction after the bubble collapsed

Bubble-made tales were doomed to collapse. With interest rate rising from June, 2004(Fig. 3), a large number of borrowers failed to repay their previously easily got credit, leading to the rapid increase of banks' non-performing loans. From loans to ABS, MBS, CDOs, affected institutions spread to investment banks and other institutional investors, the formation of global financial crisis started.

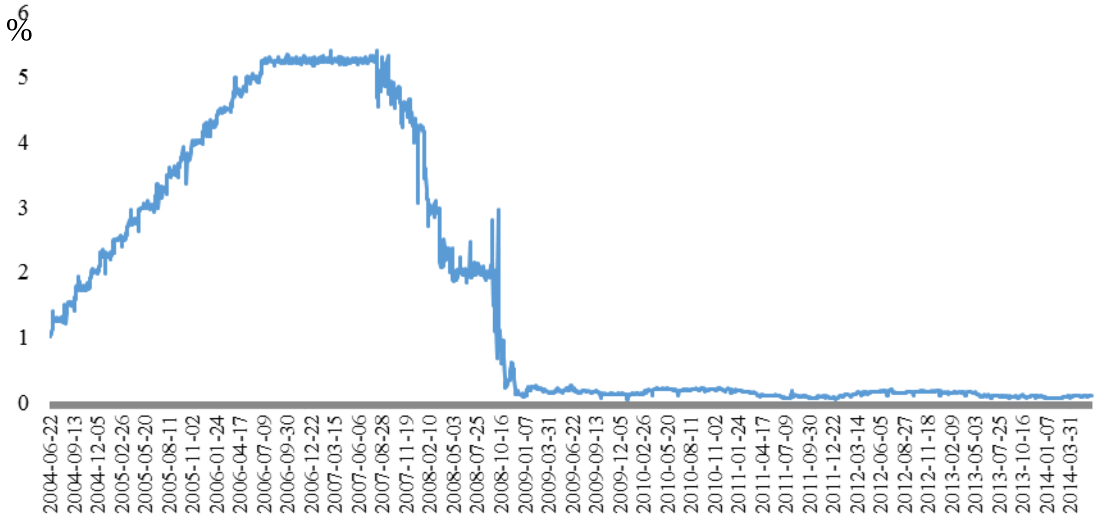

Fig. 3 Federal Funds Effective Rate (Daily: 22/06/2004-16/06/2014)

Source: Federal Reserve Board

What financial crisis caused was more than financial problems. Owing to people's loss aversion (Kahneman, 1979), investors' confidence was reversed to fearful risk-aversion, not only more conservative when investing in financial markets, but also preferring to cut down investment and consumption in the real economy, in other words, a downturn in financial markets stirred up economic recession due to the overreaction of micro subjects after the bubble collapsed.

5. Social contagion – globalized crises

With global interaction much easier than before, individuals' behaviours depended more on social factors. Social media had then been playing an important role in people' life, overly pessimistic economic expectation was repeatedly reinforced through the process of global contagion. Apart from that, the depression of real economy in turn deteriorates financial payoffs, making the crisis originated from the US evolve into global economic crises.

It could be observed that governments promoted series of stimulus packages promptly for economic bailout, however, pessimism was still taking control. It is now approaching 8th year after the symbolic incident of Lehman Brothers' bankruptcy, the US have carried out round after round of QE, yet optimistic market feedback is still doubtful. It is difficult to rebuild market confidence up after such great risks have happened, concerning people's risk aversion toward poor payoff prospect.

Therefore, the emerging process of the recent financial crisis started from irrational exuberance and developed into exaggerated downturns, with end still invisible. As we can see till now, it is important to realize that the neoclassical assumption of perfect market and rational economic subjects is not so appropriate to explain many practical phenomena. It is easy to find herding behaviours in everyday life, which cannot be avoided in financial markets, either. Future financial regulation may well take market behaviours into account, not only investors' or debtors', media's and regulators' are also of great influence.

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