Behavioural Biases in the Indian Stock Market

Alok Kumar Sahai and Veena Keshav Pailwar[1]

An enormous amount of information hits human brains every moment of every waking hour of a day. Even with the most evolved brain, humans find it impossible to analyze and interpret the sea of information available to them in real time. That is why the human mind reacts very selectively to the information it takes in, by employing shortcuts and rules of thumb to arrive at conclusions, evaluate potential risks and rewards, and assess the likelihood of particular outcomes. The shortcuts are often based on immediate past experience, intuitions, feelings, familiarity, easy recall of events, following the mob, etc. The use of such shortcuts often biases people's decisions and make them act in apparently irrational ways. Even while taking financial decisions people use shortcuts, which bias their investment and other financial decisions. The branch of finance that studies the influence of behavioural biases on financial decisions is known as behavioural finance. The literature on behavioural finance indicates that there are a large number of biases that affect our financial decisions. At any point of time, a person or an investor may be affected by more than one bias, making the decision making process a complex one. At the same time, different people or investors may be affected by different combinations of biases, which make them react to the same situation in different ways. In stock markets such biases are observed commonly.

Traditionally stock market investors are classified as bulls or bears. Our observation of the Indian stock markets indicates that, depending on the combination of behavioural biases exhibited by the traders, we can classify them as Lions, Jackals, and Pigs.

Lions are aggressive traders affected by overconfidence bias. They rely on their own information and analysis and do not entirely depend on publicly available information. These traders are likely to be contra traders, i.e., they bet on reversals in the market by entering long (purchasing stocks) in a falling market or short (selling stocks) in a rising market. These traders take high risks by timing the market reversals and are rewarded commensurate with their risks. Lions are few in number but trade heavily and aggressively. Trading in large volumes, they can affect the market outcomes significantly. Foreign Institutional Investors (FIIs) and Domestic Institutional Investors (DIIs) are the lions in our analysis.

The trading strategy of Jackals is to follow the trend of the market and move with the flow of the market by entering long in rallies (rising markets) and short in the corrections (falling markets). They have a high probability of success. They get squeezed and realize losses only when they enter long near the top or short near the bottom. The jackals follow the lions to enter the market and latch on to the trends after the initial kill of the lions. Jackals come in large packs and trade in smaller amounts. They affect the market more by their number than their trade volumes. High Networth Individuals (HNIs) and large traders come under this category.

Pigs or retail traders or the conservative traders are affected by biases known as risk aversion, loss aversion, and short sightedness. Such traders are likely to sit on the fence for confirmation of any price trend and are the last ones to join the party. As they enter late and exit the trades fast and their trading horizon is short, they generally miss out on rallies and corrections and often get

[1] Alok Kumar Sahai is Associate Professor, iLead School of Business, Indore, India and Veena Keshav Pailwar is Professor, Institute of Management Technology, Nagpur, India.

slaughtered. However, as they take less risk they are also content with low payoffs. Pigs are the largest in number but their trade size is the smallest.

At a point of time, all types of traders are seen in the market, but the dominant category affects the market outcomes. We can see this clearly from the behaviour of the Indian stock market during the run up to the latest Lok Sabha election and its aftermath.

Nifty, the Index of the National Stock Exchange, was at 5928 on 4th Feb 2014 (Figure 1). At that time, the election fever had just caught on and the campaigning had started. There was a general opinion that Congress, the ruling party for the last two terms at the centre, would not return to power and a BJP government might take over and the new government under Mr. Narendra Modi might be conducive for the business and industry in India. This widespread opinion started the long rally in Nifty; it started from below 6000 in early February, crossed 6500 mark in one month's time, and stood at 6558 on 10th March 2014.

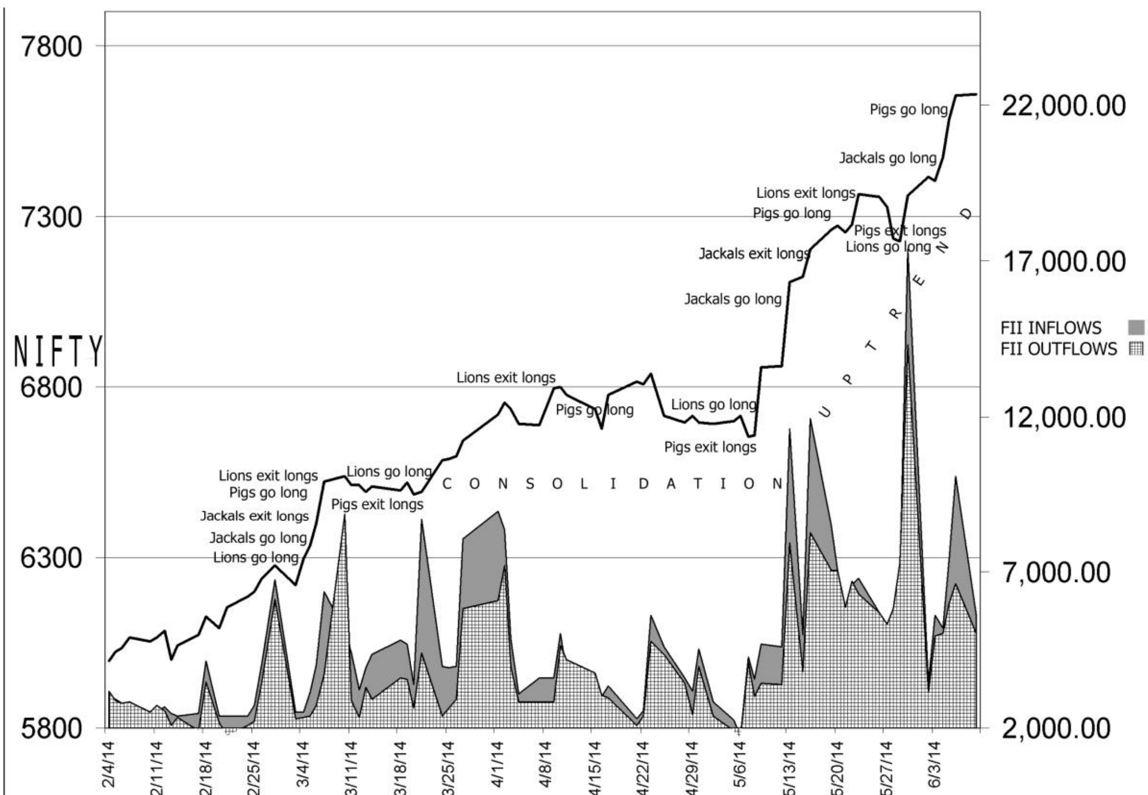

Fig 1. Nifty Daily Closing Price and Net FII inflows

Source: Authors' own construct based on data from www.nseindia.com on 10 June 2014

The BJP campaign caught momentum and the Lions, hopeful of a big rally, started taking positions in Nifty and sectoral scrips like banks and infrastructure. After rising more than 10 percent in March 2014, Nifty moved only to 6800 in the next month, i.e., April, which was less than 4 per cent rise. This shows that the market had not caught the momentum yet and the jackals were not yet in the market.

In the subsequent period, the Nifty showed a decline from 6800 on 9th April 2014 to 6634 on 8th May 2014. This happened due to profit booking by pigs, who were holding some stocks for a long time and did not want to face the uncertainty of election outcomes. The Lions held onto their longs and opened more fresh longs.

By 9th May 2014, punters had given very high odds of the BJP coming to power, making the lions open fresh long positions and the jackals joining them. Around this time the exit survey results were allegedly leaked, which caused a four day rally in the market. From 12th May 2014 to 15th May 2014, the Nifty made new daily highs. Also along this time the FII inflows had been rising and peaked on 13th and 16th at over 3600 crores net inflows. On 16th May 2014, i.e., the election results day, the Nifty touched a high of 7563 before profit taking pulled it down to 7203 at close. Pigs, having missed the rally, jumped on the bandwagon on or before 16th May 2014. Immediately after 16th May 2014 the markets lost 20-30 points daily for four consecutive working days, trapping the pigs in the process of corrections. This correction was perhaps caused by the lions cashing out after the big rally and taking contra positions on the short side. The fifth working day, i.e., Friday, 23rd May 2014, as the policy direction of the incoming government became clear, the markets rallied 80 points on fresh longs by lions. On Monday, 26th May 2014, i.e., on the day of swearing in ceremony of the newly elected PM, on continuation of the positive sentiments, the Nifty again went up by over 140 points. At the close the Nifty was trading at 7359 or 8 points below previous day's close. The next three days saw Nifty shrinking further by 131 points. This period was also marked by negative net inflows of FII money. The inflows and outflows had not yet abated indicating sectoral switching and some profit taking by the lions. A fresh thrust was seen on 30 May with net inflows of over 500 crores. Between 30 May and 10 June FIIs pumped in over 54000 crores in metals, infrastructure, power and financial services sectors and Nifty scaled new heights scaling 7400, 7500 and 7600 in the process. The markets witnessed two days of correction on 10th and 11th June i.e. today with Lions closing their longs and taking profits. Infrastructure, power, banking, metals, steel and financial sector witnessed all round selling and IT sector saw fresh longs. Stocks like TCS, HCLtech, Tech Mahindra and Infosys rose upto 3% while the Nifty closed in red for the second day in a row.

A further insight into the market behavior is seen with the FII inflows and outflows data for the corresponding period. The peaks in the inflows, depicted with dark grey in the lower panel of Fig.1, coincide with the entry levels of the Lions. FII outflows are shown as grey checked legend in the lower panel and its peaks coincide with Lions exiting longs. FII inflows show a very encouraging pattern with four instances of inflows over 11000 crore in May and June. The biggest single day purchase of 17371 on 30 May indicates that the rally is not yet over and the lions are taking fresh bets. The latest large inflow of 10,074 crores on 6th June further reaffirms the commitment of the lions in the Indian stock market. With the attendant large outflows it is surmised that the lions are switching sectors in line with policy indications at the center.

We expect the lions to pull the Nifty to 8000 mark by budget session in July before taking profits and opening shorts from the top of the market rally. Thereafter a correction to 7000 or lower levels can not be ruled out.