Research Paper

A Statistical Analysis of the GDP and PCI of Bangladesh for the Coming Years

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Abstract

The objective of this paper is to anticipate Bangladesh's economic future and predict its sustainability by examining the GDP and per capita income (PCI) figures. Since the nation's independence, statistics spanning 51 years have been analyzed to track its development, and data from the last 11 years have been used to forecast future trends. In this study, annual statistics from 1971 to 2022 were analyzed to forecast future years. The result manifests a slow but sustainable development in the country's growth with some fluctuations. Analyzing GDP and PCI insights into the country's continuous growth and development. Sustainable development encompasses not only economic development but also the balancing of economic, social, and environmental factors to ensure that development is sustainable in the long run and benefits everyone. The results illustrate a surprising picture of the future. The information is sourced from the World Bank, OECD, and Asian Development Bank's National Account Data. The Least Squares Method and the Trend Projection Method, variants of the linear regression technique, are used in the current study to evaluate data and predict future trends. According to the IMF, the globe will experience a severe recession-like situation in 2023. To anticipate Bangladesh's economic status, this study utilizes GDP and PCI. GDP has expanded on average at a rate of 4.4% since 1971, whereas PCI has grown at an average rate of 1.8%.

Keywords *GDP; Income; Growth; Economy; Policy*

INTRODUCTION

East Pakistan split from the union in 1971 and formed the People's Republic of Bangladesh, alongside (West) Pakistan. The country, which occupies 143,998 square kilometers, is situated on the abundant plains of the Ganges River Delta. Approximately 90% of its people are Muslims, and approximately 98 percent of them speak Bangla. By supplying the necessary labor force for economic expansion, a sizable portion of Bangladesh's unique and hardworking population aids Bangladesh. At the time of its independence in 1971, Bangladesh's GDP and PCI growth were negative at -5.47 and -7.3, but starting in 1976, they were positive at 5.66 and 3.3, respectively. It has advanced despite variations in growth rates. From 1973 to 2010, economic progress in terms of education. The GDP contribution from the population will be crucial for the next phase of economic growth. This hardworking populace merits happiness. The vibrant, dynamic, and fierce rivalry in the business sector was unable to obstruct the nation's progress.

Furthermore, improvements in GDP and PCI have had a positive impact on people's well-being and economic development. Policymakers can utilize data to design effective plans and policies that promote and sustain long-term economic development by using GDP as a measure of overall well-being. The COVID-19 pandemic had a significant impact on Bangladesh's average economic development. The expanding "new normal" throughout the development era allowed every nation to reestablish its economy. People's quality of life, which is used to measure and comprehend their degree of well-being, is determined by GDP per capita.

As a result, Bangladesh's government has worked to standardize the nation's economy. The country's efforts to restore normality and the effects of hazardous policies on economic normalcy are hotly debated topics. The effects of actions on the normalization of the economy will be reflected

in the nation's GDP and PCI. In order to give analytical importance, the current study clarifies Bangladesh's GDP as a result.

The Neoclassical Growth Theory, which explains how the interplay of labor, capital, and technology affects GDP growth rates, is most frequently defined by the Solow-Swan Growth Model. The value of agricultural, industrial, and territorial productivity is added to determine a nation's GDP. Because it evaluates the entire value of products and services generated inside a nation's physical borders over a year, GDP is a crucial indicator of economic performance. According to Marcus and Kane (2007), the gross domestic product (GDP) is an estimation based on routine survey data that takes into account a nation's manufacturing, spending, distribution, savings, and investment. The US Bureau of Economic Analysis states that GDP measures "how quickly the economy is growing, what the trend of consumer spending is, what percentage of the increase in production is due to inflation, and how much of the income produced is used for consumption rather than investment or savings" (McCalla & Smith, 2007).

GDP trend analysis can anticipate the country's economic future; as a result, the government may establish policies, programs, and strategies to sustain financial development on the one hand while driving economic growth to the next level of success on the other. Another indicator of a country's progress is the PCI. The average income is calculated by dividing GDP by the whole population. PCI determines life quality. People's welfare policies, initiatives, and strategies were created and implemented. The need for statistical analysis of these estimates grows since the IMF and World Bank predict that the world economy will stagnate in 2023.

The available research on Bangladesh's GDP and PCI is limited and dated. Bangladesh's GDP and PCI numbers were released by international organizations in charge of tracking economic development. However, there has been no statistical analysis of Bangladesh's GDP and PCI's potential future growth. Investigated is the upward trend in Bangladesh's GDP and PCI. An exploratory research with the working title "A Statistical Prediction of Bangladesh's GDP and PCI for the Future Years" is then presented.

The IMF has forecast that 2023 will be a challenging year for the world, as it reduces its growth forecast and anticipates economic difficulties in developing nations. The IMF claims the "worst is yet to come." With the projected global growth rate for 2023 being lowered, more than three-quarters of the world's nations might see a downturn. The entire globe is in turmoil. Events in the fields of economics, geopolitics, and the environment all affect the global perspective. Bangladesh's PCI in 2007 was half that of India's. India has finally been cleared. Bangladesh's GDP will increase at a projected pace of 6.6% annually, according to the Asian Development Bank. The COVID-19 pandemic had a significant impact on the economy; however, GDP growth in the fiscal year 2020–21 was 6.93%, compared to 3.44% in the fiscal year 2019–20. The current inquiry examines assertions made by the Asian Development Bank and the IMF regarding the PCI and GDP growth of Bangladesh. As a consequence, this study statistically analyzes and forecasts the pattern of GDP and PCI growth in Bangladesh, using data from the World Bank and the OECD's National Accounts.

LITERATURE REVIEW

To illustrate Bangladesh's comparable economic situation, this study examines the trends in the nation's increasing GDP and PCI. There has been limited research on Bangladesh's GDP and PCI that has examined the factors affecting and impacting the growth of these two metrics. However, there aren't many studies that focus on GDP and PCI to show Bangladesh's development and growth. Additionally, for several reasons, foreign organizations have acquired and assessed data on Bangladesh's GDP and PCI. Ale et al. (2018) analyze the effect of remittances on economic growth and find a substantial bidirectional association with two-way directional causation between

remittances and economic growth. According to Roy (1991), exports help to raise Bangladesh's GDP. Lall (2002) completely agrees with my appraisal of the export market's competitiveness. Following that, examined the GDP growth trend for Bangladesh over a certain time frame.

In this regard, the study updates the trend and examines Bangladesh's potential position in the future to strengthen its economic links with the rest of the world. The effect of exports on economic growth was studied by Begum and Shamsuddin in 1998. Although exports add to GDP, other factors and industries that also affect GDP and PCI were ignored. As a result, a comparison of economic position is necessary. According to Fotopoulos and Louri (2004), local industry growth encourages FDI, which is a sign of an economy's prosperity. In line with this, Faruk (2013) focuses his research on how foreign direct investment affects Bangladesh's economic growth. This study utilized FDI as a lens through which to examine certain economic challenges. FDI cannot determine GDP on its own.

The VAR Model for economic growth was highlighted in Rahman's (2014) empirical study on inflation. The most important element influencing Bangladesh's economy is education. Used secondary data to research the factors affecting Bangladesh's GDP. They learned that pricing, inflation, savings, the labor market, and FDI impacted Bangladesh's GDP. Hassan and Shakur (2017) examined the nonlinear effects of remittances on Bangladesh's GDP and PCI. However, they should also consider the GDP and PCI growth rates in their analysis. The lack of the GDP and PCI components in Ali et al.'s (2016) research constrained the expansion of the economy and human capital.

According to Ali et al. (2015), a relationship exists between population growth and economic development, but not between GDP and PCI. Zaidan (1969) and Srinivasan (1987) both supported this. According to Kentor (2000), the effects of globalization on income inequality, population growth, and economic development are long-lasting. It is important to accept that globalization is to blame for the current GDP and PCI growth rates. To predict Bangladesh's GDP from 1960 to 2017, Miah and colleagues (2019) created a model. To 2022, the continuing investigation has been postponed. Bhuiyan et al. (2020) devised methods to seize business opportunities to achieve the goal of developing the nation. The components that affect Bangladesh's GDP were the main focus of this study. The effect of imports, inflation, and trade on Bangladesh's GDP. Inflation had a substantial positive association with GDP, whereas imports had a significant negative relationship with GDP. Exports had a positive relationship with GDP, although it was not statistically significant.

Kaur's research (2021) used World Bank data spanning the years 1986 to 2019. According to this analysis, exports, foreign direct investment, and gross capital formation all have a big impact on Bangladesh's GDP. Not to mention, Hasan et al. (2021) asserted in their study that a nation's GDP is an excellent indicator of its economic health. The economy of Bangladesh is expected to develop at the sixth-fastest rate in the world by 2019. While this is happening, Bangladesh's development has fallen below projections. The current study, on the other hand, tries to comprehend Bangladesh's economic trajectory.

RESEARCH METHOD

In light of the current circumstances, every country is making a great effort to accelerate economic development. To encourage quick economic growth, they have undertaken a number of monetary, fiscal, and physical policies. According to the Economic Freedom Index 2022, Bangladesh's economy is ranked 137th overall, with a score of 52.7. Bangladesh placed 29th out of 39 nations, despite having a lower overall score than the averages for the Asia-Pacific and the world. Its GDP rose by 6.93% in the fiscal year 2020–21. According to the preliminary BBS estimate for FY 2021–22, the per capita GDP increased to $2,723, and the per capita national income rose to $2,824, respectively, from $2,462 and $2,591 in FY 2020–21. According to projections for moderate GDP

growth, the economy is expected to increase at a rate of 7.5% in fiscal years 2022–2023, 7.8% in fiscal years 2023–2024, and 8% in fiscal years 2024–2025. This research investigates Bangladesh's possible economic position as a result. The following goals were set to provide context for the study based on recent data and a review of the literature:
1. To analyze the GDP and PCI growth rates of Bangladesh since 1971; and
2. To forecast the GDP and PCI growth rates of Bangladesh in the future.

The purpose of this study is to forecast Bangladesh's GDP growth rate and PCI trends going forward. In this study, the growth rates of Bangladesh's GDP and PCI over the preceding 51 years are examined. The current study employs both the Least Squares approach and the Trend Projection Method, a variation of the linear regression methodology, to analyze data and forecast future trends. An accurate representation of the anticipated outcome may be obtained by drawing a straight line across statistical data points using the "Trend Projection Method," a linear regression technique.

Trend Projection Method

It is a traditional business prediction style that considers how factors change over time. This strategy requires a large number of data points and the presumption that the same variables will impact future patterns as past patterns. The statistical equations also establish the slope of the trend line (b) and the point (a) where it crosses the y-axis. As a result, the equation for a straight line is as follows:

Y = a + Bx

Where X reflects the figures on the horizontal axis (time) and Y indicates the figures on the vertical axis (GDP and PCI).

Least Square Method

The "Fitting Trend Equation or Least Square Method" is used to compute the trend of GDP and PCI by using statistical data to fit the trend line in the time series. A variety of trends may be seen when the data is plotted. Trend equations most frequently take the following forms:
Trend Equation: Y = a + bx

Whereas Y = GDP and PCI, X= years, and a and b are constant.

Normal Equation

$\sum y = na + b\sum x$
$\sum xy = a\sum x + b\sum x^2$

Updated versions of these equations will reveal the value of a and b that best capture the pattern over time. The results of replacing the equations for GDP and PCI are a = 6.73 and b = 0.096, whereas the results for GDP are a = 5.29 and b = 0.22. The growth pattern will become apparent when it is multiplied by the number of ensuing years.

FINDINGS AND DISCUSSION
Growth of the GDP of Bangladesh since 1971

GDP is a measure of economic growth. Table 1 shows the reported GDP growth rate of Bangladesh based on World Bank National Accounts Data and OECD National Accounts Data.
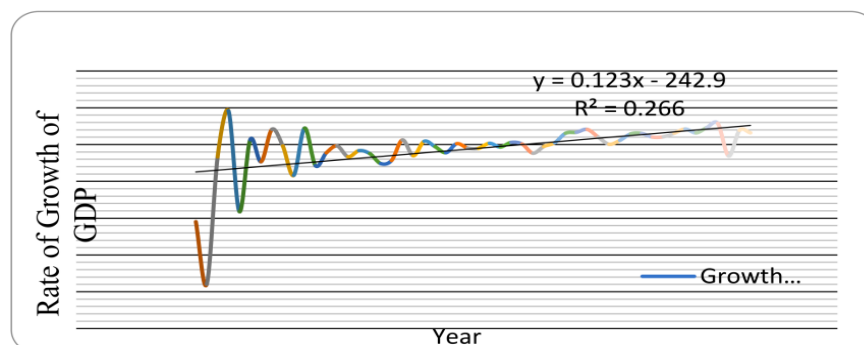
Table 1. Growth of GDP of Bangladesh

Year	Growth of GDP in %	Year	Growth of GDP in %
1971	-5.479483027	1997	4.489896497
1972	-13.9737287	1998	5.177026873
1973	3.325680199	1999	4.670156368
1974	9.5919563	2000	5.293294718
1975	-4.088214092	2001	5.077287776
1976	5.661361201	2002	3.83312394
1977	2.67305605	2003	4.739567399
1978	7.073837733	2004	5.23953291
1979	4.801634601	2005	6.535944941
1980	0.819141869	2006	6.671904981
1981	7.233943695	2007	7.058599357
1982	2.134327836	2008	6.013789759
1983	3.8810464	2009	5.045124794
1984	4.803310015	2010	5.571788188
1985	3.342014654	2011	6.464379123
1986	4.173382559	2012	6.521458781
1987	3.772401853	2013	6.013605658
1988	2.416256856	2014	6.061059359
1989	2.836582129	2015	6.552639879
1990	5.622258162	2016	7.113478213
1991	3.485227815	2017	6.590249998
1992	5.442685551	2018	7.31941263
1993	4.711561724	2019	7.881915151
1994	3.890126441	2020	3.448021455
1995	5.121277897	2021	6.938675089
1996	4.522919218	2022	6.60[1]

Source: World Bank National Accounts Data and OECD National Accounts Data, [1] Asian Development Bank

Since 1971, Bangladesh's GDP has grown at a constant pace, as seen in Table 1. Between 1971 and 1980, the average annual GDP growth rate was 1.04%. This was followed by 4.02% between 1981 and 1990, 4.68% between 1991 and 2000, 5.5% between 2001 and 2010, and 6.4% between 2011 and 2022. A 4.4% yearly growth rate has been the norm for the GDP since 1971. As seen visually in Figure 1, Bangladesh's GDP growth has been moderate and steady. During and after the country's independence, it is noticeable that the GDP growth was negative. In 1975, we can also mark the negative growth. 1975 was a year of political instability in Bangladesh. As a result, the downward growth occurred that year. In 1972, a huge negative impact took place on the GDP of Bangladesh. It was around -8.5% growth. However, in 1973, a huge change occurred in the economy of Bangladesh. Bangladesh experienced a GDP growth rate of almost 10.65% that year. 1973 was one of the best years of growth in Bangladesh. The second-best year was 1981. This year, the economy grew by almost 6.41%. The other yearly growth of Bangladesh's economy has mostly been on a regular basis. Within these 50 years of independence, only two or three fiscal years are mentionable that the country saw remarkable growth in its economy. In the first two decades, although Bangladesh's economy experienced very low growth, it exhibited a steady and regular upward movement in its growth curve. After 1990, Bangladesh experienced satisfactory growth in its GDP, as political instability, with regular but unpredictable military movements, had been a persistent issue until then. From the beginning of the 1990s, democracy was in power in the country, and the upward movement of the growth curve areas noticeable without significant fluctuations. From the 1990s to 2022, Bangladesh enjoyed a regular growth in its GDP with a few

unpredictably downward movements of the GDP curve.

Figure 1. Growth of GDP of Bangladesh in % from 1971 to 2022

Figure 1 shows the GDP growth track for Bangladesh starting in 1971. The curvature shifts as one climbs higher. This shows that the country's GDP has grown every year. The nation's population's well-being and level of living have mirrored this. Therefore, it is clear that since 1971, GDP has raised the standard of living for Bangladeshis. The linear GDP trend curve, which has an R2 of 0.266, supports this.
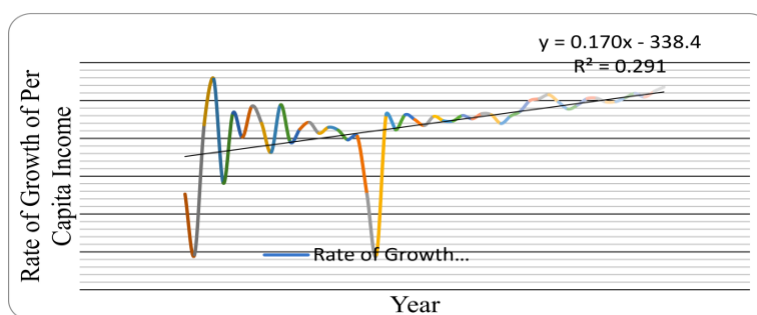
Table 2. Growth of PCI in Bangladesh

Year	Growth of PCI in %	Year	Growth of PCI in %
1971	-7.353329683	1997	2.901244279
1972	-15.38637938	1998	2.319635126
1973	1.779962568	1999	2.306676748
1974	7.830823937	2000	3.014682995
1975	-5.900720627	2001	2.574208258
1976	3.322472596	2002	3.257496507
1977	0.141704802	2003	3.113805997
1978	4.254809751	2004	1.960394887
1979	1.991289832	2005	2.941850091
1980	-1.8525797	2006	3.55335866
1981	4.443156185	2007	4.965840614
1982	-0.499724165	2008	5.24454106
1983	1.215529046	2009	5.753407226
1984	2.107809332	2010	4.806176198
1985	0.669033044	2011	3.878500674
1986	0.669033044	2012	4.390962886
1987	1.078532439	2013	5.253547153
1988	-0.207289569	2014	5.29926033
1989	0.274084213	2015	4.79519609
1990	-7.353329683	2016	4.85575647
1991	-15.38637938	2017	5.366866159
1992	3.086982001	2018	5.946678284
1993	1.106647184	2019	5.449977297
1994	3.11421545	2020	6.194662592
1995	2.465582465	2021	6.777292217
1996	1.690416545	2022	N/A

Source: World Bank National Accounts Data and OECD National Accounts Data

Growth of PCI of Bangladesh since 1971

PCI is another indicator of a country's economic development and level of living. Using data from the OECD and the World Bank's National Accounts, Table 2 displays the PCI growth rate for Bangladesh.

Bangladesh's PCI growth rate from 1971 is seen in Table 2. The average annual growth rate of PCI was -1.11% between 1971 and 1980, 0.31% between 1981 and 1990, 0.31% between 1991 and 2000, 0.31% between 2001 and 2010, and 5.29% between 2011 and 2021. PCI has grown by an average of 1.8% per year since 1971. The rise in PCI has been modest, as graphically depicted in Figure 2. Compared to Bangladesh's GDP, the nation's PCI has experienced more fluctuation over the last 50 years. It also witnessed more negative growth during the years of political instability. From 1971 to 1991, the country experienced eight consecutive years of negative growth in PCI. Each year of downward income is marked by military intervention in the history of the country's politics. After 1991, no military intervention happened in the country's politics, and the nation experienced a steady, though slower, growth in living standards and income. In the year 2021, the country had a PCI of 6.78%. Compared to the beginning of 1971, the country's PCI increased by 14.13% within 50 years. When this paper was written, the PCI of 2022 was not available in the source. This is the reason the writer could not add the information for that year.

Figure 2. Rate of Growth of PCI of Bangladesh in % from 1971 to 2022

Figure 2 shows the trend of PCI increase from 1971. As the curvature ascends, it alters. This indicates that the nation's PCI has increased consistently throughout time. The quality of life and well-being of the population of the country have reflected this. Therefore, it is evident that since 1971, PCI has positively impacted the lives of Bangladeshis. The tendency of the linear curve, which has an R^2 of 0.291, supports this.

Forecasted Trend of Growth of GDP of Bangladesh

The current study used data covering 11 years beginning in 2011 to estimate Bangladesh's GDP growth trend in the future. Data for 2020 was omitted due to the unique economic circumstances that were revealed. The trend projection approach was used to examine the data. Table 3 displays the results of the analysis.

Table 3. Trend line for the growth rate of GDP of Bangladesh

Year x	Growth of GDP in % Y	X	X²	XY	Trend Line Y=6.73+(0.096 x X)
2011	6.46	-5	25	-32.3	6.15
2012	6.52	-4	16	-26.08	6.246

Year x	Growth of GDP in % Y	X	X²	XY	Trend Line Y=6.73+(0.096 x X)
2013	6.01	-3	9	-18.03	6.342
2014	6.06	-2	4	-12.12	6.438
2015	6.55	-1	1	-6.55	6.534
2016	7.11	0	0	0	6.63
2017	6.59	1	1	6.59	6.726
2018	7.31	2	4	14.62	6.822
2019	7.88	3	9	23.64	6.918
2021	6.93	4	16	27.72	7.014
2022	6.61	5	25	33.05	7.11
N=11	∑Y = 74.03		∑X²=110	∑XY=10.54	
2023		6	36		7.206
2024		7	49		7.302
2025		8	64		7.398
2026		9	81		7.494
2027		10	100		7.59
2028		11	121		7.686
2029		12	144		7.782
2030		13	169		7.878
2031		14	196		7.974
2032		15	225		8.07

Bangladesh's GDP growth has consistently met expectations. A very small fraction fluctuated; however, the real-life results were very close to the calculated expectation. To exemplify, the real-life GDP in 2011 was 6.46% while the expectation was 6.15%. The difference between the calculation and reality is 0.31%, which is not a significant issue, as expectations can never be entirely accurate in the economy. Another example is that in 2022, the GDP growth rate was 6.61%, but the Trend Line was 7.11%. This year, the difference between real-life scenarios and expectations was 0.5%. Therefore, if this trend continues without any economic barriers or hindrances, Bangladesh's economic growth in 2032 will be approximately 8.07%.

The trend of Growth of GDP = Y = a + bX
Where,
a = ∑Y/N
b = ∑XY/∑X2
a = ∑Y/N = 74.03/11 = 6.73
b = ∑XY/∑X2 = 10.54/110 = 0.096

A trend line for GDP growth is produced when the values of a and b are modified. The pattern analysis has been extended by an additional 10 years, to 2032. The trend line indicates that GDP will increase at a rate of 7% or more in the future years.

Forecasted Trend of Growth of PCI in Bangladesh
In the current study, the PCI for Bangladesh was predicted using 11 years of data dating back to 2011. With the help of the trend projection approach, the data were evaluated. Table 4 displays the results of the analysis.

Table 4. Trend line for the growth rate of PCI of Bangladesh

Year x	Rate of Growth Per capita income in %	X	X^2	XY	Trend Line Y=5.29+(0.22 x X)
2011	3.88	-5	25	-19.393	4.19
2012	4.39	-4	16	-17.564	4.41
2013	5.25	-3	9	-15.761	4.63
2014	5.30	-2	4	-10.599	4.85
2015	4.80	-1	1	-4.795	5.07
2016	4.90	0	0	0	5.29
2017	5.37	1	1	5.367	5.51
2018	5.95	2	4	11.893	5.73
2019	5.45	3	9	16.349	5.95
2020	6.20	4	16	24.779	6.17
2021	6.78	5	25	33.886	6.39
N = 11	∑Y = 58.20		∑X2 =110	XY=24.16	
2022		6	36		6.61
2023		7	49		6.83
2024		8	64		7.05
2025		9	81		7.27
2026		10	100		7.49
2027		11	121		7.71
2028		12	144		7.93
2029		13	169		8.15
2030		14	196		8.37
2031		15	225		8.59
2032		16	256		8.81

PCI of Bangladesh in 2011 was 3.88, whereas the trend line was 4.19%. The difference between the calculation and the real-life achievement was 0.31% less. In 2021, the difference was 0.39% more. So, it is noticeable that the calculation always remains close to the real achievement. Depending on the trend projection method, it can be forecasted that in 2032, the PCI of Bangladesh will be approximately 8.81%.
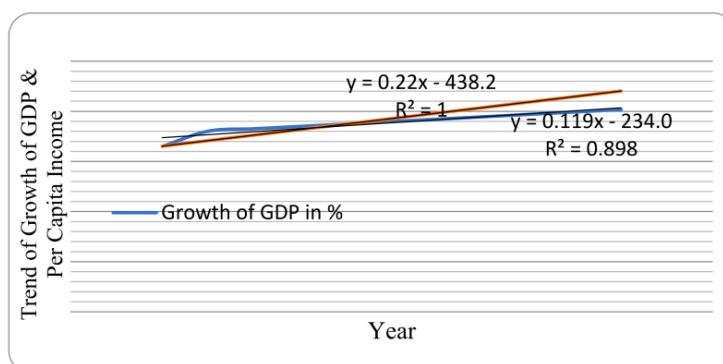
The trend of Growth of PCI = Y = a + bX

Where

$a = \sum Y/N$

$b = \sum XY/\sum X2$

$a = \sum Y/N = 58.20/11 = 5.29$

$b = \sum XY/\sum X2 = 24.16/110 = 0.22$

A line graph showing the PCI increase is shown when the values of a and b are altered. Ten additional years, up to 2032, have been included in the trend research. The trend line suggests that PCI will rise at or above 7% during the coming years, as seen graphically in Figure 3.

Figure 3. Trend of Growth of GDP and PCI

Figure 3 displays the GDP trend curve (red) and the PCI curve (blue). In this circumstance, R^2 is nearly one. As a result, statistics indicate that Bangladesh's GDP and PCI may expand at a pace of 7% or higher in the future. This conclusion can be drawn from the statistics because in the past, from 2011 to 2021, the trend line was always around the expected line. So, the future achievement will not make a great difference.

Discussion

Between 1971 and 1980, the average annual growth rate of GDP was 1.04%. This was followed by 4.02% between 1981 and 1990, 4.68% between 1991 and 2000, 5.5% between 2001 and 2010, and 6.4% between 2011 and 2012. The PCI increased at an average rate of -1.11% from 1971 to 1980, 0.31% from 1981 to 1990, 0.66% from 1991 to 2000, 3.81% from 2001 to 2010, and 5.29% from 2011 to 21; nevertheless, the GDP increased at an average rate of 4.4% over that same period. Since 1971, PCI has expanded at an average annual rate of 1.8%. It is expected that by 2032, Bangladesh will become the 24th largest economy in the world, according to the World Economic League Table (WELT) of 2023.

Immediately after the independence of Bangladesh, the nation witnessed a very low or, sometimes, negative growth rate in GDP and PCI. The ups and downs are noticeable. The question may arise as to why this huge fluctuation occurred in the history of GDP and PCI of Bangladesh. The answer is crystal clear. After the nation's independence, it needed to rely on the aid of other countries and organizations. The production was halted due to the war, exports did not occur, and remittances were not sent from abroad. The whole economy was stagnant.

Additionally, from 1971 to 1991, the people of Bangladesh saw the political vulnerability and unpredictability of military coups. For all of these reasons, the FDI was not possible. For those vulnerabilities, instabilities, and unpredictabilities in politics, development did not occur in the first two decades. After the last coup d'etat in 1991, when democratic political parties began to control

parliamentary power, national economic growth began to rise.

According to a trend study, Bangladesh's PCI and GDP will both grow at a rate of 7% every year. Within a few years, the PCI growth rate may surpass the GDP growth rate. Kaur (2021) attributes Bangladesh's GDP growth to the expansion of gross capital formation, exports, and foreign direct investment. Exports, foreign direct investment, and gross capital creation all rise as a result of the boom. Imports, exports, and inflation all contribute to the expansion of Bangladesh's economy. Hasan et al. (2021) predict that Bangladesh's GDP will increase during the coming years. Even in the present inquiry, it was considered trustworthy. The use of GDP to gauge an economy's size and performance is crucial, as it provides a comprehensive measure of these dimensions. Correct GDP growth is generally encouraging. Bangladesh's fiscal situation is reflected in the rise of real GDP. The Asian Development Bank's projection turned out to be exact and flawless. Bangladesh's government must take steps to protect the economy, as the IMF has issued a warning to all nations about a potential disaster in 2023. If the whole workforce is employed together with the proper governmental initiatives, the expected recession in 2023 may be less resilient. The nation's economy will be stable.

When development benefits everyone, especially marginalized and vulnerable groups of people, it is defined as sustainable development. Different demographics in society are enjoying the benefits of social changes and facing the challenges together to overcome them. All those endeavors are helping to increase the nation's reserves and economic growth. According to the World Bank, Bangladesh is one of the countries listed to have graduated from the least developed to a developing country. The slow but steady growth in GDP and PCI made it possible for Bangladesh to create a sustainable impact on the lives of people, and the nation is dreaming of a better future. One of the main conditions of sustainable development is economic diversification. Since 1971, this diversification has happened thoroughly. The average growth rate of GDP is 4.4%, which is substantial.

CONCLUSIONS

Sustainable development depends on several key variables, including inclusive growth, environmental sustainability, social development, and economic diversification, among others. Every country aims to have wise economic policies that bring about sustainable stability and prosperity in the economy. This viewpoint holds that statistics are a gift from a nation that can employ statistical analysis to forecast the direction of economic development and enforce sustainable policies. Bangladesh is often considered a developing country; however, the study reveals that its economy is robust, indicating sustainable growth and improved human well-being. Any resilience, such as that experienced during the COVID-19 epidemic, may soon impede economic progress, but strong policies with feasibility can keep the nation standing strong. To sustain growth, the Bangladeshi government must prioritize expanding both natural and human resources while controlling inflation.

LIMITATIONS & FURTHER RESEARCH

In the current study, just two parameters, GDP and PCI, were used as indicators of economic development. The GDP growth rate for 2020 has been excluded from the analysis due to the impact of COVID-19 on the country's economic status. Nevertheless, it is present in PCI. Additionally, the study only looked at the most recent 11 years of data to predict the trend.

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