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Conditional Mutual Fund Performance in Dynamic Economy : Indian Evidence

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Abstract

No doubt, Treynor and Mazuy measure is path breaking in the field of market-timing performance. If we think it differently then we can see that conditional measure provides better performance estimates as compared to the traditional measures. Majority of the earlier studies have shown that the conditioning public information variables make the performance is better. This study takes an attempt to evaluate market-timing performance of the open-ended equity mutual fund managers based on conditional as well as traditional measures and makes a comparison of results derived from both the measures. The finding of the present study is remarkable. After inclusion of available public information in the conditional model, the statistically significant performance is increased (market-timing) as compared to the unconditional model. Finally, the statistical test implies that there is significant difference between the two measures.

I. Introduction

MUTUAL FUND IS considered a popular investment vehicle to the investors (Sadhak 1997). It plays an important role in mobilising savings from the household sector to the capital market and makes a link between the markets. Generally, it provides to the investors a reasonable return with a minimum degree of expected risk and hence, performance evaluation of mutual fund is popular to the academicians as well as professionals. Although, performance appraisal of risky asset is a fundamental difficulty in finance. Generally, portfolio performance concerns with three fundamental issues namely successful prediction of security prices, efficient estimation of market movement and diversification activities. A considerable study is dealt with the problem of market timing by employing the well-known measures of Treynor and Mazuy (1966) and Henrikson and Merton (1981). However, the traditional measures suffer from a number of problems in

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Finally, it is observed from the above analysis that the market-timing performance based on conditional measure is better than that of the unconditional approach. After statistical test, it is observed that the computed value of the test statistic is 2.3561, which, is higher than the table value of 'z' at 5% level (1.96) of significance. This prompts us to reject the null hypothesis. Based on this finding, it may be concluded that significant difference is observed between the evidences offered by the two measures.

VII. Conclusion

In the present study, we have seen that the market-timing performance of the open-ended mutual fund (Equity type) schemes based on two measures is different. Incorporation of available public information variables in the model the significant market-timing performance of the managers has been radically changed and makes the performances look better. The statistical test also reveals that the conditional market-timing performance of the open-ended equity schemes is better than the unconditional measure. Finally, it may be recommended that further research is needed in order to prove that conditional model is superior to the traditional model after consideration of other types of mutual fund schemes. In addition to this, the use of multi-index conditional measure, breakdown of managers' performance in the conditional framework and continuous research on sustainable investment are the natural extension of this paper.

References

Arditi, F. D., (1971), "Another look at mutual fund performance", *The Journal of Financial and Quantitative Analysis*, Vol. 6, No. 3, pp. 909-912.

Artikis, G., (2004), "Bond mutual fund managers performance in Greece", *Journal of Managerial Finance*,Vol. 30, No. 10, pp. 1-6.

Athanassakas, Carayannopoulos, and Racine, (2002), "How effective is aggressive portfolio management?", *Canadian Investment Review,* pp. 39-49.

Chander, R., (2005), "Empirical investigation on the investment managers stock- selection abilities: The Indian experience", *The ICFAI Journal of Applied Finance*, Vol. 11, pp. 5-20.

Chang and Lewellen, (1984), "Market-timing and mutual fund investment performance", *Journal of Business*, Vol. 57, pp. 57-72.

Chen, Zhiwu and Peter Knez, (1996), "Portfolio performance measurement: Theory and applications", *Review of Financial Studies,* Vol. 9, No. 2, pp. 511-555.

Christopherson, Jon.; Wayne Ferson and Debra Glassman, (1998), "Conditioning manager alphas on economic information: Another look at the persistence of performance", *Review of Financial Studies.* Vol. 11, No. 1, pp. 111-142.

Christopherson, Jon.; Wayne, Ferson and Andrew Turner, (1999), "Performance evaluation using conditional alphas and betas" *Journal of Portfolio Management*. Vol. 26, No. 1, pp. 59-72.

Coggin, Fabozzi, and Rahman, (1993), "The investment performance of US equity pension fund managers: An empirical investigation", *Journal of Finance*,pp. 1039-1055.

Deb, Mafisetty and Vijaya, (2004), "The conditional performance of closed-end funds: Evidence from India" *International Journal of Finance*. Vol. 16, No. 4, pp. 3246-3264.

Deb, S.; A. Banerjee and B.B. Chakrabarti, (2007), "Market-timing and stock selection ability of mutual funds in India: An empirical investigation", *Vikalpa,* Vol. 32, No. 2, pp. 39-51.

Drew, E. M., M. Veeraraghavan and V. Wilson, (2005), "Market-timing, selectivity and alpha generation: Evidence from Australian equity superannuation funds", *Investment Management and Financial Innovation.* Vol. 2, pp. 111-127.

Dybvig, Philip and Stephen Ross, (1985), "Differential information and performance measurement using a security market line", *Journal of Finance*, Vol. 40, No. 2, pp. 383-399.

Fama, E. F., (1972), "Components of investment performance", *The Journal of Finance.* Vol. XXVII, No. 3, pp. 551-567.

Fama, Eugene and K. French, (1989), "Business conditions and expected returns on stocks and bonds", *Journal of Financial Economics*, Vol. 25, No. 1, pp. 23-49.

Ferson, W. and M. Qian, (2004), "Conditional performance evaluation, revisited", Working Paper, Boston College-EUA.

Ferson, W. and R. Schadt, (1996), "Measuring fund strategy and performance in changing economic conditions", *Journal of Finance*, Vol. 51, No. 6, pp. 425-461.

Ferson, W. and V. Warther, (1996), "Evaluating fund performance in a dynamic market", *Financial Analysts Journal*, Vol. 52, No. 6, pp. 20-28.

Fransworth, H., (1997), "Conditional performance Evaluation", In paxson, D., Wood, D. (eds), *Blackwell Encyclopedic Dictionary of Finance*. Blackwell Business, pp. 23-24.

Gordon, M.J. and R. Gangoli, (1962), "Choice among and scale of play on lottery type alternatives" *College of Business Administration, University of Rochester, pp.* 1-25.

Graham, J.R. and R.H. Campbell, (1996), "Market timing ability and volatility implied in investment newsletter asset allocation recommendations", *Journal of Financial Economics*. Vol. 42, pp. 397-422.

Grant, D., (1977), "Portfolio performance and the cost of timing decisions", *Journal of Finance,* Vol. 32, No. 3, pp. 837-846.

Grinblatt, M. and S. Titman, (1989), "Portfolio performance evaluation: Old issues and new insights", *Review of Financial Studies*. Vol. 2, No. 3, pp. 393-421.

Henrikson, R. and R.C. Merton, (1981), "On market timing and investment performance II. Statistical procedures for evaluating forecasting skills", *The Journal of Business.* Vol. 44, pp. 513-533.

Hicks, J.R., (1962), "Liquidity", *The Economic Journal*. Vol. LXXII, pp. 787-802.

Ilmanen, A., (1995), "Time-varying expected returns in international bond markets", *Journal of Finance,* Vol. 50, No. 2, pp. 481-506.

Iqbal and Quader, (2012), "Survivorship-biased free mutual funds in Pakistan", *American Journal of Scientific Research*. Vol. 62, pp. 127-134

Jensen, M. C., (1968), "The performance of mutual funds in the period 1945-1964" *The Journal of Finance*. Vol. 23, pp. 389-416.

Jensen, M., (1972), "Optimal utilization of market forecasts and the evaluation of investment performance", *Mathematical methods in Investment an d Finance*. North-Holland. pp. 310-335.

Kader, M. and Y. Kuang, (2007), "Risk-adjusted performance, selectivity, timing ability and performance persistence of Hong Kong mutual funds", *Journal of Asia-Pacific Business.* Vol. 8, No. 2, pp. 25-28.

Kon and Jen, (1978), "The investment performance of mutual funds: An empirical investigation of timing, selectivity and market efficiency", *Journal of Business.* Vol. 52, pp. 263-289.

Kosowski.; A. Timmermann and Russ White, (2006), "Can mutual fund stars really pick stocks, new evidence from a bootstrap analysis", *The Journal of Finance,* Vol. LXI, No. 6, pp. 2551-2595.

Koulis, Beneki and Adam Botsaris, (2011), "An assessment of the performance of Greek mutual equity funds selectivity and market-timing" *Applied Mathematical Science.* Vol. 5, No. 4, pp. 159-171.

Lee, C.F., and S. Rahman, (1990), "Market-timing, selectivity and mutual fund performance: An empirical investigation" *Journal of Business*. Vol. 63, pp. 261-278.

Linter, J., (1965), "Security prices, risk and maximal gains from diversification", *The Journal of Finance*. Vol. XX, No. 4, pp. 587-615.

Mansor and Bhatti, (2011), "The Islamic mutual fund performance: New evidence on market-timing and stock selectivity", *International conference on Economics and Finance Research.* IPEDR, 4, ACSIT press, Singapore, pp. 477-484.

Markowitz, H. M., (1952), "Portfolio selection", *Journal of Finance*, Vol. 12, pp. 77-91.

Mossin, J., (1966), "Equilibrium in a capital asset market" *Econometrica*. Vol. 34, pp. 141-183.

Otten, R. and D. Bams, (2004), "How to measure mutual fund performance: Economic versus Statistical relevance", *Journal of Accounting and Finance*, Vol. 44, No. 2, pp. 203-222.

Pesaran, M.H. and A. Timmermann, (1995), "Predictability of stick returns: Robustness and economic significance", *Journal of Finance,* Vol. 50, No. 4, pp.1201-1228.

Redman, Gullett, and Manakyan, (2000), "The performance of global and international mutual fund", *Journal of Financial and Strategic Decisions*. Vol. 13, No. 1, pp. 75-85.

Roy, S. and S. K. Ghosh, (2012), "Selectivity as a measure of mutual fund performance: A comparative study of the open-ended income and growth schemes" *Global Journal of Finance and Economic Management*, Vol. 1, No. 1, pp. 69-86.

Roy and Deb, (2004), "Conditional alpha and performance persistence for Indian mutual funds: Empirical evidence", *ICFAI Journal of Applied Finance.*

Shanmughan and Zabiulla, (2011), "Stock selection strategies of equity mutual fund managers in India" *Middle Eastern Finance and Economics*. Vol .11, pp. 19-27.

Sharpe, W. F., (1964), "A simplified model for portfolio analysis", *Management Science.* pp. 277-293.

Sharpe, W. F., (1966), "Mutual fund performance", *Journal of Business*. pp. 39, 119-138.

Silva, Florinda, M. Cortez and M. Armada, (2003), "Conditioning information and European bonds fund performance" *European Financial Management*. Vol .9, No. 2, pp. 201-230.

Sipra, N., (2002), "*Mutual fund performance in Pakistan 1995-2004*" SSRN Network, pp. 6-45.

Sondhi and Jain, (2006), "Can growth stocks be identified for investment? A study of equity selectivity abilities of fund managers in India", *The ICFAI Journal of Applied Finance,* Vol. 13, pp. 17-30.

Tobin, J., (1958), "Liquidity preference as behaviour towards risk" *The Review of Economic studies*, Vol. XXV, pp. 65-86.

Treynor, J. L., (1965), "How to rate management of investment funds", *Harvard Business Review*, Vol. 43, No. 1, pp. 63-75.

Treynor, J. L., and J. Mazuy, (1966), "Can mutual fund outguess the market?", *Harvard Business Review.* Vol. 43, No. 1, pp. 63-75.