Level of Awareness of Filipinos on Stock Market Investments in Relation to Economic Growth

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Abstract: The increasing importance of financial markets across the world has reinforced the general conviction that finance is an important element of economic growth, in particular—the stock market. Even a country not known for having a sophisticated economy relies on its stock exchange to help business raise capital and give investors opportunities to back new and established enterprises. This study determines the level of awareness of Filipinos on the stock market in relation to economic development. The respondents of the study were the selected 500 employees working in selected business districts in Metro Manila: Makati, Ortigas, and Taguig. The stock investment performance and economic growth performance regarding the Gross Domestic Product of the Philippines were gathered from the website of the World Bank for years 2002 to 2016. For data analysis, Frequency and Percentage, Weighted Mean, and Pearson Product Moment Correlation (r) were employed. Findings show that the respondents are aware of the stock market investments and the possible return of the investment, but moderately aware of the process of investing. This paper provides policy recommendations.

Keywords: Level of awareness; stock market investment; economic growth

1. INTRODUCTION

1.1 Background of the Study

The stock market is an important component of the financial sector in promoting economic development. When it comes to investment, many invest in the stock market. It may be surprising to discover the number of stock markets blanketing the globe, but even a country not known for having a sophisticated economy relies on its stock exchange to help business raise capital and give investors profitable opportunities. Stock exchanges promise and often deliver higher profits, and in return, investors receive measures of assurance, diverse opportunities, and flexibility. The foundation of the securities market in developing nations like the Philippines is anticipated to increase savings. The awareness of the investors on the stock market is of big help to boost the anticipated increase that leads to economic growth and development.

Economic growth is an increase in the capacity of an economy to produce goods and services, compared from one period to another. It can be measured in nominal or real terms, the latter of which is adjusted for inflation. Traditionally, aggregate economic growth is measured regarding the Gross National Product (GNP) and the Gross Domestic Product (GDP), although alternative metrics are sometimes used. In simple terms, economic growth refers to an increase in aggregate productivity. Often, but necessarily, aggregate gains in productivity correlate with increased average marginal productivity. This means the average laborer in each economy become, on average, more productive. It is also possible to achieve aggregate economic growth without an increased average marginal productivity through extra immigration or higher birth rates.

The term economic growth is also associated with economic progress and advancement. Economic growth occurs whenever people take resources and rearrange them in ways that make them more valuable. Because of the importance of the stock market in economic development, it becomes appealing to conduct a study on the level of awareness of Filipinos on the Philippine stock market.

This study aims to determine the level of awareness of Filipinos on stock market investments regarding some listed companies, the process of investing, and return of investment about the GDP, the stock market performance, and the general economic growth performance of the Philippines for the years 2002 to 2016.

1.2 Hypothesis

There is no significant relationship between stock market investment performance and economic growth performance of the Philippines from 2002 to 2016.

1.3 Related Literature

Since the birth of the capital market, several types of research with varying results on the relationship between the stock market and economic growth had been conducted. Pascuale's research (as cited in Nguyen & Pham, 2014), stated that people who advocate the positive relationship of the stock market and the economy claim that when stock market ascends, investors tend to spend more and so, the economy grows. On the other hand, economic growth declines when the investors expend less due to the decline of stock prices. Evidence on the connection of the stock market to the succeeding growth of the economy as well as the capital accumulation are found on Levine & Zervos' research in 1946 (as cited in Nguyen & Pham, 2014). However, detractors argue that this positive relationship can be detected in emerging countries with flourishing stock markets while it is rarely found in developed countries. Furthermore, because of some incorrect indication of the stock market in a country's economic growth, Pearce and Campbell (as cited in Nguyen & Pham, 2014) postulated that additional evidence should be provided to further evaluate the said interrelationship. A stock market is an important tool for firms in raising funds for their expansion. A pricing process rewards the well-managed firms to have a greater allocation of new investment resources from issuing new stocks. The increase in the level of capital formation and private and foreign investments and in aggregate enhances economic growth. The development of a stock market is determined by some factors that include market capitalization, liquidity, regulations, and trade. It is assumed that the existence of an active and stable stock market can stimulate the rate of economic growth.

Ovat (2012) investigates empirically into the relationship between stock markets in driving economic growth, with evidence from the Nigerian stock market. Utilizing several econometric techniques, such as unit root test, Co-integration test, and Granger causality test, he disaggregates stock market development into two components: stock market size and stock market liquidity. His findings suggest the dominance of stock market liquidity over market size and he concludes that, while there is two-way causation between stock market liquidity and economic growth, the strength of the causality comes more from stock market liquidity, and market size.

On the other perspective, Aigbovo and Izekor (2015) examine the long-term and causal relationship between both stock market development and economic growth in Nigeria. The Vector Error Correction Model (VECM) and co-integration techniques of analysis were employed to analyze the data and draw policy inferences on annual data from 1980 to 2010. The study finds that there is a long-term relationship between stock market development as well as banking activity variables in Nigeria. They conclude that economic growth granger causes both stock market development and banking activity in Nigeria. The study, therefore, recommends that policy makers should emphasize the economic growth through the appropriate regulatory and macroeconomic policies to remove all constraints to the acceleration of the sustainability of economic growth and development in Nigeria.

Bayar, Kaya, and Yildirim (2014) also examined this relationship in Turkey during the periods of 1999-2013. He used Johansen and Juselius co-integration test and documented that development of stock markets affects the economic growth in the long run.

1.4 Conceptual Framework

Fig 1. Level of Awareness of Filipinos' on Stock Market Investments about Economic Growth

Figure 1 presents the conceptual framework of the study. As shown, the stock market will reflect the economic conditions of an economy. If an economy is growing then the output will be increasing, and most firms should be experiencing increased profitability, but this will be based on the awareness of the investors to invest in the stock market. As the stock market increases, profit makes the company shares more attractive – because they can give bigger dividends to shareholders.

The stock market also affects the GDP through consumer confidence and influencing financial conditions. With high valuation, the companies would be able to borrow money at cheaper rates enabling them to expand their operations, investing in new projects which would result in creating more jobs. If the consumers' confidence is high, they would spend their extra money and make major purchases. Increase spending would give higher sales and earnings for the company which would further boost the country's GDP.

2. METHODOLOGY

This study is descriptive-evaluative research. A purposive sampling method of research was utilized in determining the level of awareness of the five hundred (500) selected Filipino employees working in Makati, Ortigas, and Taguig related to the operations of stock market who are willing to participate as respondents of the study. Documentary analysis was used in determining stock market investment performances and economic growth in the Philippines (regarding Gross Domestic Product) from 2002 to 2016 based on the World Bank website reports. For responses in the study, the following scale and its corresponding verbal interpretations were used: 4.51 – 5.00 Very Much Aware (VMA), 3.51 – 4.50 Aware (A), 2.51 – 3.50 Moderately Aware (MA), 1.51 – 2.50 Less Aware (LA), 1.00 – 1.50 Not Aware (NA).

3. RESULTS AND DISCUSSION

Table 1: Level of Awareness of Respondents on Stock Market Investment

Stock Market Investment	Overall Mean	Verbal Interpretation
1. Listed companies	3.74	Aware
2. Process of investing	3.20	Moderately Aware
3. Return of investment	3.58	Aware
Composite Mean	**3.51**	**Aware**

As presented in Table 1, the composite mean of 3.51 signifies that the respondents are aware of stock market investment which are the listed companies trading at the Philippine Stock Exchange and the possible return of investments. However, the respondents are just moderately aware of the process of investing.

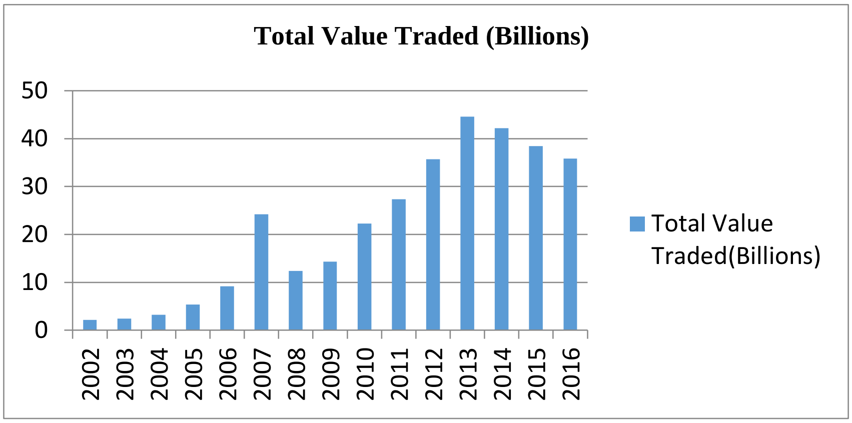

Fig 2. Stock Market Investment Performance in the Philippines (Total Value of Stocks Traded) (World Bank, 2017)

As shown in Figure 2, years from 2002 to 2007 had been the as steady progress of increase of the value of traded stocks. The sudden decrease in 2008 can be largely attributed to the stock market crash which caused a financial crisis that influenced the activities more so in the financial sector throughout the world that affects the decisions of the local investors. Due to persistent efforts of the government and countries worldwide to alleviate the situation and the government consistently doing its best to solve the wide array of problems in our country, the Philippines slowly recovered from the financial crisis that gains back the trust of the investors—both local and foreign. There has been an abundant supply of oil to which causes the prices to fall rock-bottom in 2014 and a slight decrease in the value of traded stocks has been felt again that in turn affected numerous inventors especially those in the oil industry. The situation is alleviated in 2016 due to consistent world-wide and government efforts though still recovering from the crisis in 2015.

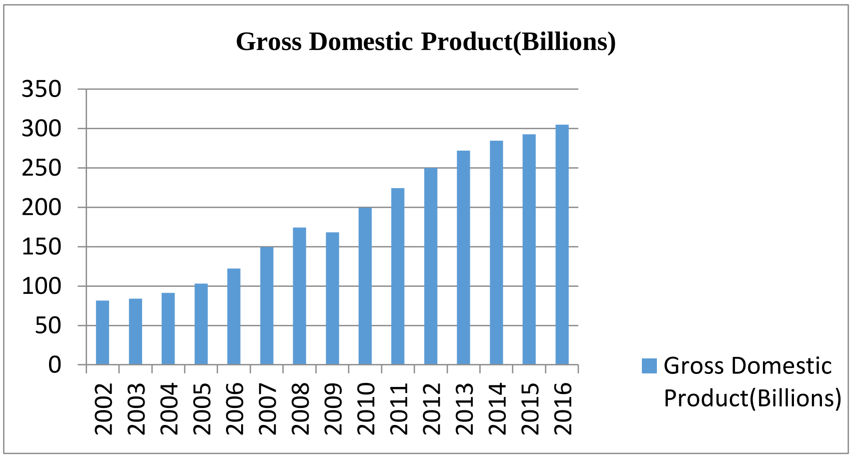

Fig 3. Economic Growth Performance (Gross Domestic Product) of the Philippines (World Bank, 2017).

The economic growth performance (based on the Gross Domestic Product) of the Philippines from the year 2002-2008 increased from 81.36 billion (in 2002) to 174.20 billion (in 2008) as shown in Figure 3. Aside from the continuous increase in investments, the emergence of the Overseas Filipino Workers and the BPO sector contributed to the 114% improvement due to the contributions to economic growth. However, during the year 2009, the GDP decreased by -3% due to the Agriculture, Fishery, and Forestry Sector which of course suffered greatly from Typhoon *Ondoy* and *Pepeng*. The domestic economy could not also keep pace with the population growth in 2009. While on the expenditure side, the consumer spending slightly decreased. The year 2010 was again the start of the GDP increased by 19% from 168.34 billion to 199.59 billion driven by the still growing BPOs and Overseas Filipino Worker (OFW) remittances. Manufacturing rebounded astoundingly, supported by hefty contributions from trade and private services. The GDP growth rate is still continually increasing that considered the Philippines in as the fastest GDP growth in Asia. The main drivers of the economy are the manufacturing, real estate, and other business activities.

Table 4. Significant Relationship of Stock Market Investment Performance (Total Value of Stocks Traded) and Economic Growth Performance (GDP) of the Philippines from 2002 to 2016

Year	**The total value of Stocks Traded (Y)**	**GDP (X)**	**XY**	**X^2**	**Y^2**
2002	2.14	81.36	174.1104	6619.4496	4.5796
2003	2.45	83.91	205.5795	7040.8881	6.0025
2004	3.23	91.37	295.1251	8348.4769	10.4329
2005	5.35	103.07	551.4245	10623.4249	28.6225
2006	9.16	122.21	1119.4436	14935.2841	83.9056
2007	24.24	149.36	3620.4864	22308.4096	587.5776
2008	12.37	174.2	2154.854	30345.64	153.0169
2009	14.32	168.34	2410.6288	28338.3556	205.0624
2010	22.25	199.59	4440.8775	39836.1681	495.0625
2011	27.37	224.14	6134.7118	50238.7396	749.1169
2012	35.68	250.09	8923.2112	62545.0081	1273.0624
2013	44.59	271.84	12121.3456	73896.9856	1988.2681
2014	42.21	284.59	12012.5439	80991.4681	1781.6841
2015	38.42	292.77	11248.2234	85714.2729	1476.0964
2016	35.85	304.91	10931.0235	92970.1081	1285.2225
	319.63	2801.75	76343.5892	614752.679	10127.7129

$$R=\frac{15(76{,}343.5892)-(2801.75)(319.63)}{\sqrt{[15(614{,}752.679)-(2801.75)^2][15(10{,}127.7129)-(319.63)^2]}} \qquad R^2=0.91$$

$R^2 = \sqrt{R}\sqrt{0.91} = 0.95$ Very High Positive Correlation

Based on the computed value, the result (R^2=0.91) is under a very high positive correlation. Therefore, the total value of stocks traded which is a stock market performance has a significant relationship to the economic growth of the Philippines.

4. CONCLUSION

The respondents are aware of the stock market investments (traded stocks at the Philippine Stocks Exchange) and the possible return of the investment but moderately aware of the process of investing. The stock market investment performance (total value of stocks traded) of the Philippines continuously rose from 2002 to 2007, but a sudden decrease in 2008 is discerned due to the financial crisis—the recession crisis in the United States and the slow recovery on the following years. The economic growth performance (GDP) of the Philippines continuously grow from 2002 up to the present that in 2016, Philippines was considered fastest in terms GDP growth in Asia because of the continuous growth of local investments (manufacturing), Overseas Filipino Workers (OFW), remittances, and the growth of Business Process Outsourcing (BPO). There is a significant relationship between the stock market investment performance and the economic growth performance in the Philippines. The level of awareness of Filipinos on stock market investments is only one factor that affects the stock market performance that contributes to economic growth.

It is recommended that the government should encourage Filipinos to look more into the benefits of a strong economy to cultivate a strong market industry. Having a progressive development of the stock market will, in turn, make the Philippine economy stronger and produce new industries, jobs, and price stability which will benefit the entire country. A slight awareness as a start will suffice as everything starts from a point. The goal is to cultivate awareness to the people even a fragment of awareness will serve as a seed to raise further awareness through financial literacy people will be aware to the relationship between stock market and economic growth and from this point will expand into various innovations and advocacies.

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