Chapter I

Introduction

A. Background

Now more than ever, investors must think of investments in a global context. Investment globalization is defined, in principle, as the proportion of all invested capital in the world that is owned by non-nationals (Chase, 2000). One part of modern world systems is investment growth, trade, economic and global invest, which are the three main contributes to transnational economic integration (Giem, 2007).Thus, investment globalization is part of the growing trend toward globalization in all sectors. The investing environment has changed. The United States (U.S.) maybe the world's largest financial markets, but it still accounts for less than half of the total market value of the world's stock. A global marketplace of found investing opportunities is emerging capital markets. When investing, we should note that Asian companies have adopted a friendlier shareholder attitude in recent years. Even Asian stocks were yielding more than U.S. stock (Jones, 2010).

With the arrivalof the information technology era, computer networks havebecome very prominent in the global economy. Investing online has become the norm for individual investors and traders over the past decades with many brokers now offering online services with unique trading platforms. This has released details about viable online investment options for the everyday investor. Many online brokers provide tools to help investors research and select potential investments. There are also numerous third party providers of information, like Yahoo Finance, Bloomberg. Many reputable sites provide information on business sectors, news and financial statements of individual companies, and basic tutorials on subjects such as diversification, basic portfolio theory, and the mitigation of risk associated with volatility in the stock market. Therefore co-integration has become a vital area for research in order to find out the best project to invest money during the world stock markets.

In the 1950s, Harry Markowitz, considered the father of Modern Portfolio Theory (MPT) developed the basic portfolio principles that underlie modern portfolio theory. He said "don't put all your eggs in one basket" (Jones, 2010).

Portfolio investment flow to developing countries is particularly important for developing countries, some of which have benefited significantly from portfolio capital inflows as developed country investors have started to take interest in emerging markets. Although higher returns might be accepted from these markets, these are undoubtedly volatile and therefore accompanied by higher risks than in major developed country markets. As long as those risks have relatively low correlations with developed country markets, there are significant benefits for investors. Thus, knowing the correlations or relationship between the returns of various national financial markets is important for the process of allocating investments among these markets to reduce risk.

Bruno Solnik, a leading authority on international investing, has noted that as recently as 15 years ago country factors dominated stock prices and the correlation of country factors was weak. This mean equity that around the world was in fact different, because of low correction, investors could reduce the total variance of their portfolio by diversifying across countries. However condition has changed dramatically in recent years as financial markets have become more and more integrated. When corrections among country returns increased significantly start in 1995, the immediate benefit of risk reduction through combining assets with low correlations was reduced. By the end of 2008, the MSCI-EAFE index, an international equity index, moved in unison with the S&P 500 index about 90 percent of the time. Even the MSCI emerging markets index was correlated with S&P 500 index at the 80 percent level (Jones, 2010).

From an investing standpoint, the real importance of adding foreign securities is that it allows the investor to achieve beneficial risk reduction, because some foreign markets move differently than other country's markets. Most of the people invest all their money usually in their home country's stock exchange market and when it slumps, investors lose all of their money. But if they buy stocks in other foreign stock markets and when their home stockmarket crashes, they do not lose all of their money. For example, when Hong Kong stocks are doing poorly, some foreign markets maybe doing well, which help offset the poor Hong Kong performance. So it is very important to analyze whether the stock markets you want to invest in have correlation or not, and how strong it is before you invest in that foreign stock markets.

Furthermore, stock market co-integration has relevant implications for financial investors. Investors should diversify their investment across assets provided the returns are not perfectly correlated. If there are positive long-run relationships between different markets, the advantage of international diversification is limited. Stock markets which share a common stochastic trend will generate similar returns in the long run. With co-movements among different stock exchanges, losses in one market cannot be compensated by gains in another. Stock market co-integration effectively reduces the number of independent assets available for the investor to hedge his risk.

The effect of regional integration on trade flows and foreign direct investment flows are very common in international finance, particularly during the current globalization era. In developing markets the capitalizations, returns and volatility have increased are dramatically more than developed markets. Therefore, the emerging markets tend to be unrelated with one another and the developed markets. Numerous investors worldwide select to diversify their funds across the emerging markets in order to minimize risk.

Deregulations among Asian stock markets at different times and market liberalization has led the markets towards integration. In the liberalization process foreigners are permitted to purchase shares in that country's stock market, which may cause the changes in the relevant sources of systematic risk from the domestic stock index to the global stock index. This index is then used to value (price) the firms stocks. Accordingly, if stock prices across countries are moving together (or they are co-integrated) for the long period, it implies that each country's firms exposure to the systematic risk is same (Chari and Henry, 2004).

The specialty of regional integration is that it not only creates interdependencies between the countries within the system but also creates interdependencies with other countries in the world. Especially the mutual influence of the regional economic circle. There are many benefits of a regional stock exchange, which could reduce this disconnect between supply and demand by improving access to investment opportunities; improving transparency and reducing due diligence costs for investments; improving transparency by establishing standards of disclosure, including standardized reporting of social and environment impact; offering a variety of investment instruments and products to mitigate risk; and engaging market intermediaries and stockholder participation (Asian Development Bank 2011).

Regional integration results in lots of trade flows and foreign direct invest cash flows among the regional country. There are several regional economic unions in Asia. For instance, the Association of Southeast Asian Nations (ASEAN) Free Trade Agreement (AFTA), which was designed to close the development gap and expand trade among members of ASEAN, a key point of policy discussion. According to a 2008 research brief published by the World Bank as part of its Trade Costs and Facilitation Project, ASEAN members have the potential to reap significant benefits from investments in further trade facilitation reform, due to the comprehensive tariff reform already realized through the ASEAN FreeTrade Agreement. Similarly, India-ASEAN Regional Trade and Investment Area (RTIA) is designed to stimulate FDI and trade flows among its member countries (Karmakar,2005). And South Asian Federation of Exchange (SAFE), established in 2000, is included among the institutions that have provided a platform to member countries to strengthen economic integration. Accordingly, there are many bilateral and multilateral agreements to boost trade and develop friendly financial policies across the countries in the region. As these activities influence the policies and hence the stock market asset price mechanism, it is very important to examine whether the phenomenon of co-integration exists in Asian stock markets and spillover effects among the stock markets.

Borderless investment activities, investors, and policymakers seek for a model that can disclose linkage and causality across financial markets, especially markets in a neighboring area. The model will provide them better view of the markets movement, therefore, enable them to appropriately price underlying assets and their derivatives, as well as to hedge the associated portfolio risks. Co-integration analysis has been the most popular approach employed by academic and stock market researchers in developing such a linkage and causality model.

B. Research Problem Statement

The World Bank (1997) argues that the world's financial markets are rapidly integrating into a single global marketplace as investors are driven to developing countries in the search for higher returns. Recognizing the benefits of international diversification, numerous studies in finance literature have concentrate on measuring the international linkages of national stocks across developed markets and several emerging markets. However:

1. Most of the work on this topic is done in Asian stock markets by taking sample from East and Pacific Asian countries, some studies considered South Asian countries, and South or Pacific Asian countries solely. Only a very few studies

took samples representing the complete Asia. This study taken the truly representative sample of the whole Asian and has studied the long term co-movement among the Asian stock markets.

2. Most of research before conducted on this topic was done by comparing emerging markets of Asia with the developed markets of the West such as the U.S. or Europe, but few research works have been done by comparing the developed and emerging stock markets of Asian on a regional level, and compared all the Asian stock markets together.
3. With the rapid growth of Asian emerging stock markets, many investors would certainly consider investing in those emerging stock market rather than in the advanced or developed markets. However, the question of whether those markets are integrated with other stock markets whether investing in Asian will provide the benefit of diversification, which is the major concern raised by investors.

This paper will begin to fill this information gap, and provide some insights into the issue above by comparing both the developed stock markets of Japan, Hong Kong, Singapore, New Zealand and Australia with emerging markets of India, Shanghai, South Korea, Pakistan, Malaysia, Taiwan, Philippines, Indonesia, Sri Lanka and Thailand.

C. Research Scope

The monthly index values top stock markets are the 15 different Asia Pacific stock markets (13 different countries) i.e. Australia, Hong Kong, Shanghai, Taiwan, Indonesia, India, Japan, South Korea, Malaysia, New Zealand, Philippines, Pakistan, Singapore, Sri Lanka and Thailand from January 2000-October 2012 (12 years) are used as data to extract the results.

D. Research Objectives

1. This paper focuses on examining the extent of the long and short term relationships among the15 different Asia Pacific stock markets i.e. Australia, Hong Kong, Shanghai, Taiwan, Indonesia, India, Japan, Korea, Malaysia, New Zealand, Philippines, Pakistan, Singapore, Sri Lanka and Thailand have been selected for the sake of this study. To analyzes whether those 15 different stock markets are interdependent with each other.
2. This paper focuses on examining the extent of the causality among the 15 different Asia Pacific stock markets i.e. Australia, Hong Kong, Shanghai, Taiwan, Indonesia, India, Japan, Korea, Malaysia, New Zealand, Philippines, Pakistan, Singapore, Sri Lanka and Thailand have been selected for the sake of this study.

E. Significances of research

This research seeks to provide the following benefits:

a. For Academic:

1) To apply and inspire that has been acquired in lectures, particularly with regards to investment management.

2) To add insight and practical knowledge of investment analysis, demonstrating the co-movement among Asian Pacific stock markets.

3) Contribute to a better understanding of whether different Asian Pacific stock markets have long term co-movement or not and how strong the co-movement is and to explore whether they have causality among each other.

b. For practice:

1) Act as a guideline to help investors make a better invest when they make investment choices in Asian Pacific stock markets.
2) Create more opportunities for global international investment as investors seek to enhance their portfolio return and reduce risks by diversifying more effectively.

c. For other Researchers:

1) Apply the knowledge gained to the real world, both as investors and analysts.
2) Add insights that can be used as material consideration when making investments.
3) Provide the basis for further research in this important area of study.

F. Organization of the Research Study

This research willbe organized as follows:

Chapter 1: Introduction

This chapter consists of the background of the research, problem statement, scope of the research, objectives of the research and benefits of the research.

Chapter 2: Literature Review and Theoretical Background

This chapter reviews the relevant literature, discusses the concepts underlying the research, and the theoretical basic for the paper.

Chapter 3: Research Method

This chapter describes the research design and itsmethodology types, sampling determination, research data, and method of analysis.

Chapter 4: Data Analysis

This chapter provides the analysis and interpretation of the collected data.

Chapter 5: Conclusions, Limitation and Suggestions

This chapter concluding the research study and reveals its findings. It examines the study's managerial implication, limits and suggestion for improvements in further research.