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Title of the thesis: Nature and Extent of Financial integration of Indian stock markets

with other developed world markets.

Abstract

Integration of financial markets across the globe has generated a great deal of interest among practitioners, academic researchers and portfolio investors. A plethora of ingredients go into the making of a well-functioning financial market, & one of them is financial integration. Moreover, the importance of financial markets generating the scope of arbitrage across different markets and movements in one market affecting the others requires an understanding of the concept of financial integration.

The purpose of this research lies in the very importance of a well-functioning financial system for economic growth of a country. Moreover the severity of inter-linkages in periods of slump increases manifolds, hence it is imperative to study the financial integration and its implication between Indian stock market, BSE SENSEX with major developed countries stock markets of the world namely (US) NASDAQ, (UK) FTSE, (Germany) DAX, (Hong Kong) HANG SENG and (Japan) NIKKEI. The analysis runs through the period of 2008 US financial recession and hence the study provides an understanding of the process of financial integration before and after recession. The study undertakes the co-integration test depicting long run relation and granger causality tests for short run integration. In order to understand the nature of integration before and after the 2008 US financial crisis, the entire study period of ten years 2003-2013 is divided into two sub periods as per the structural breakpoint test as on 1st August, 2008: the day of first policy announcement for Lehman Bankruptcy.

The results indicate the existence of long run co-integration between the stock markets that increases and become stronger during and after the recession 2008. Moreover, the returns of all other countries feed BSE (India) in short run while BSE returns cause changes in only NIKKEI (Japan) returns in short run during the study period.

The findings of the long run co-integration suggest the existence of significant co-integration of developed markets with India. Further, despite the restrictions and barriers to capital flows and capital market, the workings of the markets suggest that jitters of a slump are experienced by the Indian stock markets since it gets more co-integrated with rest of the world stock markets post 2008 financial crisis. The results reveal that this extent of co-integration grew stronger post crisis reflecting the contagion effect of financial turmoil. It suggests that diversification amongst these indices these cannot benefit the international portfolio investor. The short run causal effects are observed flowing from all economies except Nikkei to BSE. The reason however for Nikkei not feeding India would probably have been the unique trend of stock exchange prices in Japan ever since 1990s, which started with an extensively high market capitalization in 1990's; higher than the US. Eventually this trend continues till 2006-7 and fades away till very recent 2011-12 years from where Japanese markets have picked up again on their indices numbers and returns.

From the viewpoint of policy makers across the globe, these results have ample implications. Firstly, these phenomena places higher demands on institutions in these integrated countries to deal with increased regional risk added due to the same. Also, this weakens the established national regulations thereby reducing the importance of domestic policy decisions. Cointegration during recession also feeds currency and banking crisis and aggravates macroeconomic cost. From viewpoint of international portfolio investor, the results poses threats to arbitrage profits; Dampens the gains from international portfolio diversification; Risk sharing between domestic and foreign agents vanish.

In a nutshell, economists across the globe have realised that it is important for countries to monitor the progress of inter dependencies and integration among financial markets via the high degree and significant nature of co-integration that poses a cocktail of precautions to be borne by both; policy makers and international portfolio investor.