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RESEARCH ARTICLE

STOCK MARKET PREDICTIONS AND ANALYSIS

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Abstract

The objective of any investment is to earn return. Return on the amount invested in stocks includes dividend and capital appreciation. These returns are influenced by both systematic and unsystematic risks. Systematic risk includes the macroeconomic variables and unsystematic risk includes firm specific factors. The stock returns is an area of study wherein many research scholars have shown immense interest for past several years. The purpose of this analytical study is to conduct a content analysis of literature of stock returns over a period of 15 years, i.e., 2000-2014 and in 63 different journals. To analyze the research work in the area of stock returns, information was extracted from 368 research papers related to stock returns. The study found that a significant amount of research work has been done in the past 15 years on stock returns across globe and results are positive. The factors analyzed in the study such as predictability/forecasting of stock returns, volatility/variability of stock returns, stock returns and inflation, etc will indeed help the stock exchanges, regulators, Government and other concerned parties. The study concluded that the areas such as predictability/forecasting of stock returns, volatility/variability of stock returns and the risk and liquidity aspect of stock returns have been the major areas of interest of many researchers for past 15 years.

Keywords: Stock market predictions, shares, trading, invest, stocks, dividends

Introduction

In stock market, the investors invest their savings with an expectation of earning some income. This income may be termed as "stock returns" which may be in the form of profits earned from trading of shares or the dividends received. These dividends may be paid to the shareholders out of the profits earned; may be quarterly, half yearly, yearly, etc. The stock prices or returns are bound to be affected by various risks occurring within a country and also events occurring across the world.

Stock returns are very sensitive to political unrest in the country, economic crises, natural disasters like earthquake, cyclones, floods

movements in international oil prices, inflation effects, changes in Government policies, norms and regulations and so on. It is known that stock prices or returns follow a random walk. It is a difficult task to predict or forecast the future returns. Many researchers have shown interest in the area of prediction or forecasting of stock returns and popular models used for such studies include ARIMA (Autoregressive Integrated Moving Average). The present study will highlight on some of these studies. Also, as said earlier, stock prices or returns are affected by economic events. Hence it becomes evident to study the volatility of stock returns. Stock returns volatility has also been an area of interest for many researchers for past several years. The various econometric models used to analyze this volatility include ARCH, GARCH, TARCH, EGARCH and similar models. Some of these studies relating to volatility of stock returns will be emphasized in the present study. The analysis of the factors which have been the area of interest for many research scholars are explained in detail in this paper.

Objectives of the Study

1. To identify the determinants of stock returns on which considerable research work is done in past 15 years.

2. To analyze the literature on stock returns using qualitative and quantitative measures.

Contribution of the Study

The present study involves identification of factors or determinants of stock returns. The study will indeed help many researchers and academicians to identify various research gaps relating to stock returns. The paper provides the analysis based on journals which will help the researchers to identify key journals which they can refer for literature review, identify factors influencing stock returns and can publish their quality research papers. The study also recognizes the country-wise contribution of authors.

Review of Literature

The stock returns is an area of study wherein many research scholars have shown immense interest for past several years. A brief review of literature will help in understanding the relevance of the content analysis in the area of stock returns. The researches in social sciences or in the field of economics depend in one way or the other on careful reading of written materials and the research work done by many research scholars on similar subjects. Considering this fact, the importance of content analysis becomes very significant. (Barelson 1952) defined content analysis as a technique of research that is systematic representation of the matter of communication. According to (Stone 1964), the content analysis is a methodology or procedure which can be used to access particular information based on the past references. The definition of content analysis requires that the inference be derived from the counts of frequency to place a number of standard methods on the borderline of acceptability (Leites Poo 1942). The various areas to which the technique of content analysis can be applied is based on the user's skill and ingenuity in framing valid category formats as discussed in the research conducted by (Chelimsky 1989). The computational linguistics tool was used by the researchers to study the qualitative aspect of the annual reports of the companies listed in United Kingdom. The paper concluded that the investors should pursue the annual report narrative because it may contain the information which has not yet discounted in the share prices. (Skjeltorp and Odegaard 2009) investigated the information content of stock market liquidity. The researchers also evaluated the forecasting power of market liquidity. The stock returns are influenced by variety of factors and the research scholars have shown interest to study these factors in detail. A content analysis of the literature will help us to understand the key issues which gained more attraction from the research scholars and identify the area which require more research work.

Analysis and Interpretation

Identification of Key Issues related to Stock Returns

For the purpose of analysis, key issues or factors relating to stock return are identified on which a significant research work is done by research scholars for last 15 years. The identified key issues are:

1. Predictability and Forecasting
2. Volatility and Variability
3. Inflation
4. Risk and Liquidity
5. Oil Price Moments/Shocks
6. Cross-section and Correlation
7. Other issues from the below depicted

Figure 1, it is seen that volatility/variability of stock return and predictability/ forecasting of stock return has been an area of interest for many research scholars each consisting 31% and 25% respectively. Similarly, the research is growing in the area of risk and liquidity (19%) stock returns. But considerable research still needs to be done in the area of inflation, oil price moments/shocks, cross-section and correlation studies with respect to stock returns which account for mere 6%, 8% and 3% respectively.

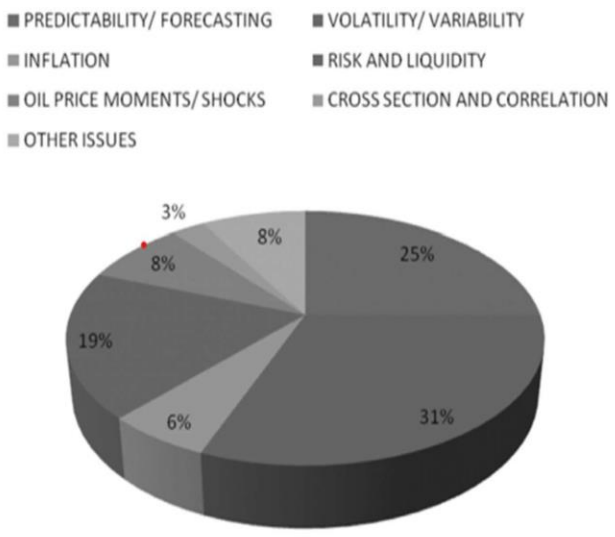
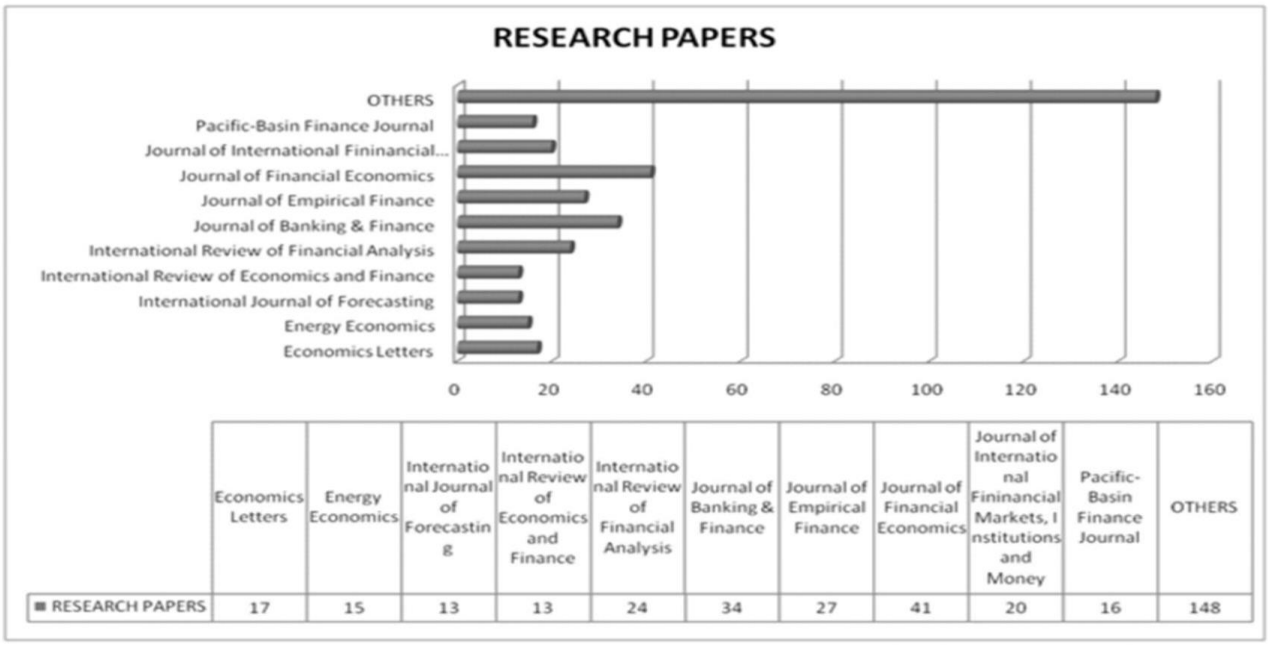


Figure 1. Pie chart showing the areas of research during the last 15 years

The detailed analysis of each of these key issue/factors is as follows: Predictability and Forecasting. Predictability or Forecasting of stock returns is an area where many researchers have shown interest for past several decades. Out of the 368 research papers analyzed relating to stock returns, the study found that 25% are related to the predictability. The interpretation based on these research papers is as follows: Research scholars use different models to analyze the result predictability. The Bayesian model used by (Avramov 2002) shows the importance of model uncertainty. It was argued in the paper that the investors who don't consider model uncertainty, face large risks and losses. Also, the study found the use of conventional tests for the predictability of stock returns (Campbell and Yogo 2006). (Schrimpf 2010) examined the predictability of stock returns. The momentum of stocks rely heavily on how much the investor is holding and the returns such predicted depend on the variation as found in study conducted by (Avramov and Chordia 2006). The predictability of stock returns has always been at the center of asset pricing research. Analysis of mean variance was used by (Wei and Zhang 2003) to investigate the statistical and economic significance of stock return predictability and it was concluded that the return predictability is not inconsistent with rational asset pricing. Also, asset pricing model was used (Rodriquez *et al.*,2002) to examine the stock return predictability. Li *et al.*,2014) incorporated the information quantitatively in order to improve the prediction/forecasting accuracy of stock returns. Another study conducted on predictability with a dynamic non-linear model (Bradley & Jansen, 2004) concluded that for stock returns, the models which are better than nonlinear models are linear models, while for analyzing or studying the development or growth in industrial production, the models which can be preferred are nonlinear models. Linear and non-linear artificial neural network (ANN) models were implemented to generate the out of sample competing forecasts for monthly returns (Konas and Yannopaulas, 2001). Also, (Mcmillan 2001) found that stock returns can be forecasted from a variety of variables in the nature

of financial or microeconomic. (Zhu and Zhu 2013) introduced a regime-switching combination approach to predict excess stock returns. The findings revealed that two-regimes are related to the business cycle. Based on the business cycle explanation of regimes, excess returns are found to be more predictable during economic contractions than during expansions. The study also provided insights on the economic sources of return predictability.



	Economics Letters	Energy Economics	International Journal of Forecasting	International Review of Economics and Finance	International Review of Financial Analysis	Journal of Banking & Finance	Journal of Empirical Finance	Journal of Financial Economics	Journal of International Fininancial Markets, Institutions and Money	Pacific-Basin Finance Journal	OTHERS
RESEARCH PAPERS	17	15	13	13	24	34	27	41	20	16	148

Figure 2. Distribution of research papers on 'stock returns' in different journals

Analysis Based on Appearance in Journals

Figure 2 depicts various journals reviewed for the purpose of study and the appearance of research papers related to 'stock returns' in these journals. The largest number of research papers appeared in Journal of Financial Economics, Journal of Banking and Finance, Journal of Empirical Finance, and Internal Review of Financial Analysis, consisting 41, 34, 27 and 24 research papers respectively. Also, considerable appearance can be seen in Journal of International Financial Markets, Institutions and Money (20), Economic Letters (17), Pacific Basin Finance Journal (16), Energy Economics (15), International Journal of Forecasting (13), and International Review of Economics and Finance (13).

Figure 4. Country-wise contribution of research papers

Conclusion

'Stock returns' is an area of study which has gained a lot of attention of research scholars from different countries in the past several decades. This shows the importance of stock returns in world economy.

Altogether 368 research papers were selected for the purpose of analysis and review. The selection of research papers was on the basis of the key issues/factors. The different key issues or the factors were analyzed and presented in count and percentages. The study indeed helps the stock exchanges, the regulators, Government, investors and other concerned parties. As found in the study, the predictability and volatility of stock returns has been an area of interest for many research scholars. The present study is in agreement with various quality research work done in the area of stock returns predictability and volatility. Researchers need to explore and give attention to highlight other key issues such as inflation, real activity, oil price moments, risk and liquidity of stock returns.

The Asian stock markets are developing and attracting many foreign investors. More study in the area of stock returns is found to be needed in the countries like China, India, Japan and other growing markets. Although the content analysis has been done carefully, this paper suffers from the limitation that only 368 research papers from 63 journals were considered related to the topic of 'stock returns', which are not enough to highlight every aspect of this area of study. Also, this paper has not considered the research papers published prior to the year 2000. Other limitation includes lack of accessibility to all research papers pertaining to the topic.

Reference

1. Alagidede, P and Panagiotidis, T. (2012). Stock Returns and Inflation: Evidence from quantiled regressions.Economic Letters, 117, 283-286.
2. Avramov, D and Chordia, T. (2006). Predicting stock returns. Journal of Financial Economics, 82, 287-415.
3. Avramov, D. (2002). Stock return predictability and model uncertainty. Journal of Financial Economics, 64,423- 458.
4. Bailey, W., Mao, C. X and Rui, Z. (2003). Exchange rate regimes and stock return volatility: some evidence from Asia's silver era. Journal of Economics and Business, 55, 557-584.
5. Berrada, T and Hugonnier, J. (2013). Incomplete information, idiosyncratic volatility and stock returns. Journal of Banking and Finance, 37, 448-462.
6. Blair, B. J., Poon, S. H and Taylor, S. J. (2001). Modeling S&P 100 volatility: the information content of stock returns. Journal of Banking and Finance, 25, 1665-1679. Boucher, C. (2006). Stock prices: inflation puzzle and the predictability of stock market returns. Economic Letters, 90, 205-212.
7. Bradley, M. D and Jansen, D. W. (2004). Forecasting with a nonlinear dynamic model of stock returns and industrial production. International Journal of Forecasting, 20, 321-342.
8. Campbell, J. Y and Yogo, M. (2006). Efficient tests of stock return predictability. Journal of Financial Economics,81, 27-60.
9. Chang, Y. Y., Faff, R and Hwang, C. Y. (2010). Liquidity and stock returns in Japan: new evidence. Pacific Basin Finance Journal, 18, 90-115.
10. Chatrath, A., Miao, H. and Ramchander, S. (2014). Crude oil moments and PNG stock returns. Energy Economics,44, 222-235.
11. Chaung, W., Liu, H. H and Susmel, R. (2012). The bivariate GARCH approach to investigating the relation between stocks returns, trading volume, and return volatility. Global Finance Journal, 23, 1-15.
12. Chelmsky, E. (1989). Content analysis: a methodology for structuring and analyzing written material. United States General Accounting Office Transfer Paper 10.1.3. Retrieved from http://archive.gao.gov/d48t13/138426.f&ved=0ahUKEwjtxvrEronLAhUHF6YKHeezC50QFggZMAA&usg=AFQjCNFjbCBZQddDjN2W 3UnKfpaKU765Jg on 07/09/2015.
13. Chen, J and Hill, P. (2013). The impact of diverse measures of default risk in UK stock returns. Journal ofBanking and Finance, 37, 5118-5131.

14. Chen, X., Kim, K. A. Yao, T and Yu, T. (2010). On the predictability of Chinese stock returns. Pacific BasinFinance Journal, 18, 403-425.

15. Chortareas, G and Noikokyris, E. (2014). Monetary policy and stock returns under the MPC and inflation targeting. International Review of Financial Analysis, 31, 109-116.

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