Impact of Capital Markets on the Economic Growth of a Country: A Comparison between a Developed and Developing Country.

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ABSTRACT

Capital markets play a very important role in the growth of the economy. The level of technology advancements, literacy and regulations of a country are constant factors that improve the performance of the market. The strength of these financial markets plays an important role in the economic growth of the country. This research was carried out to between a developed country, Japan and a developing country, India. The period of analysis was 8 years and the independent variables taken for this study were the Stock Indices of the respective countries and the Foreign Exchange against the US Dollar. This research shows us how the instruments of a developing country have a significant impact on the economic growth while the instruments of a developed country don't have a significant impact.

KEY WORDS: Developing Country, Developed Country, GDP, Stock Indices, Foreign Exchange,

INTRODUCTION

The capital markets play an important role in the development and functioning of an economy. The level of technology advancements, literacy and regulations of a country are constant factors that improve the performance of the market. The strength of these financial markets plays an important role in the economic growth of the country. The level of development in the country determines the economic growth. To examine the former statement, this research is being carried out between a developing and developed country. Many papers have been published in various nations, showing the connection between the established capital markets and its economic growth. Numerous examinations demonstrate that in numerous nations, there can be something like a connection between the GDP development and the profits of capital markets. In principle, the aggregate income of organizations rises when there is development in the economy or the other way around however there are numerous such models where the share trading system was totally disengaged from the economy. In the event that we think about a shorter era, there can be a ton of varieties between the two factors mulled over. In the midst of high unpredictability like the 2008 Financial Crisis, the securities exchanges all around the globe plunged by relatively 60%, the impact was not to compare on the genuine economy. The buyer advertises saw the S&P 500 triple in just merely 6 years, which was definitely not an intelligent of the development in the genuine GDP.

The activities in the stock market can have a huge influence on the economy and as well as the residents of a nation. A downfall in the share prices has a huge latent to result in widespread economic commotion. It is also to be noted that the stock market crash of 1929 played a very significant role in the making of the great depression of 1930. However, the daily actions in the stock market might not have a huge impact on economy.

REVIEW OF LITERATURE

Prashanta B, Nehal Ahmed (2017) study the effect of the Stock Market of Bangladesh and Banks development on the economic growth of the country. The financial sector of Bangladesh is highly dependent on Banks. The method of financing through issuing of shares and corporate bonds are almost nonexistent. The people of Bangladesh are quite uneducated about the various sources of saving and raising funds. The author finds that there is a long term and positive contribution of the bank credit on the economy but same cannot be said for the stock market as the author could not establish a significant relationship

Gerard R, Jaya S (2017) study the impact of capital markets on the economic growth of Rwanda. The people of Rwanda have a negative attitude towards the underdeveloped capital market of the country. The country also has a poor saving and investing culture due to fear of loss of managerial control, safer investing options etc. which leads to the downfall of the country's capital market. The research conducted proved that there was a positive relationship between the stock market and economic growth encouraging the the people of Rwanda to participate in building the capital market.

The economic growth of any country runs on the smooth functioning of an efficient financial sector that pools resources and disperses them in a productive manner. Uma S M, Biswo R M (2010) work to prove the above theory in a developing country. They analyze the impact of capital market efficiency on the economic growth of India. The results prove that there is a significant impact and market organizations and regulations should be large enough to accommodate domestic as well foreign investors.

Marisa L (2014) examines the bi directional relationship of the stock market and the economic growth of Thailand. There is an understanding that developments in the stock market generate higher investments leading to greater economic growth. Consequently, a developed economy would lead to greater levels of investments and therefore lead to higher demand and development of the stock market. This has been proved in the article by using regression analysis that there is a bi directional relationship between the two variables.

Stock Markets play an important role in strengthening and fueling a growing economy. Initially countries only depended on the banking system to raise and save funds, including Mauritius. But with the development of the financial sector, there has been a rapid development in the stock market. Jeevita M, Boopen S (2015) have analyzed the impact of the developing stock market of Mauritius on its economy to prove its significance and have given proper proof.

Christie Dike (2016) studies the efficiency a developing countries stock market will have on its economy. The stock market plays a vital role in the economy for this reason, the industrial bodies, government and the central bank monitor the activities of the market closely. The equity market is found to be a major contributor of economic growth, as depicted by the presence of significant positive links between the two both in the long-run and the short-run.

OBJECTIVES

1. To analyze the impact of a developing countries Capital Market on its Economic Growth
2. To analyze the impact of a developed countries Capital Market on its Economic growth
3. To compare and contrast the above objectives and to the evaluate the differences.

VARIABLES IDENTIFIED FOR THE STUDY

1. **Independent Variables**

   The Stock Indices of India, Sensex and Foreign Exchange, USD/INR for the period 2010Q1 to 2017Q4

   The Stock Indices of Japan, Nikkie225 and Foreign Exchange, USD/JPN for the period 2010Q1 to 2017Q4
2. **Dependent Variable**

   The Gross Domestic Product (GDP) of both the countries for the period 2010Q1 to 2017Q4

HYPOTHESIS

H0a: There is no significant impact of the capital markets on the economic growth in India.

H1a: There is a significant impact of the capital markets on the economic growth in India.

H0b: There is no significant impact of the capital markets on the economic growth in Japan.

H1b: There is a significant impact of the capital markets on the economic growth in Japan.

RESEARCH DESIGN

Type of research: Analytical research which aims to study the impact of the Capital Markets on the economic growth of developed and developing country.

Data and Event Window

The data for the respective countries were collected for a period of 8 years from Q1-2010 to Q4-2017.

TOOLS OF DATA COLLECTION

Secondary data:

1. The quarterly Gross Domestic Product (GDP) was collected for both the countries. This information was collected from the OECD website
2. The quarterly closing price for Sensex and quarterly closing price for Nikkei225. This information was collected from Investing.com
3. The quarterly foreign exchange rates were collected for India and Japan. These rates were taken against the US Dollar.

Selection of Country

1. India, as reported by United Nation and the World Bank, is classified as a developing country. Multiple reasons such as Low Capital Income, over population, Lack of

Infrastructural Development, Vicious Cycle of Poverty among others are few of the reasons India's economic growth is not at Par with what it should be.

2. Japan, as reported by United Nations and World Bank, is classified as a Developed country. This can be credited to developed infrastructure, Highest level of Tertiary education, Government policies and Social development.

Plan of Analysis

1. Regression Test: The study is used to study the impact of the stock Indices and foreign Exchange on the economic growth of the country.
2. Correlation Test: This test is used to determine the positive/negative impact of the independent variables on the dependent variables.
3. Return: The logarithm returns of daily closing prices of the Stock Indices and Foreign Exchange are calculated using the following formula:
   Ri=LN(P1/P0)*100

Where, P1= today's closing

price P0= yesterday's closing

price LN= natural Logarithm

FINDING AND DISCUSSIONS

INDIA

Unit Root test was carried out and all the variables were stationary at Level 0.

	Table1A: Regression Analysis			
Dependent Variable:	GDP			
Method: Least Squares				
Date: 02/13/19 Time: 09:43				
Sample: 1 31				
Included observations: 31				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
Sensex_Return	0.174156	0.047141	3.694363	0.0009
USD/INR_Return	0.200630	0.075544	2.655810	0.0127
R-squared	-6.509934	Mean dependent var	1.708768	
Adjusted R-squared	-6.768897	S.D. dependent var	0.539599	
S.E. of regression	1.504009	Akaike info criterion	3.716486	
Sum squared resid	65.59925	Schwarz criterion	3.809002	
Log likelihood	-55.60554	Hannan-Quinn criter.	3.746644	
Durbin-Watson stat	0.773020			

Table (1A) shows the regression analysis of independent variables; Sensex and USD/INR on the dependent variable; GDP. From the above table we can we see that there is a .09% impact of Sensex on GDP and 1.27% impact of USD/INR on GDP. When the probability value is less than 5%, we reject the null hypothesis and accept the alternative hypothesis.
Therefore, we can say that there is a significant impact of Sensex and USD/INR on the GDP in India.

Table (2A) shows the positive/negative relation between the variables. From the above table, we can see there is there is a weak positive relation between Sensex and GDP. That is, when the Sensex increases by 1, the country's GDP increases by 0.37. We can also observe that there is a weak negative relation between USD/INR and GDP, when USD/INR increases by 1, the GDP falls by 0.36.

Table2A: Correlation test

	GDP	Sensex_Retu	USD/INR_Return	
GDP	1.000000	0.370330	-0.367627	
Sensex_Retu	0.370330	1.000000	-0.604347	
USD/INr_retu	-0.367627	-0.604347	1.000000	

JAPAN

Unit Root test was carried out and all the variables were stationary at Level 0.

Table1B: Regression test

Dependent Variable: GDP
Method: Least Squares
Date: 02/13/19 Time: 21:37
Sample: 1 31
Included observations: 31

Variable	Coefficient	Std. Error	t-Statistic	Prob.
N225_RETURN	0.012258	0.026980	0.454345	0.6530
YEN_USD_RETURN	-0.015088	0.048587	-0.310538	0.7584

R-squared	-0.120625	Mean dependent var	0.324037
Adjusted R-squared	-0.159268	S.D. dependent var	0.918243
S.E. of regression	0.988665	Akaike info criterion	2.877419
Sum squared resid	28.34631	Schwarz criterion	2.969934
Log likelihood	-42.60000	Hannan-Quinn criter.	2.907577
Durbin-Watson stat	1.874679		

Table (1B) shows the regression analysis of independent variables; Nikkei225 and USD/YEN on the dependent variable; GDP. From the above table we can we see that there is a 65%impact of Nikkei225 on GDP and 75% impact of USD/YEN on GDP. When the probability value is less than 5%, we reject the null hypothesis and accept the alternative hypothesis.

Therefore, we can say that there is no significant impact of Nikkei225 and USD/YEN on the GDP of Japan.

Table 2B: Correlation test

	GDP	N225_RETU	YEN_USD_R
GDP	1	-0.018445203	-0.030508945
N225_RETU	-0.018445203	1	0.748871877
YEN_USD_R	-0.030508945	0.748871877	1

Table (2B) shows the positive/negative relation between the variables. From the above table, we can see there is there is a weak negative relation between Nikkei225 and GDP. That is, when the Nikkei225 increases by 1, the country's GDP decreases by 0.01. We can also observe that there is a weak negative relation between USD/YEN and GDP, when USD/YEN increases by 1, the GDP falls by 0.03.

From the above analysis, we can see that instruments of a capital market in a developing country have a significant impact as compared to a developed country. This could be because a developing country is growing, output will be increasing and most firms should be experiencing increased profitability. As compared to a developed country which is already running and earning at its capacity. The results for a developed country can be noticed in other countries also including Germany.

IMPLICATIONS OF THE STUDY

The study has been undertaken to study the impact of instruments in the capital market on the economic growth of the country. The study has been conducted for a period of 8 years from 2010-2017. This study can help the government and financial regulators understand the importance of a developed and advanced capital market along with the significance of educating and raising awareness about Capital Markets.

LIMITATIONS OF THE STUDY

The study conducted is on the economic growth of the country which has many extraneous variables influencing them. All those variables can't/ haven't been taken into consideration in this study. The study was also conducted for 8 years, because of the economic crisis prevailing in the country, years before 2010 couldn't be taken as a part of the study.

CONCLUSION

The study has been undertaken to analyze the impact of Capital market instruments, i.e. Stock indices and Foreign exchange on the economic growth of a country (GDP). The study takes two nations, a developed country, Japan and a Developing country, India for a period of 8 years from 2010 to 2017. Overall the study found that there was a significant impact of the Stock Indices (Sensex) and foreign exchange (USD/INR) on the GDP of India whereas there was no significant impact of the Stock Indices (Nikkei225) and foreign Exchange (USD/YEN) on the GDP of Japan.

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