

## Comparing Market Risk of Indian Balanced, Small and Mid cap and Large cap Funds

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### Abstract

Balanced funds invest in a mixed portfolio of debt and equity, to hedge market risk. Small & mid cap funds invest purely in equity for long term capital appreciation. We compare the market risk and risk adjusted returns of 19 balanced, 40 small & mid cap and 40 large cap Indian funds for 10 financial years. Balanced funds are generally considered to be less risky than small & mid cap funds, which are perceived to be highly risky. But surprisingly, three small & mid cap funds and eleven large cap funds exhibited lower market risk than fifty percent of the balance funds, on daily or monthly basis, during period under study. Also, six small & mid cap funds exhibited lower market risk than fifty percent of the large cap funds on a day to day basis. Moreover, the success of a particular scheme of an asset management company does not ensure the success of the other schemes of the same company. We identify some funds where the market risk was well managed during the period under study.

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### I. Introduction

AS FINANCIAL MARKETS become more sophisticated and complex, investors need financial intermediaries like banking institutions, insurance companies, mutual funds and housing finance companies etc. which provide professional expertise on various financial services. A mutual fund is a trust that pools the savings of a number of investors who share a common financial goal. The money thus collected is then invested in capital market instruments such as shares, debt instruments (such as debentures) and other securities. In India mutual funds are a popular investment avenue. In March 2015, Association of Mutual Funds in India (AMFI) data revealed that assets of the Indian mutual

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While one scheme of a particular asset management company (AMC) may perform very well, but that does not ensure the success of other schemes offered by the same AMC during the same period. Eg. While the Aditya Birla Sun life MNC fund-Regular Plan-Growth is found to be one of the best managed small & mid cap funds, but the balanced fund Aditya Birla Sun Life 95 offered by Aditya Birla Sun Life does not seem to perform very well. No AMC can be claimed to be the best during the period under study.

UTI Opportunities Fund-Growth Option, Aditya Birla Sun Life Frontline Equity Fund-Growth, Aditya Birla Sun life MNC fund-Regular Plan-Growth, Reliance Small cap Fund-Growth, HDFC MID-CAP Opportunities Fund-Growth and Dividend and HDFC Balanced Fund-Growth are the top performing funds during the period under study.

### References

- Acerbi, C., C. Nordio and C. Sirtori, (2001), "Expected shortfall as a tool for financial risk management", 16 February, 2001
- AMFI, (2017), "Nav History Report", Association of Mutual Funds in India, April 5 2017.
- Artzner, P., F. Delbaen, J.M. Eber and D. Heath, (1997), "Thinking coherently", *Risk*, Vol. 10, pp. 68-71.
- Artzner, P., F. Delbaen, J.M. Eber and D. Heath, (1999), "Coherent measures of risk" *Mathematical Finance*, Vol. 9, No. 3, pp. 203-228.
- Carmona, R. , (2004), "Statistical Analysis of Financial Data in S-Plus". Springer-Verlag Inc., New York , USA.
- Chen, S. X. and C.Y. Tang, (2005), "Nonparametric inference of value-at-risk for dependent financial returns.", *Journal of Financial Economics*, Vol. 3, No. 2, pp. 227-255.
- Danielsson, J. and C.G. De Vries, (2000), "Value-at-risk and extreme returns", *Annals of Economics and Statistics*, Vol. 60, pp. 239-270.
- Das, S. K. (2012), "Semi urban investors attitude and preferences in mutual fund investment: a case study of Nagaon districts of Assam", *International Journal of Marketing, Financial Services & Management Research*, Vol. 1, No. 9, pp. 70-91.
- Dhanalakshmi, K. (2013), "A Comparative analysis on performance of SBI and HDFC equity, balanced and gilt mutual fund", *Vidyaniketan Journal of Management and Research*, Vol. 1, No. 2, pp. 107-117.
- Drees, H., (2003), "Extreme quantile estimation for dependent data, with application to finance", *Bernoulli*, Vol. 9, No. 1, pp. 617-657.
- Dutta, S. and S. Biswas, (2017), "Extreme quantile estimation based on financial time series", *Communications in Statistics-Simulation and Computation*, Vol. 46, No. 6, pp. 4226-4243.

Duffie, D. and J. Pan, (1997), "An Overview of Value-at-Risk", *Journal of Derivatives*, Vol. 4, No. 3, pp. 7-49.

Gajera, A., P. Vyas and P. Patoliya, (2015), "Risk and return analysis of BSE small, medium and large capitalization indices. *Scholedge International Journal of Management and Development*, Vol. 2, No. 4, pp. 32-37.

Gringlatt, M. and S. Titman, (1992), "The persistence of mutual fund performance", *The Journal of Finance*, Vol. 47, No.5, pp. 1977-1984.

Hong, H. and J.C. Stein, (1999), "A unified theory of underreaction, momentum trading, and overreaction in asset markets", *The Journal of Finance*, Vol. 4, No. 6, pp. 2143-2183.

Jorion, P., (2006), "Value-at-Risk" 3<sup>rd</sup> edition, MacGraw-Hill, New York, USA.

Karrupaswamy, R. and V. Vanaja, (2013), "A study on the performance of selected large cap and small and mid cap mutual fund schemes in India", *The International Journal of Management*, Vol. 2, No. 3, pp. 7-13.

Keswani, S. (2011). Effect of fund size on the performance of balanced mutual funds an empirical study in Indian context. *International Journal of Multidisciplinary Research*, Vol. 1, No. 4, pp. 18-38.

ET, (2016), "Large Cap Funds", *The Economic Times*, 23 May 2016

Malik, N. S. and S.K. Mittal, (2007), "Performance evaluation of mutual funds in India-A risk-adjusted return analysis", *Amity Management Analyst*, Vol. 2, No. 2, pp. 90-104.

Muruganandan, S. and S. Prasad, (2010), "Performance persistence of Indian fund of mutual funds: with special reference to bull and bear market period", *IOSR Journal of Economics and Finance*, pp. 18-27.

NSE, (2017) "Historical Index data", National Stock Exchange, Mumbai, India.

Rai, R. S., T.V. Raman and G. Shreekanth, (2014), "Comparing returns between 'Large' and 'Mid & Small' cap equity mutual funds in India", *Indian Journal of Applied Research*, Vol. 4, No. 12.

Rathnamani, V., (2013), "Investor's preferences towards mutual fund industry in Trichy", *Journal of Bussiness and Management*, Vol. 6, No. 6, pp. 48-55.

Scaillet, O., (2003), "The origin and development of VaR, in modern risk management: a history", *Risk Magazine*, 15th anniversary, Risk Publications, pp. 151-158.

Sharpe, W., (1994), "The Sharpe ratio", *Journal of Portfolio Management*, Vol. 21, No. 1, Fall 1994, pp. 49-58.

Singh, S. K., (2013), "Invest in Mid and Small-Cap Funds for High Returns", *The Economic Times*, June 17, 2013.

So, M. K. P. and C.M. Wong, (2012), "Estimation of multiperiod expected shortfall and median shortfall for risk management", *Quantitative Finance*, Vol. 12, No. 5, pp. 739-754.