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A Comparative Study of International Stock Market of Developed & Developing Countries

Amitabh Joshi and Shanul Gawshinde
Department of Management,
Prestige Institute of Management Dewas, (MP)

ABSTRACT

An understanding of the difference in stock price exposures across markets helps to determine equilibrium premium and asset allocation of international portfolio. This paper is based on cross sectional study of various developed and developing countries for the year 2006,2007 and 2008. Eight developed countries viz.USA, UK, Australia, France, Germany, Hongkong, Japan, Singapore and Nine developing countries viz. India, Russia, Brazil, Indonesia, Korea, Malaysia, Taiwan and Mexico. Two way ANOVA has been used for analysis. The results shows that there is no significant difference in market capitalization among developed and developing countries. But the market capitalization of developing and developed countries differ significantly.

INTRODUCTION

The interrelationship between international stock markets is a key issue in international portfolio management and risk measurement. The efficient markets hypothesis has been one of the most widely criticized theories in the financial literature in recent years on the basis that investors may exhibit irrational and predictable biases mainly attributed to psychological factors. Trading and active portfolio management involve sophisticated brain functions such as logical reasoning, numerical computation, and short- and long-term planning which may often be tempered by emotional responses such as fear. Investors' preference for the avoidance of loss may imply that significant fluctuations in prices are not necessarily related to the arrival of information on economic or financial variables but may also correspond to collective phenomena such as crowd effects or herd behavior. Behavioral finance incorporates these approaches into standard models of financial markets to explain the aggregate effects of decisions taken by individual traders. The existence of uncorrelated returns in international stock markets is fundamental in a context of global portfolio diversification. When high stock market volatility occurs, risk control is the main aim of portfolio managers and international diversification is a crucial issue for it. The existence of uncorrelated returns in international stock markets is fundamental in a context of global portfolio diversification. When high stock market volatility occurs, risk control is the main aim of portfolio managers and international diversification is a crucial issue for it.

Portfolio managers, who follow a top-down approach, first look for the best international diversification and then choose the best-performing stocks in the local markets. The common component or cycle decomposition shows that country-specific shocks are by far the most important source of international return variation. In this case international diversification strategies still prove to be effective. Second, our approach provides portfolio managers with information on which stocks to pick within countries. In addition, stocks differ in their exposure to country-specific shocks, not all diversified country portfolios are equal in terms of risk reduction.

REVIEW OF LITERATURE

CHIOU, LEE & LEE (2009) Using returns of 4,916 stocks from 22 developed countries and 15 developing countries, this study examines the relative magnitude of conditional volatility and the international market systematic risk of stock prices in countries at different developmental stages and in various geographical areas.

BLASCO & FERRERUELA (2008) This paper examines the intentional herd behavior of market participants within different international markets (Germany, United Kingdom, United States, Mexico, Japan, Spain and France) using a new approach that permits the detection of even moderate herding over the whole range of market return. This approach compares the cross-sectional deviation of returns of each of the selected markets with the cross-sectional deviation of returns of an "artificially created" market free of herding effects.

SARKAR, CHAKRABARTI & SEN (2008) This study investigates volatility in Indian stock markets. Specifically, it looks for the possible volatility transmission channel for the Indian stock market from among Indian sectoral developments as well as developments in the global market.

BEKAERT et al (2007) We propose an exogenous measure of a country's growth opportunities by interacting the country's local industry mix with global price to earnings (*PE*) ratios. We find that these exogenous growth opportunities predict future changes in real GDP and investment in a large panel of countries.

BREDIN & HYDE (2007) We examine the influence of US, UK and German macroeconomic and financial variables on the stock returns of two relatively small, open European economies, Ireland and Denmark. Within a nonlinear framework, we allow for time variation via regime switching using a smooth transition regression (STR) model. We find that US (global) and UK and German (regional) stock returns are significant determinants of returns in both markets.

MUKHERJEE & MISHRA (2007) During the periods of globalization and deregulations, it has become very common for the equity market of a country to respond to the equity movements of its international trading partners from all over the world. The effort, trying to achieve in this study, relates to how Indian equity market responds to the equity price movements of other countries and vice versa.

MORANA (2007) The contribution of economic and financial integration to international stock markets co movements are investigated by means of a large scale macro econometric model, set in the factor vector autoregressive framework (F-VAR). The findings point to a relevant role for both economic and financial integration in explaining international stock markets co movements for the G-7 countries.

D'ECCLESIA & COSTANTINI (2006) The interrelationship between international stock markets is a key issue in international portfolio management and risk measurement. The dynamics of security returns and their risk characteristics have a crucial role in the financial market theory. Recent empirical studies have tested market efficiency measuring the degree of integration of international financial markets. These studies have shown that international markets react quickly to news but they are volatile and difficult to predict, with a changing correlation structure of security returns among countries.

OBJECTIVES OF THE STUDY

The objectives of the study are as follows:

1 To study the variation in market capitalization among developing countries
2 To study the variation in market capitalization among developed countries
3 To study the year wise variation in market capitalization of developed and developing countries

DESIGN

This research is based on exploratory research. The main purpose of this research is that of developing the working hypotheses from an operational point of view. The major emphasis in such studies is on the discovery of ideas and insights. As such the research design appropriate for such studies must be flexible enough to provide opportunity for considering different aspects of a problem under study. Through the research study for assessing the growth in market capitalization of developed and developing countries, three sets of parameters are considered namely, impact of market cap on developed countries, then on developing countries and overall impact has been assessed.

DATA COLLECTION

Secondary data was collected from NSE website for the year 2006, 2007 & 2008 (Indian Security Market, 2009).

SAMPLE SIZE

The total number of countries data was used is 17, were developed countries were 8 i.e., Australia, France, Germany, Hongkong, Japan, Singapore, UK, and USA and Developing countries were 9 i.e., China, India, Russia, Brazil, Indonesia, Korea, Malaysia, Taiwan, and Mexico.

TOOLS FOR DATA ANALYSIS

Two-way ANOVA technique is used when the data are classified on the basis of two factors.

RESULT AND DISCUSSION

Ho1

Ho1A: There is no significant difference in market capitalization within developed countries

Ho1B: There is no significant difference in market capitalization of developed countries in various years

	SS	df	MS	F ratio	5% F limit
Between SSC	362,183,328	2	181091663.8	-8.06904404	6.51
Between SSR	980,396,539	7	140056648.4	-6.240614507	4.28
Residual Error	-314,198,718	14	-22442765.57		

Result: Ho1A: Calculated value of f ratio is 0 (i.e.-6.24) where as observed value is 4.28. Thus it can be said that hypothesis is not rejected i.e. there is no significant difference in market capitalization within developed countries.

Ho1B: Calculated value of f ratio is 0 (i.e.-8.07) where as observed value is 6.51. Thus it can be said that hypothesis is not rejected i.e. there is no significant difference in market capitalization among developed countries in different years.

Ho2

Ho2A: There is no significant difference in market capitalization within developing countries

Ho2B: There is no significant difference in market capitalization of developing countries in various years

	SS	Df	MS	F ratio	5% F limit
Between SSC	3,17,12,717	2	15856358.71	-7.883918689	6.23
Between SSR	5,82,77,423	8	7284677.818	-3.622004814	3.89
Residual Error	-3,21,79,649	16	-2011228.088		

Result: Ho2A: Calculated value of f ratio is 0 (i.e.-3.66) where as observed value is 3.89. Thus it can be said that hypothesis is not rejected i.e. there is no significant difference in market capitalization within developing countries.
Ho2B: Calculated value of f ratio is 0 (i.e.-7.88) where as observed value is 6.23. Thus it can be said that hypothesis is not rejected i.e. there is no significant difference in market capitalization among developing countries in different years.

Ho3

Ho3A: There is no significant difference in market capitalization within developed and developing countries

Ho3B: There is no significant difference in market capitalization of developing and developed countries in various years

	SS	**Df**	**MS**	**F ratio**	**5% F limit**
Between SSC	29,07,71,631	2	145385816	79.7702593	5.53
Between SSR	1,03,86,76,578	16	64917286.2	35.6188031	2.96
Residual Error	5,83,21,812	32	1822556.64		

Result: Ho3A: Calculated value of f ratio is 35.61 where as observed value is 2.96. Thus it can be said that hypothesis is rejected i.e. there is a significant difference in market capitalization among developed and developing countries.
Ho3B: Calculated value of f ratio is 79.77 where as observed value is 5.53. Thus it can be said that hypothesis is rejected i.e. there is a significant difference in market capitalization among developing & developed countries in different years.
Study conducted by Chiou and Lee (2009) Concluded that the stock returns in high risk countries tend to be less volatile but the conditional volatility of stock return in less risky countries leans to increase.

CONCLUSION

Thus from above study, it can be concluded that there is a significance relationship between the Market Capitalization of Stock Market of Developed and Developing countries. This study is supported by the study conducted by Chiou, Lee, Lee (2009), in which they prove that the stock returns in emerging markets are riskier than the ones in developed countries, measured both by conditional volatility and unconditional global beta.

LIMITATIONS

- The study is limited to the study of information contents and its availability in the latest as per the NSE website.
- This study was limited for a period of 1 year.

- This one-year data may not be representative of reporting practices in general.

REFERENCE

1. BEKAERT et al (2007), Global Growth Opportunities and Market Integration, *The Journal of Finance*, VOL. LXII, NO. 3

2. BLASCO & FERRERUELA (2008), Testing Intentional Herding in Familiar Stocks: An Experiment in an International Context, *The journal of Behavioral Finance* , 9: 72–84.

3. BREDIN & HYDE (2007), Regime Change and the Role of International Markets on the Stock Returns of Small Open Economies, *European Financial Management*, Vol. 14, No. 2.

4. CHIOU, LEE & LEE (2009), Variation in Stock Return Risks: An International Comparison, *Review of Pacific Basin Financial Markets and Policies* Vol. 12, No. 2.

5. D'ECCLESIA & COSTANTINI (2006), Comovements and Correlations in International Stock Markets, *the European Journal of Finance* Vol. 12, No. 6–7, 567–582.

6. MORANA (2007), International stock markets comovements: the role of economic and financial integration, Received: 15 October 2006 / Accepted: 15 May 2007 / Published online: 19 September 2007 © Springer-Verlag 2007.

7. MUKHERJEE & MISHRA (2007), International Stock Market and Its Economic Determinants: A study of Indian and World Equity Markets, *Vikalpa*, VOL 32, No 4.

8. SARKAR, CHAKRABARTI & SEN (2008), Indian stock market volatility in recent years: Transmission from global market, regional market and traditional domestic sectors, *Journal of Asset Management* Vol. 10, 1, 63–7.