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Risk Comparison of Karachi Stock Exchange with Next Eleven Countries: A Country Beta Approach

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Abstract

This study is based on the Country risk of different stock exchanges of the world. Here Country risk is derived from the Country Beta Approach, as this approach is described by the Erb, Harvey and Viskanta (1996). Specifically, this study is based on the risk comparison of KSE 100 with next eleven countries (South Korea, Iran, Mexico, Philippine, Indonesia, Turkey, Egypt, Nigeria, Pakistan, Vietnam and Bangladesh), which are defined by the Goldman Sachs (2005). For this purpose, the stock exchange's data of these countries is compared with the global index. Actually, the global index is consisted on the 44 countries of the world. Here only one factor is discussed, which is a country risk (country beta). Actually the riskiness is measured in this study on the basis of beta, higher the beta means higher the risk; lower the beta means low the risk. The result shows that the performance of KSE is much better than the next eleven economies but Nigerian stock exchange has less risk than the KSE 100.

Keywords: Country Beta Approach, KSE 100, Next Eleven Countries (Gold Man Sachs).

1. Introduction

The globalization of the markets of world, Asian's markets and eastern countries has a considerable influence on their financial integration. The estimation of the country level risk is required for economic judgmental investment and also worldwide situation. So there is a required framework for the estimation of country level risk. The estimation of a country risk is very vital in an assessment of project, portfolio assessment, FDI and comparison of different countries indexes. Each economy and market has to face the systematic risk/country risk as well as unsystematic risk. And they have to use different techniques to minimize their systematic risk or country level. There are used many techniques to evaluate the country risk. Most of the people use Capital Assets Pricing Model (CAPM) for the evaluation of the systematic risk. But the resent study is based on the comparison of different stock exchanges. These stock exchanges are being evaluated on their stock data. So in this study the systematic risk is evaluated on the comparison of KSE-100 and next eleven countries, which are defined by the Goldman Sachs (2005). He also categorized these countries into four economies as developed countries, newly industrializing countries, developing countries, and least developed countries. He defined South Korea as developed country, Iran, Mexico, Turkey and Philippine as industrialized countries, Indonesia, Egypt, Pakistan, Vietnam, and Nigeria as developing countries and Bangladesh as least developed country.

The Goldman divided these countries into four group of economy and the overviews of these economies are discussed. First of all he described the South Korea as a developed economy. Typically the developed nations are those, who have relative high level of economic growth and securities. For the evaluation of country's degree development, most countries are using per capita income, gross domestic products (GDP), industrialization, amount of widespread infrastructure and their general standard of living.

But further Goldman included five countries as newly industrializing countries. The newly industrializing countries (NICs) are those countries that have not reached at developed countries level but they have resources to achieve the developed nation's level. The characteristic of NICs is that they are going under rapid economic growth. According to the Goldman 2005 Iran, Mexico, Philippine, Indonesia and Turkey are the newly industrializing countries.

After that Goldman pointed out four countries as a developing or emerging economies. He included Egypt, Pakistan, Vietnam, and Nigeria as the emerging markets. So in this way the emerging markets are those markets, which are having characteristic of restructure their economies along with market oriented lines, having huge trade opportunities, moveable technology, and also foreign direct investment. The fourth condition of economy is defined by the Goldman that is least developed country, Bangladesh falls in this economy. The least developed countries have some problems, which are related to their economies. First of all they have poverty in their countries. And according to the World Bank their three years average GNI per capita is less than US $905, which must exceed $1086.

Country beta is a covariance of a national economy's rate of return and the rate of return of world economy divided by the variance of world economy. The discussion about the country beta is that, it is a cause incident such as an institutional cause of failure or economic upset in the bad economic consequences by Gangemi in 2000. These bad economic shocks could include a chain of financial insinuation and market failure. Less dramatically, this type of loss might include financial institution failure or market price volatility. There are some finding related to the systematic risk. The systematic risk may appear to different form across countries having its own properties. Specifically, a return of index's movement is upward than it will good for investor. These findings have great importance for the investors to invest in the stock exchanges of all over the world. Investors should be cleared about his investment as higher risk with higher return or loss for the compensation of systematic risk. A very simple index of differences, the country or market owned, is the only one that is positively correlated with the market. In addition the total risk of a country or market, as measured by the market index is significantly greater than the other markets.

In February 26 2009, it was field under the credit ratings, emerging markets, exchange trade funds, foreign investment, foreign investor, international markets and investor's decisions to place out their portfolios in different types of securities. The decision of the investors mostly involved in the analysis of the mutual funds, exchange trade funds and stock or bond offerings. Therefore, many investors ignore first important step in the process international settings. Every country has to face two types of risk that is economic and political risk. Economic risk refers to a country's ability to pay its debts to the other country. A country should be stronger that having stable financing than the country having weaker financial position. Political risk refers to which the political agents' decision in the country is un-anticipated loss to the investors. While economic risk is often referred to a country's ability to pay back its debts, but on the other side the political risk is the willingness of the country to pay debts or maintain hospitable condition for the investors. A country having strong economic condition but having bad political condition to foreign investors, that country has not good condition for investment. On the other side the country's risk is used in two different terms as a systematic risk in finance and market risk or diversifiable risk in economic. In the economic the market risk is a vulnerability effect or event which affects the entire market as total economy wide resource holding, or aggregate income. However in the finance, it is typically referred as a systematic risk. The systematic risk is the risk of loss from some catastrophic event with potential to collapse entire financial system.

The history behind the Goldman Sachs was that he started the research on BRIC countries (Brazil, Russia, India and china). In 2003 these countries are declared most rapid developing countries by the Goldman Sachs. He defined in his study that these countries continuing to be developed fast, it would be prove good to watch the next emerging economies. The next emerging economies are following the way of BRIC countries be developed economies, there were some characteristic to be in same position. The characteristic of BRIC were experienced high population growth rate, consumers potential created at growing pool and at the same time the disposable income raised. The Goldman Sachs also defined the key points that were the key of success. He told that since the Goldman coined The BRIC the economies of the country's growing rapid, with China having highest growth and Brazil lowest. In 2005 after the success of BRIC Goldman Sachs defined the Next-11 (N11). This grouping comprises

Bangladesh, Egypt, Indonesia, Iran, South Korea, Mexico, Nigeria, Pakistan, Philippine, Turkey and Vietnam. According to Goldman Sachs these countries also have the same characteristic related to BRIC.

1.1 Research Objective

To determine a country beta of Karachi Stock Exchange

To determine a country beta of Next Eleven countries in the global context, which are defined by Goldman Sachs (2005)

To determine and compare, which country is more risky than the other by using country beta approach

2. Conceptual Framework

This paper is based on the comparison of stock markets risk in the global context. The comparison of stock market risk is between Karachi Stock Exchange and with Next Eleven Countries. Different economies such as developed, newly industrialized, emerging and least developed economies are compared by me. Moreover, the comparative study of different countries/economies is based on the country beta approach. This paper is supported to investor for better decision. From an investor perspective, comparison of developed, newly industrialized, least developed and emerging countries would be used to emphasize relationship between the stock data and country beta. At the end, the comparison of different economies created global truth for the investment either investor should invest or not.

H1. KSE is less riskier than the Next Eleven Countries.

This alternative hypothesis shows that the riskiness of KSE is less than the remaining countries. But result shows that the Nigerian Stock exchange is less risky than the KSE. On the other side the risk of remaining countries is greater than the KSE.

3. Data and methodologies

3.1 Data source and sample selection

This study is based on the monthly closing price of all selected countries indices. The data is fetched from the Yahoo finance for country's respective index. So this study is based on the recorded data of Next Eleven Countries stock exchanges. The sample size is consisted of 11 countries (South Korea, Iran, Mexico, Philippine, Indonesia, Turkey, Egypt, Nigeria, Pakistan, Vietnam and Bangladesh) which are defined by the Goldman Sashes. The data is ranged from 2009 to 2012.

3.2 Methodology and research design

Studied on the next eleven countries is based on the risk comparison. A country beta approach is used for the risk comparison. This approach is described by the Erb, Harvey and Viskanta (1996). Here, I compared these countries on the biases of their stock exchange data. The model of my study is as follows

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$$\beta = \frac{\mathrm{Cov}(rg,\ ri)}{\mathrm{Var}(rg)}$$

$$\beta = \frac{\text{Covariance Global index with country index}}{\text{Variance of Global index}}$$

Where

- cov(rg,ri) is the covariance between the global index and the country index.
- rg is the variance of the global return (volatility squared)

4. Empirical results

4.1 Summary statistics

The result is based on the country beta of next eleven countries, which is defined by Goldman. The country beta approach is applied on the stock exchange's data of these countries. And the data is ranged from 2009 to 2012. The results from each country are discussed in detail and the country beta is also compared between the KSE 100 and the remaining countries. The comparison of these countries is made critically and important recommendations are given at the end of this chapter.

4.1.1. Pakistan (KSE):

Karachi stock exchange is the main stock exchange of Pakistan. It is founded in 1949 as the biggest and most liquid exchange in the Pakistan. It has been declared as "Best Performing Stock Market of the World for the year 2002". He determined the country beta which was derived from the four years data of this stock exchange. The beta of this country is 0.89. So it means the growth of this country is satisfied in the future. On the behalf of the country beta the investor can invest in the KSE 100 with less uncertainty because the beta value of this index is not in negative. Actually the country beta is derived from the covariance of KSE 100 index with Global index divided by the variance of Global index. The Global index is based on the 44 countries of all over the world and the variance of the global index is 0.02384. The covariance of the KSE 100 with Global index is 0.021414.

$$covariance = \frac{\sum(1.006451)}{48 - 1}$$

$$= 0.021413861$$

$$Beta = \frac{0.021413861}{0.02384}$$

$$= 0.898227$$

As we know that the Pakistan is facing many types of problems, such energy crises, terrorist's attack, and political instability and inflation impacts. This country is in trouble, but instead of these insecurities this country is also working up to the mark. As we have seen many of foreign companies are investing in this country for future betterment. As the results of the country beta analysis, this country has lesser beta than the other countries so the investors have the better opportunities for the investment.

4.1.2. Comparison of Korean stock exchange with KSE 100:

According to Goldman Sachs, South Korea is developed nation in these countries. When we talk about the macroeconomic situation of this country, this country is not working up to the mark. But on the other side the GDP of this country is 48% depended on the exports. So in this way this country is not internally strong for the investment. Because this country is earning only from the exports. The internal position of this country is based on household debt (including mortgages, credit card debt and nonbank loan). The economy also has one of the world's lowest fertility rates and the rapidly aging labor force, which also leads to less people able and willing to work. Such type of factor continues to put strain on the Korean economy. In this way the overall macroeconomic trend of this country is downward. So at the end the analysis of country beta also shows that this country is not so much favorable for the investor to earn the profits. South Korea is the developed nation according to Goldman. He just included this country as a developed nation in the Next Eleven Countries. On the analysis of this stock exchange with the Global index the beta of this country is 0.99. It means this stock exchange has less influence for investment because we can say that it is almost 1 beta.

$$covariance = \frac{\sum(1.118943)}{48 - 1}$$

$$= 0.023807299$$

$$Beta = \frac{0.023807299}{0.02384}$$

$$= 0.998622$$

As it is mention above the Korea's stock exchange is not working up to the mark due to financial crisis of 1990s. But after that in 1997, Korean government decided to increase the country financial openness. As Kim and Yang (2010) point out, it dismantled most capital flow restriction. On the behalf of the analysis the beta of KSE is .89 and the beta of Korean Stock Exchange is .99. The difference between KSE and Korean stock exchange is .10 so it means the Korean stock exchange is more risky than the KSE. So if the investor wants to invest in these stock exchanges, than he must invest in the Pakistani stock exchange because it will be profitable for him. And there is also less risk than the Korean stock exchange.

4.1.3. Comparison of Tehran stock exchange with KSE 100:

Goldman included Iran as NICs in the Next Eleven Countries. Iran has a mixed and transitional economy with a large public sector. Tehran is the 17th largest world purchasing power parity and 25th by the nominal gross domestic product. According to the economist, Iran was ranked as the 39th as the industrialized nation in the world. This country was producing $23 billion of the industrial products in 2008. In the early 21th century the service sector was the country’s largest, followed by the industry and agriculture. In 2008 GDP was estimated at $382.3 billion, or $5,470 per capita. Nominal GDP is projected to double in the next five years. However real GDP growth is expected average 2.2% a year in 2012 t0 2016.The growth rate of Iran is also good for the investment. So it means this country is working for the progress of the entire world. The beta of this country is calculated as 1.07634900, which is highest value in the analysis of these countries. The beta of this country is greater than 1, so it has more risk. As higher the beta means higher the risk.

$$covariance = \frac{\sum(1.206035)}{48-1}$$

= 0.025660311

$$Beta = \frac{0.025660311}{0.02384}$$

= 1.07634

As a study is conducted by the Seyedehat al in 2013, they described the crises situation of the Tehran stock exchange. They gathered the data of financial crises of 2008 and used the tactical test. They concluded that the stock prices of the product before the financial crisis were more than the prices after the global crisis in the accepted companies by Tehran Stock Exchange. The operating profits before the global financial crisis were more than the operating profits after the global financial crisis in the accepted companies by Tehran Stock Exchange. Anh Phuong Nguyen (2009) described the situation of terrorist in Pakistan and Iran. He described that these terries activities have bad effect on the stock returns for the both countries. But our results show that the Pakistani Stock exchange is working better than the Tehran stock exchange. As already proved that the beta of Pakistan is 0.89, which is lesser than the Iran’s country beta 1.07. So it is easy to sort out which country is best for the investment. Through the results it is proved that the investment in Pakistani stock exchange is better than the Tehran stock exchange. Because the beta of KSE is lesser than the beta of Tehran stock exchange.

4.1.4. Comparison of Mexican stock exchange with KSE 100:

Mexico is the newly industrializing country according to Goldman Sachs. This country has also potential for the investment in future. When we talk about macroeconomic situation of this country is based on the economic growth dynamic, inflation and possible threats to the economy. When we see about the downturn of this country, we find two weaknesses, the low productivity levels and the drug related violence effect on the investment and local development. On the other side it is forecasted that the economic growth of this country will be 3%. The bank governor Agustin Carstens believes that Mexico will grow at 4%. To achieve this, he points out the control inflation and creation of approximately 600,000 to 800,000 new jobs in the economy. So on this situation for this country has great opportunity to invest in the stock exchange of this country for the portfolio investors. But the recent analysis shows that the stock exchange of this country is not working up to the mark. The beta of this country is 1.054014. The beta of this country is greater than 1, so the investment in this country is not also profitable for the investors. As we know that the greater the beta the higher the risk.

$$covariance = \frac{\sum(1.181009)}{48 - 1}$$

= 0.025128

$$Beta = \frac{0.025128}{0.02384}$$

= 1.054014

Julio describe Mexico crisis of financial stability. He talked about the period of 1982-1986, at that time the Mexico had two serious external shocks: the debt crisis in 1982 and huge fall in the price of oil in 1986. Thus between 1981 and 1987 GDP per head fell by over 11%, while the annual rate of inflation averaged 78%. And know the same situation is on the behalf of stock exchange the Mexico stock exchange is not working very well, because it has the beta value greater than 1. That is not good for this country as well as investor to invest in this country rather than the Pakistan. The analysis showed that the beta of KSE is .89 and Mexico 1.054. The beta of Mexico is greater than the Pakistani stock exchange. So the investment in Pakistani stock exchange is better than the Mexico stock exchange.

4.1.5. Comparison of Philippine stock exchange with KSE 100:

Philippine is the 40th largest economy of the world according to the 2012 consensus of International Monetary Fund. Philippine is considered as a newly industrialized country in the next eleven countries, which are defined by Goldman Sachs. He also describes, that Philippines will be 14th largest economy of world in 2050. According to HSBC Philippines' economy will become the 16th largest economy in the world, 5th largest economy in Asia and the largest economy in the Southeast Asian region by 2050. The Philippines has been named as one of the Tiger Cub Economies together with Indonesia, Malaysia and Thailand. The economy of the Philippines has been growing very steadily over the decades, as it is described by the International Monetary Fund in 2011 as a 45th largest economy in the world. In the years 2012 and 2013, Philippines was posted high GDP growth rates, as reaching 6.8% in 2012 and 7.7% in the first quarter and 7.5% in the second quarter of 2013. And this is the highest growth rate of GDP in the Asia in the first two quarters of 2013. In this way the portfolio managers have great opportunities for investment in this country as better results.According to Goldman the third country of NICs is Philippine. This country is also working good but greater than the Mexico and Iran. The country beta of this country is 0.96910737. On the four year data analysis the beta of this country is lesser than the 1. But it is in positive so the investor can also invest in this country. If the investor knows about the investment than he can earn profit form Philippine stock exchange.

$$covariance = \frac{\sum(1.085871807)}{48-1}$$

= 0.023103655

$$Beta = \frac{0.023103655}{0.02384}$$

= 0.96910737

Rodolfo Q. Aquino (2005) described the Philippine stock market prices exchange rate risk during the period 1992-2001. The evidence in this study shows that the stock returns do not react significantly to the foreign exchange fluctuations. In the same way the recent study is also significant to the stock exchange of this country. As the result shows that the beta of Philippine is greater than the Pakistani stock exchange. So if an investor has to choose in two countries than he must invest in the Pakistani stock exchange. Because the beta of Philippine is .969 and Pakistani is .89.

4.1.6. Comparison of Jakarta Stock exchange with KSE 100:

When we talk about the Indonesia, this country is included as NICs in Next Eleven Countries. The macroeconomic situation of this country is also favorable in every aspect of progress. The GDP of this country is increasing yearly, as its 4.6 in 2009 but in 2013 5.9. And on the other side consumer price index is also increasing but the public debt decreasing. The poverty rate of this country is also decreasing yearly, that is good for this country as well as for the investor for their investments. The fourth NICs country is Indonesia in the next eleven countries. This country is also working in a good way because the beta of this country is 1.068609. So the country beta of this country is greater than1, which is not so good for the country economy. The investor can invest in this country for better results.

$$covariance = \frac{\sum(1.197362)}{48-1}$$

$$= 0.025476$$

$$Beta = \frac{0.025476}{0.02384}$$

$$= 1.068609$$

Muhammad Chatib Basri described the situation of the Indonesia as this country facing the economic crisis. The global crisis affected the world economy including the Indonesia, Singapore, Malaysia and Thailand. It is not experienced first time that Indonesia has experienced a financial crisis. In 1998, the Asian crisis had a very bad effect on Indonesia. On the other hand Indonesia had faced the 2008 financial crisis with good policy. In this way it is surviving better way. But this study also shows that the Indonesia is not working better than the Pakistan. As Indonesia beta is greater than the Pakistani stock exchange as the results showed. The beta of KSE is .89 and the Indonesia stock exchange is 1.068. So the beta of Indonesia is more than the 1, and it is not so good for investor for investment. The investor has great opportunity in Pakistani stock exchange rather than Indonesia.

4.1.7. Comparison of Istanbul stock exchange with KSE 100:

When we talk about the macroeconomic situation of the Turkey, it is very high in the recent years. Turkish economy expanded by 9.2% in 2010 and in 2011 8.5%, thus this growing situation of economy is good for the Turkey as well as for the world economy and also the economy of Europe. The report of 2011 the budget deficit was decreased from more than the 10% to less than 3%, while one of the EU Maasticht criteria for the budget balances. The CIA classified Turkey as a developing nation but on the other side Goldman Sachs defined as a newly industrialized country in the next eleven countries. The World Bank classified this country as an upper middle income country in terms of country's per capita GDP in 2007. And mean while the pay graduate was $10.02 per man hour in 2010. According to the Turkish stock market and credit rating agencies have responded positively. The share price of the Turkey has been doubled over in 2009. In this way, the Turkish economy as well as stock exchange has the potential for the investment in different sectors. So the investor or portfolio managers have the opportunity for better results. According to the Gold man the last NICs country is Turkey. And the beta of this country is 1.010781073. So the results showed that the beta of this country is greater than the 1. And this is not good for the investor because the higher the risk. In this way the beta is more than risk will be also more.

$$covariance = \frac{\sum(1.132567)}{48-1}$$

= 0.024097

$$Beta = \frac{0.024097}{0.02384}$$

= 1.01078

A study conducted on the Turkey stock market and economic activities. In 1980s, it was argued that the traditional links between stock market and real activity broke down implying that movements of stock prices are independent from subsequent change in real activity. The recent situation of the stock exchange is good but lesser than the Pakistani stock exchange on the behalf of beta analysis. The beta of Turkey stock exchange is greater than the Pakistani stock exchange. The beta of KSE is .89 and Turkey is 1.01. So it is better for the investor to invest in the Pakistani stock exchange than the Turkey stock exchange.

4.1.8. Comparison of Egyptian stock exchange with KSE100:

During the 19th century, Alexandria's Futures Market was one of the oldest in the world. Alexandria Stock Exchange was established in 1883.Egypt is also working good economically in the world. The macroeconomic situation of this country is also favorable for the investors because it has good GDP rate as well as economic stability. The work opportunity in this country is also good for the labor and the political situation is also favorable for the investment. So the portfolio investors have the opportunity for better result for their investment. The Egypt is the first developing country according to Gold man. The Egyptian economy is growing rapidly. The beta of this country is 1.031419. The beta of this country is also greater than 1, so the investment in this will be beneficial for the investors. The results are very favorable according to 4 years analysis data for investors.

$$covariance = \frac{\sum(1.155691)}{48-1}$$

= 0.024589

$$Beta = \frac{0.024589}{0.02384}$$

= 1.031419

The Egypt stock exchange had faced financial crisis since in 1974 to 2002. And the banking sector of this country was also working negatively since that time. And same in this study that is conducted on the stock exchange data of next eleven countries. The beta of this country is greater than the Karachi stock exchange. The beta of Karachi stock exchange is .89 and the beta of Egyptian stock exchange is 1.03. So in this way the investors should invest in the Karachi stock exchange rather than the Egyptian stock exchange.

4.1.9. Comparison of Vietnam stock exchange with KSE 100:

Vietnam is developing country in the Next Eleven countries, which are defined by Goldman. The economy of this country has been working well since 1986. Vietnam is implementing its transition from centrally planned economy to a market economy and also maintains the opening up policy. The economic condition for both demand and supply are largely contributed to the economic success. Since 1990, the economic development of this country has impressive role for the development of this country. The inflation of this country is controlled in stable macroeconomic situation. So undoubtedly, the macroeconomic policies have played an important role in the stabilizing the economy of this country. As on the integration of the world economy and its reforms, Vietnam has benefited from the inflows of FDI and also foreign trade expansion. As this country has joined the WTO in 2007 creates both opportunities and challenges to the country and raised the need for suitable and flexible economic policies to sustain the economic development. Vietnam is also included in the developing countries according Goldman. The economy of Vietnam is also progressing in a better way. The beta of this country is 0.99, which is less from 1. But instead of less than 1 it is so much near to 1. The investors have better opportunity to invest in the Vietnam stock exchange on the macroeconomic situation of this country.

$$covariance = \frac{\sum(1.11)}{48-1}$$

= 0.0237

$$Beta = \frac{0.0237}{0.02384}$$

= 0.99

The Vietnam economy, especially the stock exchange, has been influenced by the global crisis during and after the period 2007-2009. For specific industries, such as banking, insurance, investment and security industries, the risk re-analysis and estimation for the crisis period 2009-2011. The beta of this country is almost 1, and the investment in this country is also beneficial for the investors. According to results the beta of Vietnam is greater than Pakistan. And the investment in the Pakistan is better than the Vietnam. So the investors should invest in Pakistan rather than the Vietnam.

4.1.10. Comparison of Nigerian stock exchange with KSE 100:

As I saw in the results of the comparison of next eleven countries, the beta of Nigeria was less than the remaining countries. It means that the Nigerian stock exchange is less risky than the remaining economies of these eleven countries. The macroeconomic situation of this country is also favorable for the portfolio investors. And on the other side, the Nigerian's economy is estimated to be worth about $262bn, which is the largest economy in the African countries. The country has fared better than many other countries during the global economic downturn, but systematic problems and labor market mean that its position in the Economist Intelligence Unit's global ranking remains towards the bottom during the forecast period, at 75^{th} out of 82 countries. But instead of this, Nigeria stock exchange has great opportunity for the investor to invest in this country. Gold man included this country as developing country. The Nigerian stock exchange is also working in good way. The beta of this country is 0.872288. The beta of this country is below from all the remaining countries and in the same way it is less risky. The investment in this country is also beneficial for the investors.

$$covariance = \frac{\sum(0.977387)}{48-1}$$

=0.020795

$$Beta = \frac{0.020795}{0.02384}$$

= 0.872288

The study on the Nigerian stock exchange relationship between the stock market development and the level of investment flows in a country with a high degree of macroeconomic instability, and if the stock market plays a role in attracting both domestic and foreign, investments in this economic situation. The study period from 1970 to 2006 was very good for this stock exchange. The study shows that the development in the Nigerian stock market on these years stimulate the growth of the national private investment flows. And the recent study's result also shows that the Nigeria country is best performing in these countries, as it has less beta value of the other countries. The result shows that the investment in Nigerian stock exchange is better than the Pakistani stock exchange. The beta of Nigerian stock exchange is .87 and Pakistani stock exchange is .89. So the beta of Pakistani stock exchange is .02 greater than the Nigerian stock exchange. So the investors should invest in the Nigerian stock exchange rather than the Pakistani stock exchange.

4.1.11. Comparison of Dhaka Stock Exchange with KSE 100:

As we know that Bangladesh is the least developed nation in the next eleven countries, which are defined by Goldman Sachs. This country is least developed nation but it has less than 1 beta of the country beta analysis. So this country has less risky than the developed nation or emerging nations. The macroeconomic conditions of this country are also favorable for the investors on the bases of country beta approach. This country is earning very high income from the readymade garments industry. This country also has the 1.12 million workforces in this industry, which shows that this country is progressing slowly in the world market. According to the Gold man the Bangladesh is the least developed nation in these next eleven countries. The Gold man says that these countries are on the next supporting economies for the entire world. So the result shows that the Bangladesh stock exchange is also working in a good. The beta of this country is 0.995515. The beta of this country is less than 1 but is so much near to 1.

$$covariance = \frac{\sum(1.115461)}{48-1}$$

= 0.023733

$$Beta = \frac{0.023733}{0.02384}$$

= 0.995515

In 2010-11 Scam market share of Bangladesh is a constant agitation of the stock market of Bangladesh. Millions of small investors have lost all their investments due to the fall of the stock market. The accident is considered that it is a scam and exacerbating due to the failure of the Government. The result of recent study indicates the same situation, which the Bangladesh stock exchange is not working properly. The result shows that the investment in Pakistani stock exchange is better than to invest in the Bangladesh stock exchange. The beta of Bangladesh stock exchange is greater than the Pakistani stock exchange. The beta of Bangladesh stock exchange is .99 and the Beta of Pakistani stock is exchange .89.Because higher the beta than higher the risk. So the investors should invest in the Pakistani stock exchange rather than the Bangladeshi stock exchange.

4.2. Tables and Diagrams:

Risk (Beta) comparison of next eleven countries results in diagram.

4.2.1. Table Beta Comparisons:

Country's Stock exchange Name	Beta of the country
Korean Stock Exchange	0.998622445
Tehran Stock Exchange	1.076349001
Mexican Stock Exchange	1.054014282
Philippine Stock exchange	0.9691
Jakarta Stock exchange	1.068609219
Istanbul Stock Exchange	1.010781073

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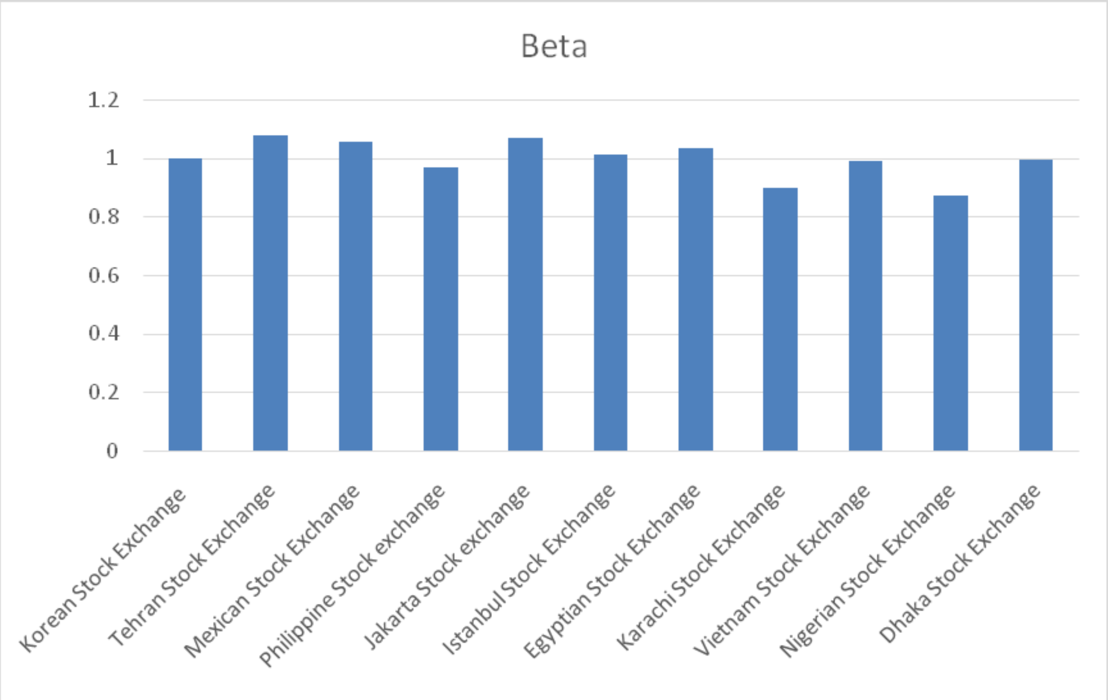
Egyptian Stock Exchange	1.031419109
Karachi Stock Exchange	0.898227136
Vietnam Stock Exchange	0.99
Nigerian Stock Exchange	0.872287555
Dhaka Stock Exchange	0.995515139

4.2.2. Figure.1 Beta Comparisons:



* Source: Yahoo Finance. Historical Prices of Stock Exchange.

5. Conclusion

The risk comparison of the KSE 100 Index with next eleven countries ranged from 2009 to 2012 has considerable importance for the investors in the Global context. Goldman (2005) says that these countries' economy will have to grow in a better way for future. The results translate that risk comparison is more important in the conventional economics situation and it is theorize that where greater the beta, the higher the risk. The investigation of the risk issue in the stock markets is a significant center of the current study.

The literature examining risk at country level is well represented by Harvey (1991), Harvey and Zhou (1993), Erb et al. (1996a, 1996b) and Bekaert et al. (1996). Following this literature, this study explores the relevance of the country beta approach in the Global context. Specifically, the approach is used in the spirit of Erb et al (1996a, 1996b), in the comparison of KSE 100 Index with Next Eleven Countries. While Erb et al. (1996b) specifically model country beta as a function of country credit risk, but here look at the risk influence of KSE 100 Index with Next Eleven Countries, as country beta approach. This is the primary contribution of this study.

The time duration of this study is chosen as the data availability. The data is based on the stock data of the next eleven countries' stock exchanges. The hypotheses of this study are based on the comparative analysis. First hypothesis H1 is accepted because the beta of KSE is lesser than the Korean stock exchange. As it is defined in above, where high the beta leads to high risk and low value beta leads to less risk. Second hypothesis H2 is also accepted, because the beta of Tehran stock exchange is higher than the KSE. In the same way the third hypothesis H3, Mexican stock exchange has greater beta value than the KSE. H4 also shows that the KSE is less risky than Philippine stock exchange. Fifth H5 hypothesis revealed the same situation as in previous hypothesis; Jakarta stock exchange is more risky than KSE. H6 Istanbul stock exchange is more risky than the KSE. Seventh H7 hypothesis also shows the same situation that KSE is less risky than the Egyptian stock exchange. Discussion about H8 that the beta value of Vietnam stock exchange is also greater than KSE. The outcome of H9 shows that only Nigerian Stock Exchange's beta is less than the KSE 100 Index than the other remaining countries. Dhaka Stock exchange is also more risky than the KSE.

So at the end this study is so much important for the international investor to invest in these countries. Actually this study is on based on the stock exchange data of the countries, so this study deals only invest in stock exchange on the behalf of closing prices.

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