

Impact of Budget and GDP Announcements on Indian Stock Market

VIVEK PANWAR*
GANESH KUMAR NIDUGALA**

Abstract

Macroeconomic policy announcements such as the annual Budget and GDP data are events keenly watched by stock market participants and other economic agents. Such events first impact to the stock markets before transmitting to the real sector. In this study we considered the impact of Budget and GDP data on Indian stock market. We employed broader market index CNX500 consisting of 500 stocks covering 97.3% of market capitalization. Further, key sectoral indices such as, IT, Financial Services, Consumer goods are used to analyze the sectoral impact of policy announcements/ events. Usage of a broader index CNX500 and analysis of sector specific variations are important to cover the depth of the stock market across sectors and to come closer to any meaningful conclusion on the possibility of abnormal returns in the stock market and in specific sectors.

I. Introduction

ECONOMISTS, POLICY MAKERS, fund managers, analysts, and other economic agents follow stock markets closely for their reaction to Macroeconomic policy and data announcements. Extensive studies have found that stock markets are susceptible to sharp changes due to policy announcements or key macroeconomic data release. It is noteworthy that though macroeconomic policy announcements influence the real sector, such impact is indirect. The first mover is asset prices such as stock markets/ bond markets. Hence, it is extremely important to understand the relation between the announcements of key policy initiatives (such as Budget), important macroeconomic variables (such as GDP data), and stock market movement. Stock market variations due to such relationship give rise to the possibility of

* Fellow Research Student, Indian Institute of Management, Prabandh Shikhar, Rau-Pithampur Road, Indore Madhya Pradesh 453556, INDIA

** Professor, Indian Institute of Management, Prabandh Shikhar, Rau-Pitampur Road, Indore, Madhya Pradesh 453556, INDIA

Notes

- 1 CNX500 is India's broad based index consisting of 500 stocks listed on the National Stock Exchange.
- 2 The CNX Nifty is a diversified stock index consisting of 22 sectors of Indian Economy and 50 National Stock Exchange listed stocks. (www.moneycontrol.com/nifty/nse/nifty-live)
- 3 "S&P BSE SENSEX is calculated using the 'Free-float Market Capitalization' methodology, wherein, the level of index at any point of time reflects the free-float market value of 30 component stocks relative to a base period." (www.bseindia.com/sensexview/DispIndex.aspx?iname=BSE30&index_Code=16)
- 4 CNX Nifty Junior is an index comprised of the next rung of 50 most liquid stocks after S&P CNX Nifty. S&P CNX Nifty and Junior Nifty may comprise of a basket of 100 most liquid stocks in India. (nseindia.com/content/press/CNXniftyJr.pdf)
- 5 See inter alia Fama (1981), Chen et al. (1986), Mukherjee and Naka (1995), and Binswanger (2004).
- 6 www.tradingeconomics.com/india/gdp-growth-annual
- 7 indiabudget.nic.in/ub2015-16/bh/bh1.pdf
- 8 www.businesstoday.in/union-budget-2015-16/stocks-impact/stock-market-weekly-sensex-nifty-reaction-feb-28-budget-2015/story/216371.html
- 9 Number got reduced from 500 stocks to 428 since we removed the stocks which had undergone stock split or which had issue of stock dividends (bonus) or there were other crucial corporate announcements during the estimation window which would impact price movements. The estimates of alphas and betas for 428 stocks are available with authors and can be provided on request. For want of space we are not reporting the detailed results in this paper.
- 10 We have not presented results for all the sectors here for want of space. These are available with authors and can be provided on request.
- 11 www.statisticstimes.com/economy/countries-by-projected-gdp.php
- 12 www.thehindubusinessline.com/economy/gdp-grew-79-in-q4-cso/article8673270.ece
- 13 We have not reported these results here for the sake of brevity. We can provide the same on request.

References

- Agrawalla, Raman K. and S. K. Tuteja, (2008), "Share Prices and Macroeconomic Variables in India: An Approach to Investigate the Relationship between Stock Markets and Economic Growth", *Journal of Management Research*, Vol. 8, No. 3, pp. 136-146.
- Humpe, A., and P. Macmillan, (2009), "Can macroeconomic variables explain long-term stock market movements? A comparison of the US and Japan", *Applied Financial Economics*, Vol. 19, No. 2, pp. 111-119.
- Bernanke, B.S., and K. N. Kuttner, (2005), "What explains the Stock Market's Reaction to Federal Reserve Policy?", *Journal of Banking and Finance*, Vol. 60, No.3, pp. 1221-57.
- Binswanger, M. (2004), "How important are fundamentals? – Evidence from a structural VAR model for the stock markets in the US, Japan and Europe", *Journal of International Financial Markets, Institutions and Money*, Vol. 14, No. 2, pp. 185-201.
- Chen, N.F., R. Roll, and S.A. Ross, (1986), "Economic forces and the stock market", *Journal of Business*, Vol. 59, July 1986, pp. 383-403.

Darrat, A.F., (1990), "Stock returns, money, and fiscal policy", *Journal of Financial and Quantitative Analysis*, Vol. 25, No. 3, pp. 387-398.

Dinesh S., and N.K. Purohit, (2013), "A Study on Pricing Behavior of Indian Stock Market - An empirical Analysis of selected information content in Union Budget 2012", *Advances in Management*, Vol. 6, No. 6, pp. 51-55.

Ewing, T. Bradley, (1998), "The impact of federal budget deficits on movements in the stock market: evidence from Australia and France", *Applied Economic Letters*, Vol. 5, No. 10, pp. 649-651.

Fama, E., (1970), "Efficient capital markets: A review of theory and empirical work", *Journal of Finance*, Vol.25, No. 2, pp. 383-417.

Fama, E. and G. William Schwert, (1977), "Asset Returns and Inflation", *Journal of Financial Economics*, Vol.5, No. 2, pp. 115-46.

Fama, E., (1981), "Stock Returns, Real activity, inflation and money", *American Economic Review*, Vol. 71, No. 4, pp. 545-565.

Gupta, Rangan, and Reid Monique (2013), "Macroeconomic surprises and stock returns in South Africa," *Studies in Economics and Finance*, Vol. 30, No. 3, pp. 266-182.

MacKinlay, A. Craig, (1997), "Event Studies in Economics and Finance", *Journal of Economic Literature*, Vol. 35, No. 1, pp. 13-39.

Mitchell, M. L., and J. M., Netter, (1994), "The role of financial economics in securities fraud cases: Applications at the Securities and Exchange Commission", *The Business Lawyer*, February 1 1994, pp. 545-590.

Mukherjee, T. K., and A. Naka, (1995), "Dynamic relations between macroeconomic variables and the Japanese stock market: an application of a vector error correction model", *Journal of Financial Research*, Vol. 18, No. 2, pp. 223-237.

Naka, A., T. Mukherjee, and D. Tufte, (1998), "Macroeconomic variables and the performance of the Indian Stock Market", Department of Economics and Finance, Working Papers, pp. 16.

Nelson, C.R., (1976), "Inflation and rates of return on common stock", *Journal of Finance*, Vol. 31, No. 2, pp. 471-483.

Schwert, G. W., (1981), "Using financial data to measure effects of regulation", *The Journal of Law and Economics*, Vol. 24, No. 1, pp. 121-158.