

The Impact of Economic Growth of Middle-Income on Individuals Investment and Wealth Creation in Ghana



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ABSTRACT: The fundamental objective of economic growth is to have a lasting, positive, and self-sustaining impact on a nation's people. The primary aim of economic growth is to establish a long-lasting, positive, and self-sustaining impact on a nation's populace. When a government contemplates implementing a financial program, it is crucial to prioritize the welfare of its citizens. This study delves into how Ghana's economic growth has affected individual investment and wealth creation. The research is exploratory and employs a mixed-methods approach to empirically investigate the association between Economic Growth and the Middle Income of Individuals in Ghana.

To assess the relationship between Economic Growth variables and the Middle Income of Individual Ghanaians, statistical analysis of content analysis of findings was employed using a quantitative research approach. Primary data was collected through semi-structured interviews and follow-up interviews in select districts of Ghana. Additionally, the researcher employed a longitudinal study approach, gathering data on 25 years of macroeconomic variables in Ghana from 1990 to 2015 from the World Bank database. The data was analyzed using statistical packages such as SPSS, MINITAB, and others. The analysis was based on the findings obtained from descriptive statistics and panel regression such as analysis of variance (ANOVA), chi-square, F-test, t-test, cointegration test, and other relevant statistical tests. The results showed that many Ghanaians invested some level of their income into various financial products, creating wealth among individual Ghanaians.

KEYWORDS: Foreign Domestic Investment, Gross Domestic Product, Lower Middle Income, Per Capita Income, Economic Growth, Wealth Creation.

INTRODUCTION

1.1 Background of the Study

A nation's economic growth significantly impacts its population in terms of wealth generation. The development of a nation's economy profoundly affects several aspects of its population, including the generation of wealth, investment opportunities, and financial stability. Ghana, a middle-income country, has experienced a considerable impact on its citizens' ability to accumulate wealth and invest as a result of its economic growth. Since 1998, real GDP growth in Ghana has transitioned from a downward trend to an upward one, indicating a path to recovery. In 2001, Ghana experienced an economic revival, primarily due to a surge in agricultural production and improved macroeconomic management practices by the previous administration. This uptick in the economy also resulted in significant improvements in public finances, underscoring the country's progress in economic management. As such, Ghana has established a consistent pattern of economic growth rising from a lower income level to middle-income status on July 1, 2011.

The World Bank (World Bank, 2012) estimates that the country currently has an average per capita income. According to the World Bank's 2012 report, Ghana's average per capita income ranges from US\$1,006 to US\$3,975. The International Monetary Fund's 2014 report indicates that Ghana's economic growth rate has consistently exceeded that of the sub-Saharan African region, making it a success story on the continent. It's worth noting that a country's economic success can also be measured by factors such as democratic governance, macroeconomic management, anti-corruption efforts, and peaceful economic expansion in those nations. For instance, a study by Gockel (2018) found that the expansion of individual incomes and wealth in Ghana was positively correlated with the country's economic growth. This was demonstrated by both an increase in the average household income in Ghana and a rise in the proportion of people who could save and invest money. According to Agyei-Mensah and Boakye-Yiadom (2019), Ghana's

The Impact of Economic Growth of Middle-Income on Individuals Investment and Wealth Creation in Ghana.

economic growth has had a favourable impact on wealth accumulation among its citizens. The report suggests that the economy's expansion has increased the number of people with access to resources.

1.3 Objective of the Study

The study aims to explore the correlation between Ghana's middle-income status and the capacity of Ghanaian individuals to create wealth through investments. This research could contribute to the existing literature on the impact of economic growth on individual financial well-being and provide insights into the factors that influence investment decisions in developing countries.

1.4 Hypothesis

To respond to and address the research question, the researcher tried to develop the following null and alternative hypotheses to provide quantitative benchmarks and data points for further consideration within the qualitative analysis of the subject matter.

1.4.1 Research Hypothesis Statement 1

H₀: There is no statistically significant relationship between Lower Middle-Income status and individual investment in Ghana.

H_A: There is a statistically significant relationship between Lower Middle-Income status and Individual Investment in Ghana.

1.4.2 Research Hypothesis Statement 2

H₀: No statistically significant relationship exists between Lower Middle-Income status and Individual Wealth Creation in Ghana.

H_A: There is a statistically significant relationship between Lower Middle-Income status and Individual Wealth Creation in Ghana.

2.0 LITERATURE REVIEW

The main goal of this literature review is to examine the connection between economic growth, wealth creation, and investment in middle-income countries. To achieve this, a thorough analysis of both theoretical and empirical data from different sources will be conducted. The theoretical aspect will concentrate on how economic growth affects investment decisions and the return on investment. Meanwhile, the empirical research will mostly focus on middle-income nations, allowing for a comparison of various economic systems and developmental stages. Additionally, the review will explore how economic expansion influences the process of wealth creation, emphasizing the role of investment.

Economic Growth, Middle –Income and Development

Economic growth and development are two fundamental concepts that are often used interchangeably but have distinct meanings. While economic growth refers to the increase in a country's economic output, such as its Gross Domestic Product (GDP), over a specific period, economic development is a measure of a country's total growth and is gauged by evaluating the quality of life of its citizens, including access to basic necessities such as food, shelter, medical care, and education.

To ensure economic progress, it is crucial to align the degree and type of economic growth with development, which is characterised by a rising middle class. Middle-income nations, often recognised as emerging markets marked by rapid economic growth, typically have per capita incomes ranging from \$1,026 to \$12,475. An expanding middle class, an increase in foreign direct investment, and a favourable business environment are some factors responsible for this growth.

However, economic expansion poses several challenges, particularly for middle-income nations, such as a lack of access to finance and financial services and limited access to quality healthcare, education, and other essential services. Furthermore, middle-income nations are often vulnerable to economic shocks, such as sudden declines in commodity prices, which can significantly impact their economic development.

It is important to note that economic development is crucial for creating new jobs, stimulating investment, and generating higher tax revenues, which can fund public services such as healthcare and education. However, economic progress cannot be achieved through economic growth alone. Focusing on other factors, such as infrastructure, technology, and human capital, is essential. Human capital, which refers to a country's population's knowledge, skills, and capacities, can be strengthened through investments in healthcare, education, and training. Physical structures such as roads, bridges, and ports are also crucial for economic development.

In conclusion, while economic growth and development are interrelated, they are distinct concepts that require different approaches to achieve. Therefore, it is essential to focus on economic growth and development, considering the challenges and opportunities presented by each aspect, to achieve sustainable economic progress.

2.2 Theoretical Background Literature

The rate of economic growth is a crucial factor in determining a nation's economic performance. It is typically quantified by measuring the increase in output, income, or employment. Over the years, economists have developed several theoretical models to explain this concept. This literature review offers a comprehensive analysis of various theoretical models of economic growth.

2.2.1 Classical and Neo-Classical Growth Model

There are two prominent theories that attempt to elucidate the process of economic growth and development, namely the classical and neo-classical theories of economic development. The classical hypothesis, which was formulated by early economists such as Adam Smith, postulates that economic growth is determined by population growth, technological advancement, and the division of

The Impact of Economic Growth of Middle-Income on Individuals Investment and Wealth Creation in Ghana.

labour - all of which contribute to the escalation of commodities and services produced. In contrast, the Neo-classical hypothesis, developed by later economists such as Alfred Marshall and John Maynard Keynes, argues that economic growth is the outcome of rising consumer, business, and government expenditure, accompanied by an increasing demand for goods and services. The neoclassical growth model significantly emphasizes the role that investments and savings play in driving economic growth.

2.2.2 Economic Growth on Investment

The field of economics is primarily concerned with the study of various aspects of economic growth and investment. One of the seminal contributions to this field is Robert Solow's neoclassical growth model, which was introduced in 1956. According to this model, economic growth is driven by capital accumulation and technological advancement. It underscores the importance of investments and savings as drivers of economic growth and suggests that technological advancement, which drives both capital accumulation and productivity increase, determines economic expansion.

Another important model that has contributed significantly to our understanding of economic growth is the endogenous growth model. Developed by Robert Lucas and Paul Romer in the late 1980s, this model argues that increasing returns to scale resulting from knowledge spillovers, human capital accumulation, and innovation are what propel economic growth. The endogenous growth model, therefore, emphasizes the role of knowledge and innovation in driving economic expansion and has important implications for policies that promote long-term growth and development.

Investment is widely recognized as a crucial component of economic growth. It is a driver of higher production of goods and services, which in turn leads to increased economic output. Investments can take various forms, such as investments in intangible assets like research and development, human capital as education and training, and physical capital like factories, tools, and equipment. The private sector, by investing in new technologies, creating job opportunities, and increasing incomes, plays a vital role in driving economic growth in both established and emerging nations. Government initiatives can also indirectly or directly increase the degree of economic output through their interaction with the private sector. Overall, investment is an essential mechanism for achieving sustainable economic development and prosperity.

Investment is widely recognized as a pivotal driver of economic development and progress, particularly in middle-income countries like Ghana, which possess ample resources and funding to support various initiatives. Nevertheless, there persists a degree of ambiguity surrounding the extent to which economic growth has contributed to the generation of personal wealth within the Ghanaian context. This warrants further investigation and analysis to enhance our understanding of the relationship between investment, economic growth, and personal wealth creation in Ghana.

2.2.3 Long-Run Drivers of Economic Growth and Investment

In the realm of macroeconomics, investment has been the subject of much fascination due to its pivotal role in predicting future economic prosperity. While investment decisions can be influenced by unpredictable factors that John Maynard Keynes famously referred to as "animal spirits," the macroeconomic factors that impact long-term investment choices are not completely obscure. These factors include growth rates, actual and shadow costs of capital, uncertainty, as well as nominal variables such as asset prices and money supply. These factors are closely related to conventional models of investment activity, as demonstrated by the work of economists such as Lucas and Prescott (1971), Dixit and Pindyck (1994), and Holmström and Tirole (1997). These scholars have shown that a comprehensive understanding of these macroeconomic factors is crucial for making informed investment decisions on a global scale. The development suggests that this information can be valuable when making well-informed investment decisions.

2. 3.0 Empirical Literature

2.3.1 It has been posited that the expansion of economies can have a positive impact on investment and wealth generation. Chakraborty and Maheshwari's (2017) research indicates that higher economic growth rates can lead to greater investment returns, an increase in investment opportunities, and ultimately, greater wealth creation. However, the empirical data derived from numerous middle-income countries presents conflicting results, thereby underscoring the need for further research in this domain.

The impact of economic growth on wealth creation and investment in middle-income nations has been the subject of extensive academic scrutiny. Acosta and Martinez-Zarzoso's 2015 research on the correlation between Latin American economic growth and investment revealed a favourable connection between the two variables. The study showed that higher economic growth rates were linked with better investment returns. Similarly, Bhattacharya et al.'s 2011 research on the relationship between economic growth and wealth creation in India found a positive correlation between these two variables. These empirical findings provide insight into the potential benefits of economic growth on investment and wealth generation in middle-income nations.

Recent academic research has examined the relationship between economic growth and its impact on wealth creation, investment, and inequality in various countries. For instance, a study conducted on the Indian economy found that while economic growth had a positive effect on wealth creation and investment, it also resulted in greater inequality (Chakraborty & Maheshwari, 2017). Similarly, a study focusing on the Chinese economy revealed that economic growth was associated with both an increase in investment opportunities and accompanying costs. Similarly, a study conducted on the South African economy observed that while economic expansion resulted in more investment opportunities, it also led to increased expenses, which could have significant implications for economic sustainability. These findings highlight the complex relationship between economic growth, investment, and inequality and underscore the need for policymakers to consider the broader societal impacts of economic policies and lower

The Impact of Economic Growth of Middle-Income on Individuals Investment and Wealth Creation in Ghana.

investment returns (Khan & Naidoo, 2016). The same study found that economic expansion hurt employment, potentially limiting wealth creation.

According to recent research on the Indonesian economy, there exists a positive relationship between economic expansion, investment returns, and opportunities. However, this same study highlights that such growth has also been accompanied by an increase in inequality (Santoso & Irwanto, 2017). In addition, the research suggests that economic growth may lead to higher investment expenses, which could potentially limit the overall wealth generation.

The empirical evidence arising from middle-income economies presents a complex picture regarding the relationship between economic growth and investment as well as wealth creation. It appears that economic expansion could have both favourable and unfavourable impacts on these two factors. On the one hand, economic growth could create greater opportunities for investment and higher returns, leading to an increase in wealth accumulation. However, on the other hand, economic expansion could also result in higher inequality and greater investment costs, thus limiting individuals' capacity to accumulate wealth. Therefore, policymakers must carefully evaluate the consequences of economic growth on investment and wealth creation while designing economic policies.

2.3.2 Channel of Investment and Wealth Generation

The scarcity of resources in specific regions has long been a critical concern for economists, primarily due to the potential alternative applications of such resources for economic growth. In this regard, this review primarily aims to explore the mechanisms that contribute to wealth generation through investment, including capital accumulation and technical development, and subsequently, investigate their impact on wealth creation.

In theory, investment and wealth growth can be facilitated successfully through capital accumulation and technological advancement. Reinvesting capital and profits into enterprises through capital accumulation can lead to higher returns on investment and wealth development (Chakraborty & Maheshwari, 2017). Similarly, through technological innovation, enhanced production, efficiency, and customer service can be achieved, resulting in higher returns on investment and wealth creation (Chen & Ruan, 2018). Empirical data from middle-income nations also supports the positive impact of capital accumulation and technical progress on investment and wealth creation. For instance, a study of the Indian economy found that capital accumulation positively affected investment and wealth growth, while technology According to contemporary economic thought, investment and wealth growth can be effectively facilitated through the mechanisms of capital accumulation and technological innovation. The reinvestment of capital and profits back into productive enterprises by means of capital accumulation can lead to higher returns on investment and consequent wealth creation (Chakraborty & Maheshwari, 2017). Similarly, technological advancement can have a significant impact on production, efficiency, and customer service, resulting in higher returns on investment and greater wealth creation (Chen & Ruan, 2018). Empirical evidence from middle-income countries further supports the positive effects of capital accumulation and technical progress on investment and wealth creation. For instance, a study of the Indian economy has found that capital accumulation had a positive impact on investment and wealth growth, while technological advancement had a negative impact. advancement had a negative impact.

In recent years, several studies have explored the relationship between capital accumulation, technological advancement, and investment opportunities in various economies across the globe. Notably, research conducted on the Chinese economy by Chen and Ruan (2018) has shown that capital accumulation is positively correlated with increased investment opportunities, while technical improvement is linked to higher rates of return on investments. Similarly, a study undertaken on the Indonesian economy by Santoso and Irwanto (2017) has demonstrated that capital accumulation leads to improved investment returns and more significant investment opportunities, while technological advancement enhances productivity, efficiency, and ultimately raises investment returns. These findings highlight the importance of both capital accumulation and technological advancement in promoting economic growth and development.

The available body of literature provides ample evidence to support the proposition that capital accumulation and technological progress are promising pathways towards wealth creation. Technical innovation has the potential to enhance productivity and efficiency, subsequently resulting in improved returns on investments and increased wealth creation. On the other hand, capital accumulation can widen the scope of investment opportunities and, thereby, enhance returns. Hence, policymakers ought to give serious consideration to both capital accumulation and technical innovation while shaping economic and policy interventions. This comprehensive review culminates by investigating the mechanisms that underpin wealth creation through investments, including capital accumulation and technical progress.

3.0 METHODOLOGY

This section provides an overview of the research methodology employed in this study, including the research design, sample and sampling techniques, data management strategies, and data analysis strategies.

3.1 Data Management Strategies

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The Impact of Economic Growth of Middle-Income on Individuals Investment and Wealth Creation in Ghana.

3.2 Data Analysis Strategies

In the present study, various econometric tools, including statistical packages such as SPSS and MINITAB, were employed to analyze the data. The study focused on examining the relationship between lower middle-income status and savings levels of individuals in Ghana using a one-way chi-square analysis (χ^2) test. Additionally, descriptive statistics were used to analyze the investment and wealth creation behavior of the population. To assess the association between middle-income status and levels of investment and wealth creation, a one-way chi-square analysis (χ^2) test was employed. Finally, a one-sample Kolmogorov-Smirnov test was conducted to establish the relationship between the lower middle-income position of the country and the levels of individual investment and wealth creation in Ghana.

4.0 RESULT AND DISCUSSIONS

The following discourse presents the research findings and ensuing discussions, highlighting the study's outcomes in an academic tone. It comprises a comprehensive portrayal of the data obtained from various instruments implemented in the research and a thorough discussion. To facilitate a better understanding of the data, several diagrams, graphs, and tables have been employed.

4.1 Findings of the Research

The subsequent text delineates the research findings and ensuing discussions, emphasizing the outcomes of the study. It encompasses a comprehensive depiction of the data acquired from diverse instruments employed in the research and a meticulous discussion. Assorted diagrams, graphs, and tables have been utilized to facilitate the elucidation of the data. The null hypothesis, H_0 , posits that there is no statistically significant association between Lower Middle-Income status and Individual Investment in Ghana.

H_A : There is a statistically significant relationship between Lower Middle-Income status and Individual Investment in Ghana.

Table 1. Showing the Relationship between Middle Income Status and Individual Investment

Comfortable Investment Portion	Yes	No	Sometimes
(i). Equity of Companies	24(22.2%)	19 (17.6%)	65(60.2%)
(ii). Treasury bills	21(19%)	26(24.1%)	61(56.5%)
(iii). Government bonds	20(18.5%)	35(32.4%)	61(56.5%)
(iv). Respondent borrowing to investment	21(19.4%)	61(56.5%)	26(24.1%)
(v). Respondents borrowing to undertake investment against the future	34(31.5%)	49(45.4%)	25(23.2%)
(vi). Equity of companies	24 (22.2%)	19 (17.6%)	65 (60.2%)
(vii). Treasury bills	21(19%)	26(24.1%)	61(56.5%)
(viii). Government bonds	20(18.5%)	35(32.4%)	53(50.9%)
(ix). Respondents borrowing to make investments	21(19.4%)	61(56.5%)	26(24.1%)
(x). Respondents borrowing to make an investment in the future	34(31.5%)	49(45.4%)	25(23.2%)

The findings presented in Table 1 offer insights into the investment decisions of the respondents and their preferences for various portfolios. The results reveal that a significant proportion of the respondents, i.e., 60.2%, do not express comfort in investing in equity shares of companies, while only 22.2% of them are comfortable with such investments. Similarly, the study indicates that 56.5% of the respondents would rarely consider investing in government treasury bills, with 24.1% expressing willingness to do so. In contrast, only 19% of the respondents appear comfortable investing in government treasury bills. Furthermore, the study highlights that only 18.5% of the respondents are comfortable investing in government bonds, while 50.9% would rarely consider such investments. The study also delves into the borrowing behaviour of the respondents to make investments, with 56.5% of the respondents stating they would not borrow for such purposes. Nonetheless, 19.4% of the respondents would borrow to invest, while 24.1% would consider borrowing occasionally. Additionally, 45.4% of the respondents would not consider borrowing to invest in the near future, while 31.5% would borrow for this purpose.

The findings of the study suggest that a significant proportion of the respondents, that is, less than 50%, expressed their comfort levels with investment portfolios in the money market. This was evidenced by their inclination towards equity shares, government treasury bills, and government bonds. However, the majority of respondents did not exhibit a similar level of comfort in investing in such portfolios. It is worth noting that Caballero (1991) posits that there may be other factors influencing respondents' decisions to abstain from investing in such portfolios.

The present study delved into investigating the connection between the Lower Middle-Income status and the Level of Individual Investment and wealth creation in Ghana. To achieve this, the null and alternative hypotheses were formulated to explore the

The Impact of Economic Growth of Middle-Income on Individuals Investment and Wealth Creation in Ghana.

forementioned relationship. Precisely, the null hypothesis stated that there is no statistically significant relationship between Lower Middle-Income status and Individual Wealth Creation in Ghana.

H_A: The current investigation has undertaken a comprehensive examination of the association between the classification of lower middle-income and personal financial accumulation in the context of Ghana. Our results reveal the existence of a statistically significant correlation between these two variables. To delve deeper into this relationship, we have conducted a one-way χ^2 analysis, and the outcomes are elaborated in subsequent portions. The ramifications of our discoveries are meticulously evaluated in light of their potential contribution to the extant scholarship on the topic.

Table 2. Lower Middle Income Status and Individual Wealth Creation.

Question <i>Ho: Hypothesis</i>	Response in frequency			χ^2 df(2)	Interpretation
	Agree (%)	Neutral(%)	Disagree (%)		
Ghana's middle-income status impact on the skills of individuals to creation wealth in the region	46(42.6)	11(10.2)	51(47.2)	26.39	Significant
Ghana's middle-income status supports and impacts knowledge, innovation, and creativity	65(60.2)	18(16.7)	25(23.2)	35.72	Significant
Ghana's middle-income status impact infrastructure development	73(67.6)	11(10.2)	24(22.2)	59.39	Significant
Ghana's middle-income status increases the stock of monetary assets of the individuals	42(38.8)	19(17.6)	47(43.5)	12.39	Significant
Ghana's middle-income status improves the standard of living and better social condition	47(42.9)	15(13.9)	46(46.6)	18.39	Significant
Ghana's middle-income status increases the provision of more jobs	37(34.5)	15(13.9)	56(51.8)	23.39	Significant
Ghana's middle-income status increases additional higher incomes	47(43.5)	18(16.7)	43(39.9)	13.72	Significant
Ghana's middle-income status improves education	58(53.6)	14(13.0)	36(33.3)	26.88	Significant
Ghana's middle-income status increases and generates greater individual and national self-esteem	54(50)	26(24.1)	28(25.9)	13.56	Significant

p < 0.05

The findings presented in Table 2 indicate that the observed frequencies are significantly different from expectations across various questions assessed. Specifically, the results highlight the impact of Ghana's middle-income status on various aspects such as skills, knowledge, innovation, creativity, infrastructure development, monetary assets, the standard of living, social conditions, job provision, higher incomes, education, and individual and national self-esteem. The statistical analysis reveals that all the statements assessed under wealth creation are substantial, as evidenced by the chi-square critical value of $df(2) = 3.9$. The table values are more significant than the chi-square $df(2) = 3.9$, indicating significance. Therefore, the null hypothesis of insignificance is rejected, and the alternative significance hypothesis is accepted. This study's findings contribute to the existing literature on the relationship between middle-income status and wealth creation, providing insights into the various factors that influence this relationship in the Ghanaian context.

Table 3. Showing Middle-Income status and Wealth Creation

Null Hypothesis Deviation	Mean	Standard	Test	Sig.	Decision
The distribution of (Wealth creation is not my	3.44	1.29	One-sample Kolmogorov	0.000	Reject null hypothesis

The Impact of Economic Growth of Middle-Income on Individuals Investment and Wealth Creation in Ghana.

<i>primary objective of investing)</i>			Smirnov Test		
The distribution of (<i>Purchase of Home and Land is not my primary objective of investing)</i>	3.42	1.27	One-sample Kolmogorov Smirnow Test	0.000	Reject null hypothesis
The distribution of (<i>Education funding is not my primary objective of investing)</i>	3.57	1.33	One-sample Kolmogoro Smirnov Test	0.00	Reject null the hypothesis
The distribution of (<i>Retirement planning or long-term wealth accumulation is not my primary objective of investing)</i>	3.47	1.36	One-sample Kolmogoro v Smirnov Test	0.00	Reject null the hypothesis
The distribution of (<i>The current rate of return does not affect my level of investment positively)</i>	3.47	1.18	One-sample the Kolmogorov v Smirnov Test	0,00	Reject null hypothesis
The distribution of (<i>The current level of prices does not determine my level of investment)</i>	3.31	1.28	One-sample Kolmogoro v Smirnov Test	0.00	Reject null the hypothesis
The distribution of (<i>Treasury bill rate does not determine my level of investment)</i>	3.32	1.19	One-sample Kolmogoro v Smirnov Test	0.00	Reject the null hypothesis
The distribution of (<i>I do not spend a considerable amount of my income investing for the future)</i>	3.53	1.13	One-sample Kolmogoro v Smirnov Test	0.00	Reject null the hypothesis
The distribution of (<i>The current rate of borrowing does not affect my investment positively)</i>	3.61	4.25	One-sample Kolmogoro vt Smirnov Test	0.00	Reject the null hypothesis
The distribution of (<i>I am willing to accept lower return associated with low risks than an investment with high risk and high return)</i>	3.70	1.17	One-sample Kolmogoro v Smirnow Test	0.00	Reject the null hypothesis
The distribution of (<i>I don't prefer to diversify investment or have a spread of investments in a portfolio)</i>	3.55	1.23	One-sample Kolmogoro v Smirnow	0.00	Reject the null hypothesis

The asymptotic significance is displayed. The significance level is 0.05

A statistical analysis was conducted to assess the significance levels of wealth creation in Ghana. Specifically, a Kolmogorov-Smirnov test was employed to test the null hypothesis and establish the relationship between lower-middle status, individual investment size, and wealth creation. The detailed test statistics have been presented in Table 3. All the test statistics indicate that wealth creation, purchase of home and land, education funding, retirement planning or long-term wealth accumulation, current rate of return, and current level of prices do not affect the level of investment positively, where $df=2$, $N=108$. The p-value was less than 0.05, indicating that all null hypotheses were rejected.

It is worth noting that all the statistical tests conducted, including the treasury bill rate, allocation of a significant portion of income towards future investments, absence of a positive impact of the current borrowing rate on investment, preference for low-risk investments with lower returns as opposed to high-risk, high-return investments, and the lack of interest in diversifying investment portfolios, yielded a p-value less than 0.05 with a df of 2 and N of 108. As a result, all null hypotheses in these tests were rejected. Based on the results of the Kolmogorov-Smirnov test, it can be inferred that all the tests conducted have entirely rejected the null hypothesis, thereby leading to the acceptance of the alternate hypothesis. As a consequence, it can be concluded that the statements under consideration are expected to occur.

The Impact of Economic Growth of Middle-Income on Individuals Investment and Wealth Creation in Ghana.

In light of the findings presented it can be concluded that all measurements pertaining to individual wealth creation exhibit a high degree of significance. Based on the analysis, it is suggested that there exists a noteworthy association between lower-middle-income status and personal wealth creation in Ghana.

Using Quantitative Analysis

The research aims to establish relationships between variables by analysing the secondary data collected from the World Bank's World Development Indicators websites (2017). The study utilises time series data of the Ghanaian economy covering the period of 1990 to 2015. In particular, the real GDP measured annually in millions of US dollars with the year 2000 serving as the base year is denoted by the variable Y, while the variable L represents Ghana's total labour force and is used as a proxy for labour supply since reliable employment data is unavailable. The present section of the research seeks to identify major indicators of economic growth in Ghana by analysing the neoclassical, structuralist, and market-friendly theories.

The current research endeavours to establish the interrelationships between different variables by analysing the secondary data collected from the World Bank's World Development Indicators websites (2017). Specifically, this study utilizes time-series data of the Ghanaian economy spanning from 1990 to 2015. The real GDP, measured annually in millions of US dollars, with the year 2000 serving as the base year is denoted by the variable Y, while the variable L represents the total labor force in Ghana, which is used as a proxy for labor supply since reliable employment data is unavailable. The main objective of this section of the research is to identify the significant indicators of economic growth in Ghana by analyzing the neoclassical, structuralist, and market-friendly theories, thus contributing to the existing literature on economic growth.

The neoclassical economic theory posits that an economy's outward orientation is a fundamental determinant of its growth potential. This perspective considers variables such as the net exports (EXP) as a percentage of the Gross Domestic Product (GDP) and the demand for a country's goods and services in foreign markets. These variables are regarded as crucial indicators of a country's growth potential and economic stability. Another key determinant of outward orientation is Foreign Direct Investment (FDI) as a percentage of GDP, which reflects the interest of foreign companies in the local companies and markets of a particular country.

The structuralist theory, in contrast to other growth theories, emphasizes the role of government indicators in promoting economic growth. This theory identifies variables that represent the degree of government involvement in an economy as key indicators of growth. For instance, Government Spending (GNS) and Government Spending (SPEND) as percentages of GDP are examples of such variables that have positive effects on GDP as they involve increased government intervention and economic stimulation. According to the structuralist theory, these variables represent ways in which a government can use fiscal policy to respond to or create shocks in the economy, with economists subscribing to this theory believing that government spending and investment are necessary for economic growth.

In the realm of macroeconomics, various indicators serve as yardsticks to evaluate the growth and stability of an economy. One such measure is the inflation rate, expressed as a percentage of the Gross Domestic Product (GDP). This indicator is used to gauge the economic stability of a country. High inflation rates are often indicative of underlying financial or economic problems that can lead to a decrease in investment and a reduction in GDP. Another key indicator is the level of government debt, which can also provide insights into the macroeconomic stability of a country. High levels of government debt are often associated with economic difficulties and have negative correlations with GDP.

Population growth (POG) is a crucial determinant of aggregate savings, and its impact is contingent upon the age distribution of the population. Specifically, if the proportion of the inactive or dependent population is high, the savings ratio tends to be low. To capture this effect, this research employs the age dependency ratio (DEPEND) as a reasonable proxy, which represents the share of the dependent age population (aged below 15 or over 64 years) to the working age population (aged 15 to 64 years). Other measures such as the share of the labour force or the number of employed individuals, which are often used as proxies, suffer from serious data limitations, particularly for self-employed and informal sector workers, especially in rural areas. The expected sign of the coefficient of DEPEND is negative.

Human capital (HC) can be defined as a comprehensive amalgamation of skills, experience, and knowledge that enables an individual to be potentially productive and capable of earning income in exchange for labour. In the present study, human capital is conceptualized as a complex set of traits that encompasses all the knowledge, talents, skills, abilities, experience, intelligence, training, judgment, and wisdom possessed by individuals in a given population, both individually and collectively.

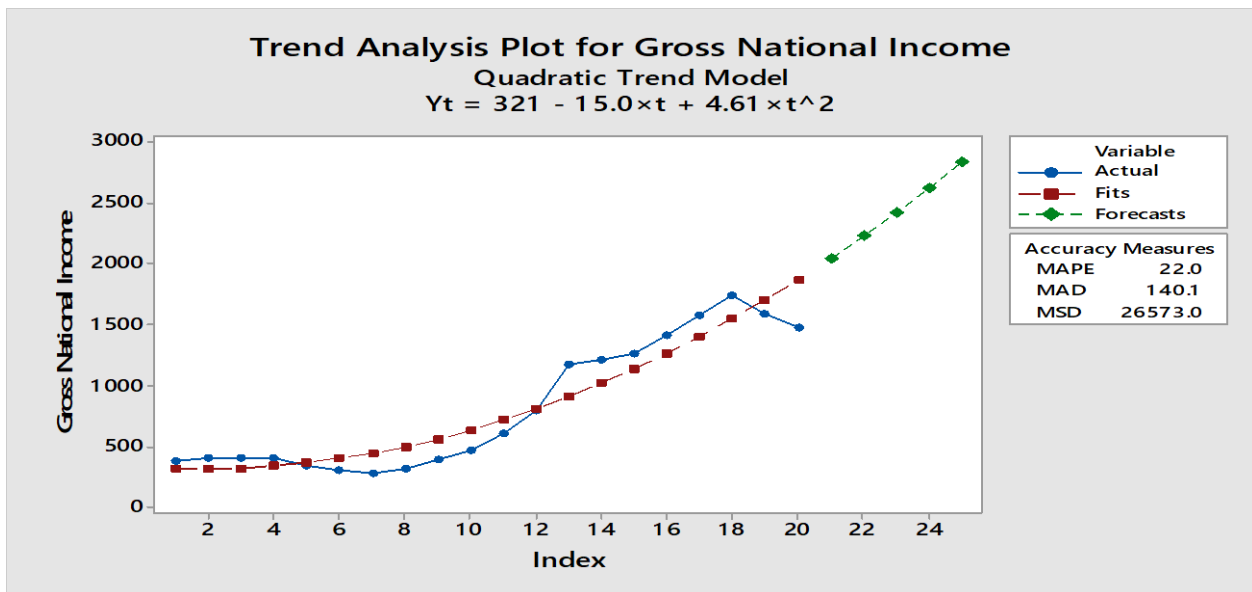


Figure 1. Trend Analysis for Gross National Income
 Source: World Bank Economic Indicators on Ghana, 2017

Based on the quadratic trend analysis conducted using Minitab software, as presented in Figure 1, the projected values for the gross national income over the next five years are estimated to be 2041.63, 2225.08, 2417.75, 2619.65, and 2830.77, respectively. In order to evaluate the accuracy of these fitted values, Minitab has employed three primary measures of accuracy, namely the Mean Absolute Percentage Error (MAPE), Mean Absolute Deviation (MAD), and Mean Squared Deviation (MSD). The MAPE, which expresses accuracy as a percentage, has been calculated to be 22.0, while the MAD and MSD values, which also assess the accuracy of the fitted time series values, are 140.1 and 26573.0, respectively.

The given quadratic equation, namely gross national income = 321 - 15.0x t + 4.61x t², can be interpreted as the equation of the curvature of economic growth. The constant value of long-term external debt, represented by 321, stands for the value of the external debt when all parameters are equal to zero. Moreover, the coefficient of -15.0 denotes the linear coefficient, which signifies the slope or gradient of the curve. In addition, the quadratic coefficient of +4.61 represents the quadratic coefficient of the equation Fitted Trend Equation: Gross national income = 321 - 15.0x t + 4.61x t².

4.9 Unit Root Test using Augmented Dickey-Fuller test

A unit root test was conducted to test for stationarity in a time series. The time series data used for our regression analysis must also be tested for stationarity or non-stationarity.

Statement of Hypothesis:

H₀: Output has Unit root, H₁: Output has no unit root

Table 4. Showing Augmented Dickey-Fuller test for unit root

. dfuller	GDP growth,		lags(0)	
Dickey-Fuller test for unit root	Number of obs =		25	
----- Interpolated Dickey-Fuller -----				
Test	1% Critical	5% Critical	10%	Critical
Statistic	Value	Value	Value	
Z(t)	-2.898	-3.750	-3.000	-2.630
MacKinnon approximate p-value for Z (t) = 0.0456				

The study conducted a unit root test on the secondary data output to determine the stationarity of the dependent variable (Gross Domestic Value) used in the regression analysis. The results, as presented in Table 4, indicate that at a critical value of 1% (0.01), the Z (t) value was found to be -2.898, the 5% Critical Z (t) was -3.750, and the 10% Critical Value, Z (t) was -3.000.

Furthermore, a Dickey-Fuller test for unit root was also performed to test for stationary and non-stationarity. The P-value for Z (t) was found to be 0.0456, which is greater than the level of significance of 0.05. Therefore, the null hypothesis was not rejected.

It is worth noting that the presence of a unit root in the variable (Gross Domestic Value) indicates that the time series data follows a random walk. Descriptive statistics for the secondary data used in the analysis are displayed in Table 4

The Impact of Economic Growth of Middle-Income on Individuals Investment and Wealth Creation in Ghana.

Table 5. Showing Descriptive analysis (Summary Statistics)

Variable	Obs.	Mean	Std. Dev.	Min	Max
GDP growth	26	5.513769	2.477277	3.3	14.646
General Exp.	26	12.93358	3.362358	9.312	20.888
Population	26	2.5185	0.1628789	2.254	2.811
Gross saving	26	15.76908	4.220047	6.935	22.872
GDP Growth	26	2.864577	2.344376	0.533	11.252
Inflation	26	20.52738	12.34047	8.727	59.462
Gross saving	26	16.12819	4.393896	7.052	23.394
Foreign Dir. Inv.	26	4.068577	3.175038	0.251	9.517
Schools enroll.	26	0.7225769	0.2328118	0.2705	0.949
Gross N.I	26	729.2308	497.3765	280 .00	1740.00
Inflation	26	24.25635	14.38467	11.15	80.751
External debt	26	70.92723	36.81504	18.231	139.439
Unemployment	26	6.526308	1.988501	3.600	10.360

Table 5 provides an in-depth descriptive analysis, or summary statistics, of the time series secondary data. The mean value offers insights into the central tendency of the variables under consideration, while the standard deviation provides information on the dispersion of these variables from their mean values. Additionally, the minimum and maximum values present the lower and upper limits of the data scores, thus providing a better understanding of the variability of the dataset.

Table 6. Showing Correlation Analysis

	Gen. Exp	P.Growth	Gr. Sav	GDPG	GDPgro~h	Inflation	Grosss~I
General Exp~P	1						
Population~e	-0.2866	1					
Grosssavin~P	0.2629	-0.2354	1				
GDPGrowthp~h	0.3859	-0.1046	0.11	1			
GDPgrowth	0.3665	-0.036	0.095	0.9971	1		
Inflation	-0.282	0.0437	0.1178	-0.4242	-0.4177	1	
Grosssavin~I	0.3013	-0.2519	0.9977	0.1304	0.114	0.0905	1
ForeignDir~G	0.5426	-0.3435	0.0567	0.5208	0.4956	-0.3054	0.0749
Schoolenro~o	0.2702	-0.4724	0.3422	0.388	0.3521	-0.2481	0.3482
GrossNatio~e	0.7376	-0.3143	0.0361	0.5757	0.5514	-0.4477	0.0685
InflationG~r	-0.2682	0.1657	0.1596	-0.1768	-0.1672	0.4141	0.1336
Externalde~I	-0.3959	-0.1163	0.2555	-0.5527	-0.5555	0.4819	0.2431
Unemploye~e	-0.4963	-0.3371	-0.1199	-0.4997	-0.5208	0.349	-0.1373

Data Source: world Bank economic Indicators, 2017

	For.Dir.	School	GrossN	Inflation	Ext.debt	Unemployment
Foreign Dir	1					
School enroll	0.5729	1				
Gross Nation	0.8847	0.5391	1			
Inflation Gr	-0.2449	-0.0705	-0.3329	1		
External debt	-0.6576	-0.3251	-0.7399	0.0728	1	
Unemployment	-0.2462	-0.0204	-0.4638	-0.0588	0.5612	1

The Impact of Economic Growth of Middle-Income on Individuals Investment and Wealth Creation in Ghana.

Interpretation

The present study showcases the comprehensive dimensions of correlation analysis, as revealed by the correlation analysis results. The study highlights the absence of perfect independent correlation (0), the presence of strong correlation (very close correlation), low or weak correlation (0.01- 0.499), medium correlation (0.5 – 0.85), and strong or high correlation (0.85 – 0.99). The study also sheds light on negative correlations, which indicate the degree of independence of certain variables from others.

Of particular interest is the correlation coefficient of 0.5208 observed between foreign direct investment and economic growth, as presented in Table 6. This value suggests a moderate positive correlation between the two variables. It implies that as foreign direct investment increases, economic growth also increases, albeit not at the same rate or to the same extent. This finding underscores the significant role that FDI can play in contributing to economic growth. However, it also suggests that other factors may also influence economic growth.

CONCLUSION

The present research study aims to delve into the examination of the impact of economic growth on middle-income individuals in Ghana, particularly in relation to investment and wealth creation. To undertake an empirical investigation, the research adopts a mixed-methods approach, encompassing primary and secondary data analysis. The study seeks to contribute to the existing body of literature in the field of economics and provide valuable insights into the relationship between economic growth and wealth creation in Ghana.

The results of the study reveal that economic growth has a substantial impact on the middle-income group, as it provides them with abundant opportunities for investment and wealth creation. Economic growth leads to an increase in job opportunities, higher wages, and more significant savings potential for individuals to invest in wealth creation. Moreover, economic growth promotes the development of new industries, which, in turn, creates new investment opportunities. Similarly, economic growth leads to augmented consumer spending, which provides entrepreneurs with opportunities to produce goods and services that cater to the needs of consumers, ultimately contributing to wealth creation.

In conclusion, the study highlights that economic growth has the potential to benefit all individuals, particularly those in the middle-income bracket, by providing them with more investment and wealth-creation opportunities. The research findings indicate that the current macroeconomic environment in Ghana is conducive to investment and wealth creation, as revealed by the secondary data analysis. Additionally, the study reveals that individuals make varied investments for wealth creation, including the purchase of homes and land.

RECOMMENDATION

In the pursuit of sustainable economic growth for middle-income individuals, it is incumbent upon governments to adopt policies that support investment and wealth creation opportunities. These policies should incorporate tax incentives for investment, as well as initiatives to enhance access to credit and capital. In addition, governments should ensure that middle-income individuals have access to financial education and resources to enable them to make informed decisions about investing and wealth creation. Addressing income inequality must remain a top priority for governments, given its potential positive impact on economic growth. By implementing these policies, governments can ensure that economic growth benefits the entire population, rather than just the privileged few.

In order to foster investment interest and stimulate wealth creation among Ghanaians, it is highly recommended that the Central Bank of Ghana manages the policy rate in a manner that precludes an escalation in interest rates. Such an approach would incentivize individuals to secure loans from commercial banks at relatively lower rates for investment purposes, ultimately boosting wealth creation in the economy. To realize this objective, the Central Bank of Ghana ought to establish stringent measures aimed at curbing excessive inflation within the economy, which would, in turn, safeguard disposable income and spur citizens' inclination to save and invest in the economy. By implementing these measures, the Central Bank of Ghana would play a pivotal role in promoting economic growth and development while ensuring the financial well-being of its citizens.

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