

What Happened During the Global Financial Crisis?

A brief report on the stock price (financial, tech, energy) in the 2007-09 financial crisis

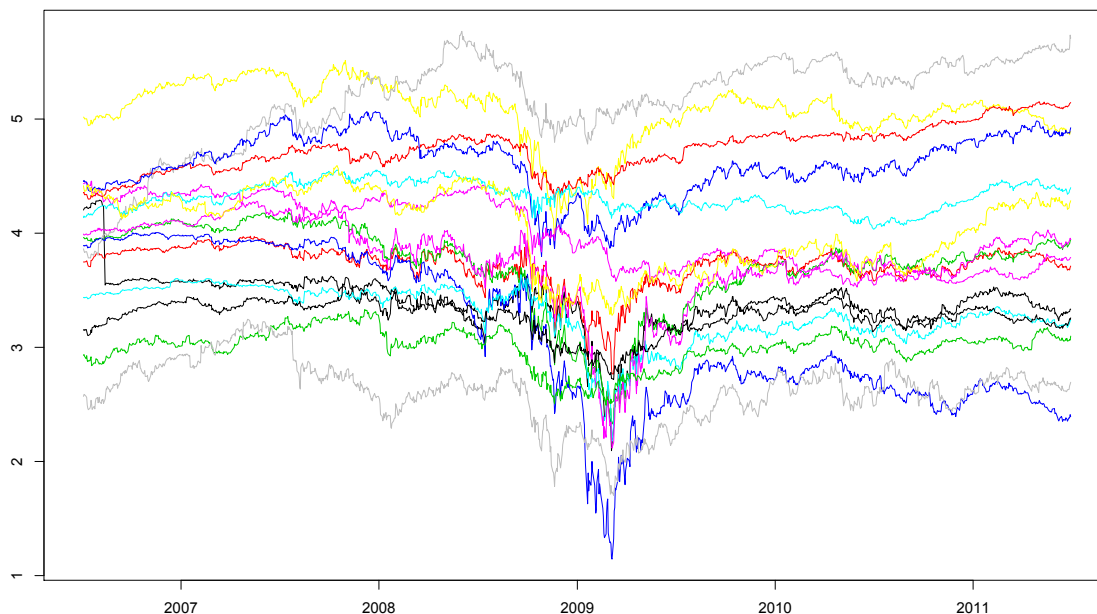
By **Qin Yu**, Jun 2018, \LaTeX is my favourite.

The financial crisis of 2007/2008, also known as the global financial crisis and the 2008 financial crisis, is considered by many economists to have been the worst financial crisis since the Great Depression of the 1930s.[1]

1 Introduction: the Data

To analyse the stock price data, statistically, during the Global Financial Crisis, the author used R on selected once including 8 stocks for the financial industry (and the average), 4 stocks for the technology industry, and 4 stocks for the energy industry, from 1st July 2006 to 30th June 2011 (but focus on 1st Jan. 2007 to 31st Dec 2010). With illustrations, we shall see from a mathematical and statistical point of view, what happened to these industries in the Global financial crisis.

Fig.1 Overview: Log Prices of All 16 Stocks



2 Overview: the Dynamics

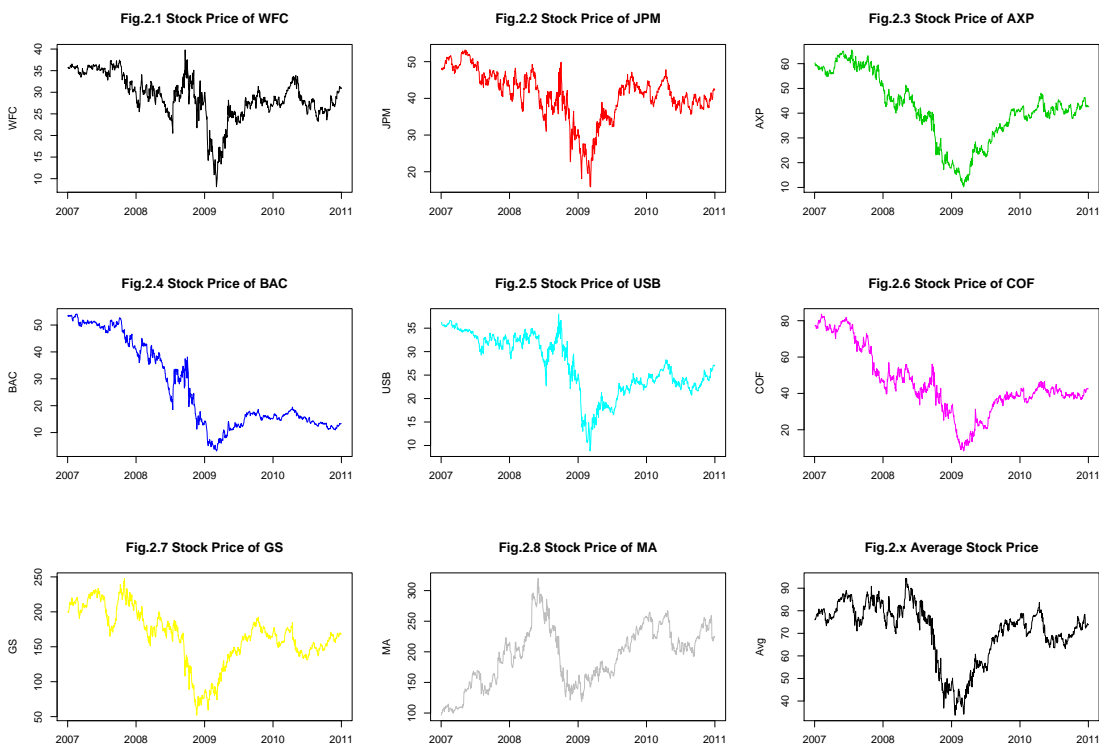
From Figure 1, 2, 3 and 4, one observes the early tremors started around February 2007. and June 2007 is when things really went wrong as we see clearly in both figures. Here is some key dates related to the graph:

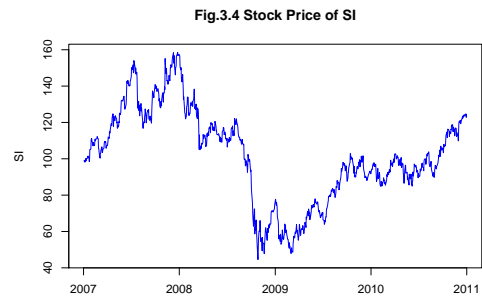
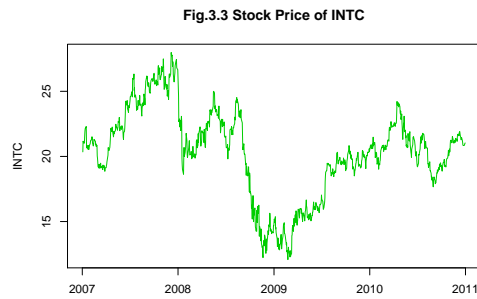
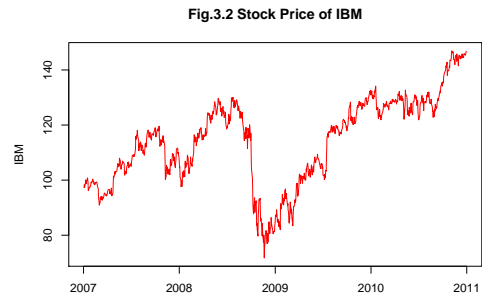
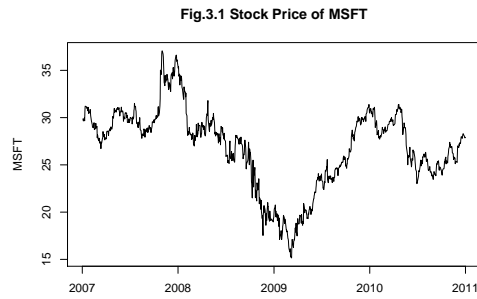
Jun. 2008 There is a sign of an undesirable trend, and this is when the subprime mortgage crisis happened: “Two Bear Stearns-run hedge funds with large holdings of subprime mortgages run into large losses and are forced to dump assets. The trouble spreads to major Wall Street firms such as Merrill Lynch, JPMorgan Chase(Fig.2.2 JPM), Citigroup and Goldman Sachs(Fig.2.7 GS) which had loaned the firms money” [2].

22 Jan. 2008 The situation seems to be in control briefly as “the Federal Reserve System (The Fed) stepped in” [3].

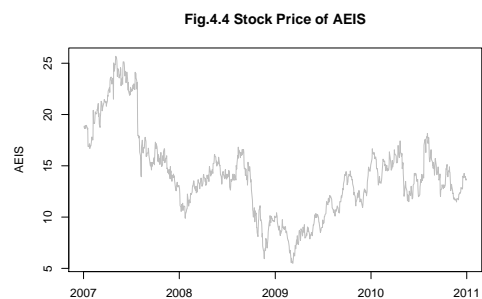
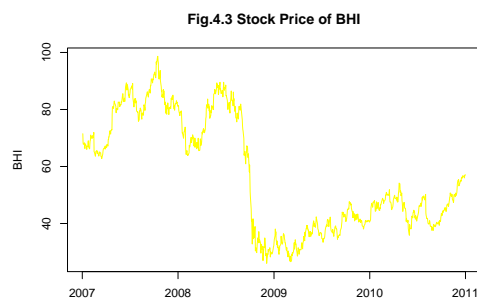
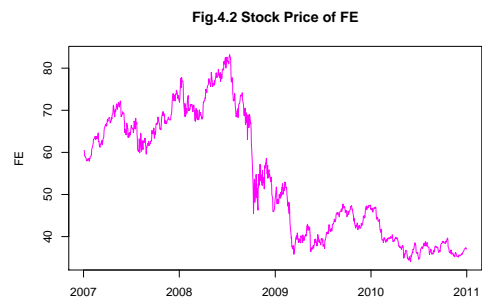
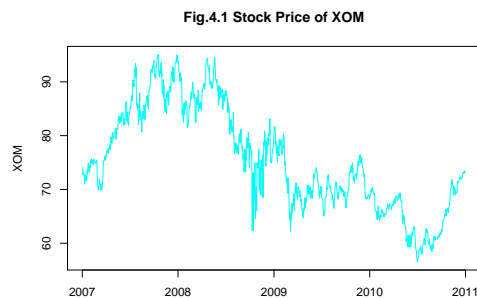
14 Mar. 2008 “Global investment bank Bear Stearns becomes a major early casualty and is bought by JP Morgan(Fig.2.2 JPM) for \$240m” [3]. This is “orchestrated by and backed by the US government, following a sharp decline in shares and a collapse in the confidence in the company” [2].

15 Sep. 2008 The market fell apart, all stock went down: “The Dow Jones Industrial average plunges 504 points to close at 10,917.51” [2]. “Investment bank Lehman Brothers files for the largest bankruptcy in history. Panic breaks out in markets across the world as massive leverage overwhelms a bank with \$639bn in assets. The next day the Fed is forced into an \$85bn bailout of American International Group (AIG)” [3].





Oct. 2008 Emergency Economic Stabilization Act was signed into law in US, Iceland's financial sector collapsed, UK government stepped in to shield British depositors, and so on. Governments around the world made every effort trying to stop the chaos but nothing could bring the broken market back to life. As we see in all figures, all stocks plunged until 2009.



3 Analysis of Dependencies

References

- [1] Wikipedia contributors. “Financial crisis of 20072008.” Wikipedia, The Free Encyclopedia. Wikipedia, The Free Encyclopedia, 29 Jun. 2018. Web. 30 Jun. 2018.
- [2] Guilln, Mauro F. “The global economic & financial crisis: A timeline.” The Lauder Institute, University of Pennsylvania (2009): 1-91.
- [3] Jolly, J. (2017). The financial crisis 10 years on: A timeline of the crash. [online] Cityam.com. Available at: <http://www.cityam.com/269810/global-financial-crisis-10-years-timeline-global-events> [Accessed 30 Jun. 2018].