EXTERNAL DEBT AND ECONOMIC DEVELOPMENT

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DECLARATION

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This is to certify that this study was carried out by **Mercy Eghosa, OMORODION** with the Matriculation number **MGS1807935** in the Department of Banking and Finance, Faculty of Management Sciences, University of Benin, Benin city under the supervision of Dr. S. U. Eboigbe.

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DEDICATION

This study is dedicated to Almighty God for granting me the grace, sufficiency and enablement to start and complete this project successfully. To God be the glory

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ABSTRACT

The study investigates the relationship between external debt and economic development in Asian countries. The study adopts a quantitative research approach, utilizing statistical analysis to examine the relationship between external debt and economic development in Asia. The outcome of the study revealed that external debt has a negative impact on GDP growth rate (D(GDPGR) and was statistically significant at 5% level. Inflation have negative impact on GDP growth rate; and statistically significant at the conventional significance level of 0.05; poverty rate was found to have negative impact on GDP growth rate while holding other variables constant and this variable was statistically significant at 5%.

The study however recommends that policymakers should exercise caution when accumulating external debt. It's essential to ensure that external borrowing is used for productive investments that generate economic returns to cover debt servicing costs; continue to monitor and manage inflation to ensure it remains within an acceptable range. High and volatile inflation can disrupt economic stability and erode the purchasing power of citizens. Policymakers should prioritize poverty alleviation measures as an integral part of economic development strategies and efforts to reduce poverty can include targeted social programs, job creation initiatives, and access to education and healthcare. Develop economic policies that promote inclusive growth, ensuring that the benefits of economic development are distributed more equitably across society.

CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND TO THE STUDY

The study of external debt and economic development builds on a long history of research into the relationship between debt and economic growth that dates back to the debt crisis of the 1980s. Resources in the form of external debts have been the main source of finance to fill the gap for both developing and undeveloped countries. The necessary question is whether such external debts fulfill the purpose for which they are obtained. The debt crisis of that time, which had an impact on many developing nations, brought awareness to the dangers of excessive external borrowing and caused debate on the right role of external debt in development.

Nations must obtain sufficient financial and material resources, whether internally or externally, to undergo fundamental developmental projects and to achieve economic advancement. The question of the impact of external debt on economic development has gained more awareness since the external debt crisis in 1982 (Ajisafe, Nassar, & Fatokun, 2006). The debate about its effect remains heated and inconclusive (Okonkwo & Odularu, 2013 Ali & Sadraoui, 2013).

External debt is one of the key macroeconomic factors that determines a country's reputation on the global market is external debt. While domestic borrowing only moves

resources within the nation, external borrowing can expand a country's access to resources. a portion of the main macroeconomic variables (Public Debt) that denote countries image in the international market. According to the World Bank, External Debt at any given time is the outstanding amount of those actual current, and not contingent (liability that may occur at a later date depending on the outcome of an uncertain future event), liabilities that require payment(s) of interest and/or by the debtor at some point(s) in the future and are owed to nonresidents by resident of an economy. External Debt is a portion of a Nations public debt that is borrowed from foreign lenders, including Money Deposit Banks, Government, or International Financial Institutions. The International Monetary Fund (IMF) defines it as debt liabilities owed by a resident to a nonresident, with residence being determined by where the creditors and debtors are ordinarily located rather than their nationality. In some cases, external debt takes the form of a tied loan, which means the funds secured through the financing must be spent in the nation that is providing the funds. External debt, particularly tied loans, might be set for specific purposes that are defined by the borrowing nation and the lending nation (Will Kenton 2022- Investopedia.com).

Economic Development is the process by which the economic well-being and quality of life of a nation, region, local community, or an individual is improved according to targeted goals and objectives. It is the process by which a nation improves the economic, political, and social well-being of its people. Economic Development focuses on innovation, skills and infrastructure as well as overall economic growth. It is a policy

intervention aiming to improve the well-being of a nation and its people. Economic Development can be seen as an increase in the total output produced by a country. It says the capacity of economy to produce goods and services (Wikipedia).

In the case of the Asian countries, also known as the Asian Tigers, their economies comprise of about 4.7 billion people- 60% of the world population- living in 50 different nations have over the years built what can be described as very strong economies through both internal and external borrowing. Asia is known for being the fastest growing economic region, as well as the largest continental economy. As in all world regions, the wealth of Asia differs widely between and within states. This is due to its large size, which will mean a huge range of different cultures, environment, historical ties and government systems. Asia's external debt and economic development have been linked in various research and discussions. While some contend that borrowing from outside the country can be an important means of financing development, others have expressed concerns about the risks of excessive borrowing and the effects of debt on economic development. On the one hand, external debt can provide the necessary funding for investment in infrastructure, healthcare, education and other areas that can support economic development. On the other hand, if debt service obligations start eating into government budget and limiting resources available to other development priorities, the excessive external borrowing will lead to a problem of debt sustainability. Asia's experience with external debt has been mixed. In order to finance its development and accelerate economic growth, some countries like South Korea, Taiwan and Singapore

have managed to take advantage of foreign borrowings. And in the past, others such as Indonesia, Thailand and the Philippines had been confronted with debt sustainability problems and severe economic crisis.

The issue of whether the increase in external debt has a beneficial or negative impact on these countries' economic development is one that empirical and theoretical analysis aims to resolve. According to Chowdhury (2001), the majority of these Asian nations use foreign debt as a mechanism to finance their long-term developmental expenditures, advancing industrialization, infrastructure development, and human resource development. However, improper or ineffective use of foreign borrowings or debts could prevent the economy from developing fully. It is impossible to overstate the connection between external debt and economic growth. This is because with such debts, industrial goods such as advanced machinery for local production and industrial growth can be acquired from the lending countries. Due to investment and cost-involvement from interest payments, debt promotes economic development. However, the majority of Asian nations use borrowing to boost growth through returns. Based on the findings provided by Babu, Kiprop, Kalio & Gisore (2014), it is possible to prove the relationship between debt and economic development in Asian nations. Although debt and development in Asian countries appear to have a clear positive linear relationship (an increase in one would result in a rise in the other), it is difficult to establish a connection between the two without a full empirical research.

1.2 STATEMENT OF THE RESEARCH PROBLEM

Asia uses or issues securities like Treasury bills, Treasury bonds, etc. to borrow money. As a result, both the cost of debt and the interest rates have a big impact on how the economy develops. External debts or borrowings are crucial for economic growth because they absorb excess capital from foreign investors and inject capital by allocating assets to those who can benefit more than they are currently. Over the past few years, there has been discussion about the factors affecting the economic development of Asian nations. Three studies—Kumara and Cooray (2013), Shabbir (2013), and Siddiqui and Malik (2001)—examined how debt affected economic growth in various nations. These studies' findings have produced a number of results.

According to their studies, different countries have different effects of debt on economic development. The primary objective of this study is to examine the relationship between external debt and economic growth. This study's research problem aims to determine "Whether or not there is a relationship and effect of external debt on economic development in Asian countries" in order to fill in the research gap. In other words, this study examines the effects, determining if they are positive, negative, or non-linear. According to Umaru and Hamidu (2013), internal debt has a detrimental influence on economic development. Internal and foreign debt have different consequences on economic development. Therefore, it is crucial to provide a response to the question of how external debt affects economic growth.

1.3 RESEARCH QUESTIONS

This study will be guided by the following research questions:

I. To what extent does external debt affect economic development in Asian countries?

II. Is there a positive relationship between external debt and the various indicators of economic development?

1.4 OBJECTIVES OF THE STUDY

Every country seeks to have both rapid growths in its economy and a level of debt that is manageable. A thorough understanding of the relationship between external debt and economic development is crucial to achieving that goal. This study contributes to a better understanding of Asian countries' external debt and economic progress. The primary goal of this research is to investigate how external debt affects economic growth in Asian nations.

1.5 RESEARCH HYPOTHESES

This study will be guided by the following Hypotheses:

I. External debt affects the economic development of Asian countries.

II. There is a significant relationship between external debt and the various indicators of economic development in Asian countries.

1.6 SCOPE OF THE STUDY

This study entails investigating the relationship between external debt and economic development in Asian countries. This study will focus on the top 10 Asian countries based on GDP: China, Japan, India, South Korea, Indonesia, Turkey, Saudi Arabia, Taiwan, Thailand, and Iran. This is justified based on the fact that these countries are the leading countries in Asia and they have independent democratic government.

The Data source of this study will draw on national statistics, international databases such as the World Bank and the IMF, and previous academic research. The data will cover the period from 2010-2022. The study will analyze variables related to external debt and economic development, such as the level and composition of external debt, GDP, inflation rate, interest rate, poverty rate, unemployment rate, exchange rate and trade balances.

Overall, the scope of the study will aim to provide a detailed analysis of the relationship between external debt and economic development in the top 10 Asian countries by GDP.

1.7 SIGNIFICANCE OF THE STUDY

This study is valuable attempt with significant impacts for policymakers, economists, and other stakeholders interested in economic development in Asia. Below are some potential significance of this study:

I. Understanding the relationship between external debt and economic development: This study can help to shed light on the complex relationship between external debt and economic development in Asia. By analyzing historical data and trends, this study can provide valuable insights into the ways in which external debt can either promote or hinder economic development in the region.

II. Policy implications: This study can have important policy implications for governments, international organizations and other stakeholders concerned with economic development in Asia. For example, the findings of the study can inform policy makers on the appropriate levels and types of external debt that countries in the region should incur to achieve sustainable economic development.

III. Cross-country comparison: By examining the experiences of different countries in Asia, the study can also provide valuable insights into the factors that contribute to successful economic development, including the role of external debt. This can be particularly useful to policymakers seeking to learn from the experiences of other countries in the region.

IV. Contribution to previous academic literature: The study can also make a significant contribution to the academic literature on the relationship between external debt and economic development. By analyzing empirical data, the project can help to advance our theoretical understanding of the factors that influence economic development in Asia and beyond.

Overall, this project External debt and economic development in Asia, has the potential to generate important insights and contribute to ongoing debates about the role of external debt in promoting economic development in the region.

CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

External Debt and economic development are two closely intertwined concepts, as external debt plays an important role in financing development projects and promoting economic development. However, the relationship between external debt and economic development is complex and multifaceted, and therefore there are different perspectives on the effect of external debt on economic development.

2.1 CONCEPTUAL REVIEW

2.1.1 INDEPENDENT VARIABLE: EXTERNAL DEBT

A country's debt to creditors abroad is referred to as its external debt. Government borrowing may be used to pay for it. Because excessive borrowing can have a negative impact on a country's economic development, the study of external debt and economic development is crucial. External debt and economic growth have a complicated and particular to the situation relationship.

Indicators of external debt can have a big impact on economic growth, both good and bad. These indicators' effects on economic growth include:

1. **Debt-to-GDP ratio:** This indicator measures the total external debt of a country as a percentage of its gross domestic product (GDP). It is a measure that measures a nation's total debt to its overall economic output. It provides an indication of the nation's ability to manage its debt burden in relation to its economic productivity.

A high debt-to-GDP ratio can be a reason for concern as it may indicate that a country is struggling to manage its debt burden. This can lead to lower investor confidence, reduced foreign investment, and lower economic development. The debt-to-GDP ratio can be used as an external debt indicator when it specifically considers the portion of the debt that is owned to foreign creditors.

By focusing on the external debt component, the debt-to-GDP ratio can provide insights into a country's ability to manage its obligations to foreign creditors and the potential risks associated with such debt. The debt-to-GDP ratio can serve as an external debt indicator in the following ways:

I. Dependency on foreign borrowing: A higher debt-to-GDP ratio indicates a larger proportion of a country's economic output is used to service external debt. This suggests a higher dependency on foreign borrowing to sustain economic activities. Countries with high external debt ratios may face challenges in meeting their repayment obligations, especially if their GDP growth is slow or stagnant.

II. Vulnerability to currency fluctuations: When a significant portion of a country's debt is denominated in foreign currencies, a higher debt-to-GDP ratio can expose

the country to currency exchange rate risks. If the local currency weakens against the currencies in which the debt is denominated, it becomes more expensive to service the debt. This vulnerability is particularly relevant for countries with high external debt ratios.

III. Creditworthiness and investor perception: The debt-to-GDP ratio, specifically the external debt component, is an essential metric for assessing a country's creditworthiness. High external debt ratios may raise concerns among international investors, leading to increased borrowing costs or reduced access to credit. It can also impact investor confidence and perceptions of a country's ability to manage its financial obligations.

IV. Debt sustainability and economic stability: The debt-to-GDP ratio serves as a gauge of a country's debt sustainability. Excessively high external debt ratios may indicate an unsustainable debt burden, potentially leading to financial instability and economic crises. Monitoring and managing the external debt-to-GDP ratio can help policymakers ensure a healthy balance between borrowing and economic growth.

It's important to note that while the debt-to-GDP ratio can provide insights into a country's external debt burden, it should be considered alongside other economic indicators. Reinhart and Rogoff (2010) conducted a comprehensive analysis of public debt levels and their implications for economic development. Their study, titled "Growth

in a Time of Debt," analyzed data from 44 countries over 200 years. They found that when a country's debt-to-GDP ratio exceeds 90%, it tends to have a negative impact on economic growth.

International Monetary Fund (IMF) has frequently studied the relationship between debt and GDP, both at the global level and for individual countries. They use debt sustainability analysis to assess a country's ability to service its external debt. The IMF's research and reports provide insights into debt-to-GDP ratios as an external debt indicator. Cecchetti, Mohanty, and Zampolli (2011) study, titled "The Real Effects of Debt," the authors analyzed the impact of high debt levels on economic growth. They emphasized the debt-to-GDP ratio as a crucial indicator, suggesting that when it exceeds a certain threshold, it can hinder long-term economic development.

2. **Debt service-to-revenue ratio:** This indicator calculates a nation's overall foreign debt service payments as a proportion of its overall government revenue. A large debt service-to-revenue ratio might be concerning since it could mean that a nation is having trouble paying its debts, which could result in defaults, increased borrowing prices, and slower growth in the economy. It is accurate that the debt service to revenue ratio is a crucial external debt indicator that sheds light on a nation's capacity to handle its debt obligations. It assesses how much of a nation's income goes toward servicing its outstanding external debt in the form of interest and principal payments. Policymakers, international financial institutions, and analysts frequently use the debt service to revenue ratio to assess a

nation's level of debt and its ability to repay its debts. It aids in evaluating a country's financial stability and shows how exposed it is to outside shocks or changes in interest rates.

Policymakers can compare and analyze a country's ability to service its debt by monitoring this ratio over time, which enables comparisons and analysis of various borrowing, debt-restructuring, and debt-management options. Additionally, it assists investors and lenders in determining the risk and creditworthiness of lending to a specific country. In their 2003 study, Reinhardt, Rogoff, and Savastano looked at the connection between a large number of nations' debt service ratios and economic development. They discovered that lower economic growth rates and greater debt service ratios were related, indicating that a heavy debt service load may hinder economic development. The connection between debt service ratios and macroeconomic stability was examined by Celasun, Debrun, and Ostry in 2007. They came to the conclusion that excessive debt service ratios can raise a nation's susceptibility to financial crises and increase its likelihood of default.

The factors that affect debt service ratios in African nations were studied by Adebiyi and Asiama (2012). As important indicators of debt service ratios, they found variables like economic growth, inflation, currency rate shifts, and debt structure. In a study published in 2014, Gupta, Pattillo, and Wagh investigated the link between debt service ratios and the decline of poverty in low-income nations. According to the findings, high debt

servicing costs can make it more difficult to invest in programs that reduce poverty by limiting the amount of money available for spending on social welfare.

3. **Debt Sustainability Analysis:** Policymakers utilize a Debt Sustainability Analysis (DSA) to evaluate the ability of a country to control its external debt burden. In determining whether a nation's debt burden is long-term sustainable, DSAs take into account variables such the debt-to-GDP ratio, the debt service-to-revenue ratio, and the debt's structure. As opposed to an unsustainable debt burden, which can cause a debt crisis and have a detrimental impact on economic development, a sustainable debt load allows the nation to invest in areas that can foster growth and development. An important technique for determining a country's long-term ability to pay its external debt commitments is the debt sustainability analysis. It assists in assessing the sustainability of a nation's debt load and locating possible threats to its economic stability for politicians, international financial institutions, and investors. In their 2010 analysis of past debt crises, Reinhart & Rogoff drew attention to repeating trends in debt accumulation and default. They emphasized the significance of taking past experiences and nation-specific factors into account when analyzing debt sustainability. In their 2009 study, Reinhart, C. M., and Reinhart, V. R., looked at the importance of domestic debt in the examination of debt sustainability. They believe that failing to consider domestic debt can result in an inaccurate evaluation of a nation's debt load and its consequences for financial stability. Manasse, Roubini & Schimmelpfennig (2003), the authors develop an early warning system to predict sovereign debt crises. They identify a set of leading indicators and

analyze their effectiveness in signaling debt sustainability problems and the likelihood of debt crises.

4. **Composition of debt:** The composition of a country's external debt which includes the type of lenders and the terms of the loan can impact economic development. For example, debt from institutions like the World Bank or the International Monetary Fund may come with some specific conditions that requires the borrowing nation to implement economic reforms that can improve economic development. While debt from commercial lenders may come with less favorable terms such as higher interest rates or shorter repayment periods which can lead to higher borrowing cost and reduced economic development. Debt composition is to the breakdown of external debt into different categories or components based on various characteristics. Analyzing the debt composition provides insights into the sources, terms, and currency structure of a country's external debt, allowing for a better understanding of its vulnerability and sustainability.

By examining the debt composition through these indicators, policymakers, analysts, and investors can assess the potential risks associated with a country's external debt profile. It helps identify vulnerabilities, such as high reliance on a single creditor, excessive exposure to foreign currency debt, concentration of debt in certain sectors, or a heavy debt repayment burden due to a skewed maturity structure. Reinhart & Rogoff (2010) examine the historical patterns of debt crises. They emphasize the importance of debt composition, including external debt, in predicting and understanding financial crises.

Panizza & Presbitero (2013) study examine the relationship between public debt composition and economic growth. They analyze the impact of external debt versus domestic debt on economic performance.

In summary, external debt can impact economic development in different ways. High debt-to-GDP and debt service-to-revenue ratios can reduce economic development. A sustainable debt burden can contribute to economic development while an unsustainable debt burden can lead to debt crisis which will have negative impact on economic development.

2.1.2 DEPENDENT VARIABLE: ECONOMIC DEVELOPMENT

Economic development is the process by which a nation raises its citizens' standards of living through continued economic expansion and higher productivity. It entails the development of basic infrastructure, the expansion of access to healthcare and education, and the establishment of employment opportunities. A sustainable and inclusive growth depends on economic development, which is also vital for eradicating poverty, advancing social welfare, and raising the general standard of living.

A variety of indicators are used to determine economic development, and these indicators can be used to evaluate how well a nation is doing in terms of social welfare, economic growth, and poverty reduction. The indicators consist of:

1. **Gross Domestic Product (GDP):** The total annual value of goods and services generated in a nation is measured by its GDP. It can be used to evaluate a country's economic performance and is a crucial indication of economic development. GDP is one of the most frequently used indicators of an economy's output or production, according to Elvis Picardo (Investopedia 2021). The GDP growth rate is perhaps the best indication of economic progress, and it is a reliable measure of the size of an economy. Because it represents the total value of goods and services generated inside a nation's boundaries over time, gives a picture of economic activity, and helps policymakers make decisions, many experts see GDP as an important indicator of economic development. Others have suggested that the GDP has significant drawbacks as a measure of economic advancement. One drawback is that the GDP concentrates on financial transactions and ignores non-market activities that also contribute to wellbeing, such as residence work and volunteerism. According to Kimberly (2008), a country's gross domestic product is everything that its citizens and businesses together generate. Moreover, it is stated that GDP is concerned with the area that generates money and that it concentrates on the location of output rather than the producer. GDP is the entire monetary worth of all goods and services generated in a country by all of its residents, regardless of where they are from as long as they remain there, according to Nnamocha (2002). He claims that the GDP of an economy includes both citizens and noncitizens. According to Abdulrasheed's research from 2005, GDP is utilized to change asset locations and determine where investors have the best opportunities.The entire market value of the finished goods and

services generated in an economy over the course of a year, according to Samuelson (2005), is the GDP. According to his research, the GDP is utilized for a number of purposes, but its main function is to assess a country's overall economic success.

2. **Gross National Income (GNI):** The Gross National Income (GNI) measures all income received by citizens of a nation, including income earned abroad. The GNI is a more comprehensive indicator of a nation's economic performance than the GDP is. It considers the earnings of citizens who reside abroad. GNI, according to Laura Porter (Investopedia 2023) is the sum of all the money that a country's citizens and enterprises make. GNI is a different way to track and measure a country's wealth from GDP and is seen to be a more accurate indicator for some countries.

3. **Human Development Index (HDI):** The HDI evaluates a nation's progress in terms of income, education, and health. It combines indicators of income, education, and life expectancy. The HDI is a summary indicator of a nation's performance in three fundamental areas of human development, according to the World Health Organization: health (measured by life expectancy at birth), knowledge (measured by literacy rate), and standard of living (measured by GNI per capita). The HDI was developed to point out that people and their abilities should be the deciding factor in a country's ability to access economic development (United Nations Development Program 1990). The HDI was developed for comparing one nation or set of nations' human development—which includes economic development—to that of other nations at a certain point in time.

Economic development has been found to be positively impacted by health. In their study, Strauss and Thomas (1998) proved how better diet and health might increase output and income. Through its impact on population expansion, education (knowledge) also has a significant indirect effect on economic development. According to Agarwal's (2006) research, both education and training contribute to improving citizens' skills and capabilities and placing them at the center of their country's economic development. In his research, Ranis (2004) found that increased opportunities result in improved economic performance, and that human development has a big influence on development.

4.**Unemployment Rate:** The employment rate is an indicator of how well an economy is performing at capacity. The percentage of the work force that is without employment is measured by the unemployment rate. It can be used to evaluate the efficacy of work and is a significant indication of economic development. When there are excesses in demand or shortcoming in supply in the labor market, unemployment results. The unemployment rate sheds light on the extra and underutilized resources in the economy. Using Jordan as the primary case study, Al-Habees and Rumman (2012) investigated the relationship between unemployment and economic progress in certain Arab nations. Similar research was conducted by Noor, Nor, and Ghani (2007) using Okun's rule to examine the relationship between unemployment and Malaysia's economic progress. They found a negative correlation. According to Ojima's (2019) study, which looked at the relationship between unemployment rate and economic growth in Nigeria from 1980 to 2017, unemployment has a negative impact on the economic expansion of the nation. It is

advised that fiscal and monetary policies be adopted to increase job opportunities in order to sustain the economy of the country.

5. **Poverty Rate:** The percentage of the population below a given income level is measured as the poverty rate. It is an important social welfare statistic that is used to evaluate how economic policies are affecting the fight against poverty. An important statistic utilized in economic development study is the poverty rate. It gives information about a population's wellbeing and aids in evaluating how well poverty reduction initiatives are working. The poverty rate determines the percentage of a population that makes less than a particular income level, sometimes known as the poverty line. The cost of providing for basic requirements including food, shelter, and healthcare is often taken into account by the national government or international organizations when determining the poverty line. The level of income inequality and the allocation of resources within a society are both reflected in the poverty rate, which is a key indication of economic development. High poverty rates emphasize places that need action since they show poor access to basic needs and few economic prospects.

In addition to being useful for measuring poverty within a nation, poverty rates are also useful for comparing nations. International organizations utilize poverty rates to track the extent of world poverty and establish goals for eradicating it, like the Sustainable Development Goals of the United Nations.

Although the poverty rate is a useful indicator, it has several drawbacks. It may not account for other components of well-being such having access to high-quality education, healthcare, and social protection because it largely concentrates on financial factors. Furthermore, poverty levels might differ from one nation to another, making cross-national comparisons difficult. Using panel data from numerous nations, Chen & Ravallion's (2004) study examined the connection between economic development and the elimination of poverty. The results indicated that although there is a general association between economic growth and a decline in poverty rates, this relationship varies among nations. The relationship between poverty and growth can be greatly influenced by variables like starting inequality, level of education, and governance effectiveness. The research of Ferreira & Ravallion (2008) concentrated on the distributional effects of reducing poverty. In order to determine how economic growth affects various income groups and to investigate the factors influencing growth that is pro-poor, the authors examined data from a wide range of nations. The study stressed the significance of inclusive growth strategies that help the most vulnerable groups in society in order to reduce poverty in the future. The multidimensional poverty index (MPI), which extends the measurement of poverty beyond income-based variables, was introduced by Alkire & Foster in their 2011 study. The MPI includes multiple factors, including living conditions, health, and education, to offer a more thorough analysis of poverty. The research highlighted the value of multidimensional approaches in capturing the complexities of poverty and designing targeted policies. The study emphasized the

importance of multidimensional strategies for capturing the complicated nature of poverty and developing focused interventions. In their 2011 study, Gasparini and Lustig examined trends in poverty rates and income inequality in Latin America. They examined the connections between economic growth, poverty, and income inequality and emphasize the need of keeping an eye on the poverty rate as a measure of economic development.

In all, the poverty rate is an important indicator for assessing the state of the economy since it sheds light on a population's wellbeing, measures income disparity, and influences the formulation of public policies aimed at eradicating poverty and enhancing living standards.

6. **Inflation Rate:** The rate at which the cost of goods and services is rising over time is measured by the inflation rate. It is a crucial metric for determining economic stability and can be applied to judge how well monetary policy is working. The inflation rate, which indicates the overall rise in prices of goods and services in an economy over time, is a crucial economic development indicator. It gauges the percentage change in the average price of a basket of household-used goods and services. The purchasing power of money is steadily destroyed through inflation. The real worth of income and savings decreases as prices rise because the same amount of money can now buy fewer products and services. Higher inflation rates can lead to decreased consumer confidence and spending, which can impact economic development negatively. Low and stable inflation

rates are generally considered desirable for economic development. A moderate level of inflation is often seen as an indication of a healthy economy, reflecting rising wages, growing demand, and increasing production. It provides a favorable environment for investment and economic development.

Inflation rates can also be compared between countries to assess their relative economic performance. While low inflation rates can suggest a stable economic climate that is favourable to development, high inflation rates can signify economic instability and may discourage foreign investment. In their 2001 study, Khan and Senhadji examine the threshold effects in the connection between inflation and economic growth. According to Khan and Senhadji, moderate inflation rates (below a specific threshold) have a limited impact on growth, but higher inflation rates (beyond that threshold) have a negative impact on development. "The Real Effects of Debt" by Cecchetti, Mohanty, and Zampolli (2011): This Bank for International Settlements (BIS) study looks at the connection between inflation, debt, and economic growth but is not simply concerned with inflation. It underlines the detrimental effects of high inflation rates on long-term growth and stresses how crucial preserving price stability is to the advancement of the economy. The 2005 study by Ball and Sheridan looks into how adopting frameworks for inflation targeting affects inflation and economic performance. It offers proof that inflation targeting is capable of helping stabilize inflation expectations and encourage deflation, both of which boost economic outcomes and stability. The study by Easterly (2001) looks into the connection between inflation, public debt issues, and slowing

economic growth. According to Easterly, decreasing development might result in debt crises, which can then be linked to high inflation rates. The study emphasizes how inflation has detrimental effects on development in the economy.

The stability of prices, the purchasing power of money, and the general health of an economy are all reflected in the inflation rate, which functions as a crucial economic development indicator. For policymakers and investors to support stable and sustained economic growth, inflation needs to be monitored and managed.

7. **Foreign Direct Investment (FDI):** The quantity of investment coming into a nation from abroad is measured by FDI. It is a crucial measure of a nation's appeal to foreign investors and can be used to determine how competitive an economy is. Policymakers and analysts frequently utilize foreign direct investment (FDI), which is widely recognized as a significant indication of economic developments, to determine how desirable a nation's business environment is. Investments made by people, businesses, or other entities from one nation into another are referred to as foreign direct investments (FDI). These investments are made with the intention of developing a substantial amount of control over a company's management and operations. FDI brings in foreign capital, which can be essential for a nation's development and economic progress. These arrivals of foreign capital can aid in funding emerging industries, infrastructural improvements, scientific and technical developments, and other beneficial endeavors.

New job opportunities are frequently created in the nation receiving the assistance as a result of FDI. When international businesses start up or grow, they frequently hire local workers, which helps to create jobs and lower unemployment rates. Development in the economy depends on job creation since it raises living standards and lowers poverty. Skills and expertise transference from FDI may help domestic businesses and employees. By adopting the best methods and tools used by foreign investors, domestic businesses can boost productivity and advance their industries.

By providing access to international markets, FDI promotes international trade. To serve local markets or as a foundation for selling goods and services to other nations, foreign investors may set up production facilities in the host nation. Export-focused industry expansion, economic diversification, and inclusion in global value chains are all essential for economic success and can all be facilitated by FDI. (2012) Wang, Wong, and Chan Indicators of economic development in Asian nations were the main subject of this study. The authors investigated the link between foreign direct investment and development in the economy as well as the intermediary role of technology transfer.

The results showed that technology transfer may partly regulate the favorable effects of FDI on economic growth. In their article from 2019, Kotlebova and Hunady explore the connection between economic development and foreign direct investment in the newest EU members. It studies examines how FDI affects GDP growth, employment, and productivity in these nations and sheds light on how FDI contributes to their economic

development. In their 2018 study, Erlangga and Ritonga examine the sectoral pattern of the relationship between FDI and economic growth in Indonesia. It investigates how FDI affects particular industries' impacts on economic growth, including job opportunities, creation of capital, and overall productivity of factors. The study paper by Majeed, Azam, and Khan (2018) examines how FDI affects economic growth in developing nations. A cross-country investigation of the relationship between inflows of foreign direct investment (FDI), development in the economy, human capital, and technical advancement is conducted in order to provide empirical support for the contribution of FDI to economic development.

The study by Anazodo and Nwogugu (2017) examines the effect of FDI on regional economic development with a particular emphasis on Sub-Saharan African nations. It provides insights into the impact of FDI in economic development in Sub-Saharan Africa by analyzing the relationship between foreign direct investment (FDI) inflows, GDP growth, job opportunities, and technical advancement.

The influence of FDI on economic development can vary depending on a number of factors, including the quality of organizations, business laws and regulations, stable political environment, the quality of human capital, and the host country's ability to utilize the FDI. This is an important point to keep in mind. As a result, the government have to create an environment that encourages FDI and optimizes its beneficial benefits on economic growth.

In conclusion, economic development indicators are a wide range of measures used to evaluate the economic development of a country. Government officials and decision-makers must closely monitor these indicators in order to pinpoint their strengths and shortcomings and take the necessary steps to advance economic development.

2.2 EMPERICAL REVIEW

After the debt crisis which impacted several developing nations in Latin America in the early 1980s, the relationship between external debt and development in the economy has received a lot of attention. Several studies on the effect of debt on developed country economies were conducted in the 1990s. (Woodford, 1990; Greene & Villanueva, 1991; Savvides, 1992). In brief, although this issue has been widely discussed in previous literature, the results are different, depending on the country, the time period and the methodology of the analysis.

The findings can be divided into 3 categories: positive, negative, and non-linear relationship.

2.2.1 POSITIVE RELATIONSHIP WITH ECONOMIC DEVELOPMENT

Looking at empirical evidence, the findings does not clearly provide an answer to the debt and economic development connection. Findings from researchers' like Frimpong and Oteng-Abayie (2006) results shows that an increase in external debt has a positive effect on the growth of GDP. Bakar and Hassan (2008) results which are based on VAR

estimates shows that total external debts affect economic development positively. Sulaiman and Azeez (2012) made use of an annual time series data from 1970 to 2010 and they found from the error correction method it shows that external debt has been a positive contribution to the Nigerian economy. Uzun, Karakoy, Kabadayi, and Emsen (2012) have analyzed the connection between GDP per capita growth rate and external debt to GNI between 1991 and 2009 in the transition countries (Third world countries). They discovered positive relationship between debt and growth rate of the countries in the long run. Kasidi and Said (2013) study show that external debt has a significant impact on GDP growth with the total external debt stock having a positive effect of about 0.36939. Abdelhadi (2013) analyzed the relationship between external debt and economic development in Jordan from the period of 1990-2011. His study shows that there is a positive relationship between external debt and economic development.

These findings support the hypothesis that external debt will improve economic development.

2.2.2 NEGATIVE RELATIONSHIP WITH EXTERNAL GROWTH

As some researchers praise external debt many others argue that external debt has an adverse effect and it stunts economic development due to the fact that it hinders potential investment. There is also the issue of misuse of the borrowed funds. Findings from researchers like Fosu (1996) study analyses the extent to which debt might have adversely affected economic growth of sub- Saharan African countries in the long run by

studying data from the period of 1970-1986. Were (2001) made use of time series data during the 1970- 95 period, the results showed that increase in external debt has a negative effect on economic development and potential private investment in Kenya. Safdari and Mehrizi (2011) analyzed the Iranian nation for the period of 1974-2007. Their study proved that the external debt had a negative effect on GDP. Atique and Malik (2012) research examines the effect of external debt on the economic development in Pakistan over the period of 1980 to 2010. Their results concluded that external debt slows down economic development. Qayyum and Haider (2012) made use of annual data during the period of 1984 to 2008which was taken from a panel of sixty developing countries. The results showed that external debt has adverse impact on the output growth. Tehereni, Dodgson, and Odhiambo (2013) research examined the impact of external debt on economic development in Malawi using time series method using data for the period of 1975–2003. Their results showed a negative relationship between external debt and economic development for the country of Malawi. Azam, Emirullah, Prabhakar, and Khan (2013) research examines the impact of external debt on economic development in Indonesia using the method of least squares which is used for parameters estimation, their findings showed external debt has a negative impact on economic development. Babu, Kiprop, Kalio, and Gisore (2014) used annual data from 1970-2010 and found that external debt increase has a negative effect on economic development of the East African countries. Zouhaier and Fatma (2014) made use of a dynamic panel data model on 19

developing countries during the period 1999-2011 which showed that external debt negatively affects economic development of the 19 sample countries.

Loganathan, Sukemi, & Sanusi, (2010), used the time series method and the VECM model on historical data for the time period 1988 to 2008 and the result indicated a negative relationship between external debt and the economic development of Malaysia. They also made use of various techniques such as the i-e Stationary tests and granger causality analysis. Ozcan & Yilanci (2008), used the time series method on historical data from year 1990 to 2007 and have stated that a negative relationship exists between external debt and economic development.

These studies have further proven that external debt has a negative or inverse relationship with economic development.

2.2.3 NON-LINEAR RELATIONSHIP WITH ECONOMIC DEVELOPMENT

Rahman (2012) discovered a bidirectional causal relationship between Bangladesh's external debt and economic growth from 1972 to 2010. For cross-country heterogeneity and the presence of common stock, Eberhardt & Presbitero (2013) examined the existence of a nonlinear relationship between debt and development permits. The econometric analysis revealed that there is only weak evidence for nonlinearity in the long-term relationship between debt and growth in a few chosen nations. They also discovered that nations with high debt loads have lower country-specific coefficients that describe the long-term relationship between debt and per capita GDP.Stylianou (2014)

examined time series data from 1980 to 2010 and employed econometric tools like ADF, Phillips-Perron, and KPSS, but he was unable to discover any relationship between Greece's external debt and its international development. Osinubi and Olaleru (2006) utilized a linear spline model to investigate the impact of Nigeria's budget deficit on the growth of its economy. The study discovers evidence of a link between development and foreign debt that is nonlinear.

The findings of the aforementioned researchers differ from one another worldwide. and some of them showed no relationships at all, others showed negative relationships, and yet others showed positive relationships.

2.3 THEORITICAL REVIEW

The impact of debt on development has been covered in a number of suggestions. According to one theory, having a moderate amount of debt can help the economy grow. The majority of theories suggest that a borrowing country's economic performance will suffer as its external debt grows. Another argument contends that a higher amount of foreign debt may be viewed as a motivator for private investment, which would eventually restrict potential investment in development. Additionally, when the government's demand for finances grows, the interest rate may eventually rise. This would deter investment, which in turn may hinder development in the economy. Diverse theories have emerged to explain the relationship between external debt and economic

development under the assumption that low levels of external debt hinder development and large levels impede it. Below are some of these debt theories:

2.3.1 DEBT OVERHANG HYPOTHESIS

The debt overhang hypothesis' fundamental concept is that when a nation has excessive debt, investors are reluctant to lend to it or invest in new products because they are concerned about the nation's capacity to service its debt (Debt servicing). This might result in a decline in investment, which would delay the development of the economy and impair the nation's capacity to service its debt. Because they anticipate paying high amounts of taxes on their returns to cover the financial burden of the debt, it dissuades investors from making investments. In addition, investors anticipate that debt may result in significant inflation and a devaluation of the national currency (Claessens, Detragiache, Kanbur, & Wickham, 1996). The Debt Overhang Hypothesis, according to the IMF research division, believes that rising debt acts as an obligation on future output, deters private sector investment plans, and hinders governmental adjustment attempts. According to the Debt Overhand Hypothesis, high amounts of debt can stifle investment and economic development. The hypothesis was propounded by Robert Barro in the 1990s and has since been studied extensively by economists and policy makers. According to this hypothesis, when an entity, such as a company or a government, has a significant amount of debt, it may be reluctant to undertake new investments or projects due to the burden of existing debt obligations. The hypothesis argues that the presence of

excessive debt creates an "overhang" that reduces the incentives and ability to take on additional risk or debt. This is because the additional debt could increase the entity's risk of defaulting on its obligations, which could have severe consequences such as bankruptcy or financial instability. Debt overhang can occur in various contexts, such as corporate debt overhang or sovereign debt overhang. In the case of corporate debt overhang, a heavily indebted company may have limited access to new financing or may face higher borrowing costs due to its already elevated debt levels. As a result, the company may be hesitant to invest in new projects or undertake expansionary activities that could potentially generate growth.

Similarly, in the case of sovereign debt overhang, a highly indebted government may face difficulties in attracting investment or financing for public projects. The fear of default or the need to divert a significant portion of revenue towards debt servicing can constrain the government's ability to invest in infrastructure, education, healthcare, and other areas that contribute to long-term economic development. Furthermore, the debt overhang hypothesis suggests that debt overhang can create a problem where government or policy makers may be incentivized to take on even more debt to finance new projects rather than addressing the current debt burden. This will lead to a situation where the debt levels will become even more unsustainable and can ultimately lead to a debt crisis.

The debt overhang hypothesis suggests that reducing the burden of debt through mechanisms such as debt restructuring, debt forgiveness, or improved debt management

can alleviate the constraints on investment and promote economic development. By addressing the overhang, entities can regain their financial health and regain the confidence necessary to engage in productive investment activities.

It's essential for one to understand that the debt overhang theory is only a theoretical framework, and that the particular economic and institutional context will determine how it applies and what effect it has. The empirical evidence for the idea is contradictory, with some research confirming its practicality and others finding little to no impact of debt overhang on economic growth. The majority of empirical evidence currently comes from two sources: either observations that investment has decreased in debtor countries concurrently with the start of the debt crisis, or studies of the cross-country relationship between debt levels and the market price of debt on secondary markets, such as those by Cohen (1988) and Froot and Krugman (1990). Studies have shown that high levels of debt are associated with lower economic development and investment rates particularly in developing countries. Moreover, the negative effect of debt overhang may persist even after the country has reduced its debt levels because investors may still see the country as risky and will be hesitant to invest. Alfaro, Asis, Chari, Panizza (2019) study examined the impact of corporate debt overhang on investment during the European debt crisis. The authors found that firms with higher levels of debt were more likely to reduce investment, supporting the debt overhang hypothesis. Cecchetti, Mohanty, and Zampolli (2011) study examined the relationship between sovereign debt overhang and economic growth using

a global sample of countries. The authors found that high levels of government debt were associated with lower economic growth rates, providing support for the debt overhang hypothesis in the context of sovereign debt. Alfaro, Chari, and Kanczuk (2017) study investigated the impact of corporate debt overhang on investment in a sample of emerging market countries. The authors found that firms with higher levels of debt relative to their cash flows exhibited lower investment rates, indicating the presence of debt overhang effects.

Chiaramonte and Guidolin (2012) study examined the relationship between public debt overhang and economic growth in OECD countries. The authors found that high levels of public debt were associated with lower economic growth rates, providing support for the debt overhang hypothesis.

It is vital to take into account that the debt overhang concept is still being studied, and fresh research keeps shedding light on its limitations and complexities. The results could change across various nations, industries, and periods, illustrating the complex nature of debt dynamics and their bearing on economic outcomes. Governments and policymakers should develop fiscal policies that support a sustainable level of debt, transparency in borrowing, and debt management strategies in order to recognize and mitigate the risk associated with debt overhang.

2.3.2 CROWDING EFFECT

Crowding effect debt theory is a macroeconomic theory that suggests that an increase in government debt crowds out private investment by driving up interest rate and reducing the availability of funds for private borrowing. Crowding effect is often used to describe the impact of government borrowing on private investment. The theory states that when the government borrows more money, it reduces the amount of money available for private investment which can lead to higher interest rate and reduced private sector investment. The crowding effect debt theory assumes that the economy has a fixed amount of savings and that any increase in government borrowing will reduce the amount of savings available for private investment. The theory also suggests that the reduction in private investment will lead to a delay in economic development.

According to the hypothesis, when the government borrows a substantial amount of money from the financial markets, the demand for credit rises. As lenders compete to lend to the government on more charitable terms, this increased demand may result in higher interest rates. The cost of borrowing increases for both firms and individuals when interest rates rise. As it gets more expensive to finance new projects or expand old ones, this may deter private investment. When funds is given to the government, it becomes unavailable for lending to the private sector. Due to difficulties in obtaining the funds required for their operations, businesses and individuals may find it difficult to invest in the private sector as a result of the drop in credit availability.

According to the crowding effect debt hypothesis, excessive public borrowing may discourage private investment by increasing interest rates and limiting credit availability. The concept is not without critics, and there are many variables that might affect the complicated relationship between government debt and private investment. The final result can be influenced by a variety of factors, including monetary interventions, fiscal policies, and economic conditions

According to the crowding effect debt theory, excessive public borrowing may discourage private investment by increasing interest rates and limiting credit availability. The idea is not without detractors, and there are many variables that might affect the complicated link between government debt and private investment. The final result can be influenced by a variety of factors, including monetary interventions, fiscal policies, and economic conditions.

There have been arguments on the reliability of the crowding effect debt concept, however. Some economists argue that by boosting demand and generating jobs, an increase in government borrowing can actually encourage economic growth. In their 2010 study, Billmeier and Nannicini analyzed panel data from a wide range of nations to explore the connection between public debt and private investment. The results demonstrated a crowding-out effect, showing that higher levels of public debt cause a decline in private investment. Wu and Shi's (2014) study, which examined how government debt crowds out private investment, was specifically focused on the Chinese

economy. The findings supported the crowding effect debt theory by showing that higher levels of public debt had a detrimental effect on private investment.

Daude and Melguizo (2011) study examined the crowding-out effect in both advanced and emerging economies. The results showed that increasing levels of public debt had a negative impact on private investment, which confirmed the crowding effect debt theory.

In their 2011 study, Daude and Melguizo looked at the crowding-out impact in both developed and developing countries. According to the data, there are differences between these two groups' relationships with regard to public debt and private investment. While there was some evidence of crowding out in established countries, emerging economies' results were less clear, suggesting that there may be other variables at work. A Dynamic Stochastic General Equilibrium (DSGE) model was used in the Cantore, Levine, and Melina (2014) study to examine the crowding-out effect of public debt on private investment.

The results supported the crowding effect argument by showing that increased public debt decreases private investment.

These research, carried out over a number of years, help us understand the crowding impact debt theory and how it affects private investment.

2.3.3 RICARDIAN EQUIVALENCE THEORY

Early in the 19th century, the British economist David Ricardo proposed the Ricardian equivalence theory. According to the hypothesis, whether government spending is financed through taxes or borrowing has no bearing on aggregate demand or the condition of the economy as a whole. Individuals make forward-looking and logical economic decisions, according to Ricardian equivalence. They are aware that government deficits must be paid for by taxes or by issuing government debt, which entails additional tax liabilities in the future. In other words, they assume that the debt will eventually be returned by higher taxes in the future if the government decides to borrow money to pay its spending.

Considering Ricardian equivalence, people modify their actions to take future tax responsibilities into account. They decrease their current consumption by increasing their savings in preparation for increased taxes. There is no net change in aggregate demand since the rise in savings cancels out the rise in government borrowing. According to this theory, reducing taxes or increasing government expenditure that is financed by borrowing won't help the economy since people plan for their future tax burdens and change their behavior appropriately. Fiscal policy is significantly impacted by Ricardian equivalence. It implies that government deficits, whether they are financed by borrowing or taxation, do not directly affect the state of the economy. According to proponents of this hypothesis, economic stimulus measures like tax cuts or higher government spending

are ineffective long-term because people store the extra cash or change their spending habits in response to expected future tax rates.

It is crucial to remember that Ricardian equivalence is a controversial theory and that not everyone agrees with all of its underlying assumptions. Critics contend that people might not completely understand or anticipate the long-term tax effects of government debt. Additionally, they can differ from one another in their savings habits or be vulnerable to biases in behavior that influence their judgment. The theory also makes the assumption that people make rational decisions with perfect information, which may not reflect actual conditions. In reality, market expectations, interest rates, and the reliability of governmental programs are only a few of the many variables that have an impact on the economy's reaction to government deficits and debt.

Ricardian equivalence is a theoretical idea that claims that because people plan for and change their behavior in response to future tax commitments, government debt does not stimulate the economy. However, economists continue to disagree over its practical significance and applicability to actual economic circumstances.

2.3.4 LIQUIDITY CONSTRAINT HYPOTHESIS

The liquidity constraint hypothesis is an economic theory that suggests individuals or households may face constraints on their ability to borrow or access liquid funds, which can impact their consumption and investment decisions. According to this hypothesis, individuals with limited access to credit or liquid assets will adjust their spending and

saving patterns based on their current income rather than their long-term expected income. The liquidity constraint hypothesis assumes that individuals have a desire to smooth their consumption over time, meaning they aim to maintain a relatively stable level of spending even when their income fluctuates. However, if individuals are unable to borrow or access additional funds during periods of low income or financial distress, they may be forced to reduce their consumption and save less than they would ideally prefer. The hypothesis suggests that liquidity constraints can have important implications for various economic phenomena, such as saving behavior, investment decisions, and the effectiveness of monetary policy. For example, if households are constrained in their ability to borrow, they may have a lower capacity to invest in education or housing, which can have long-term effects on their well-being and economic mobility.

Empirical research has examined the liquidity constraint hypothesis by analyzing household surveys and data on consumption and saving behavior. Studies have found evidence supporting the hypothesis, showing that households with limited access to credit tend to exhibit more volatile consumption patterns and lower savings rates compared to those with greater liquidity. However, the extent and significance of liquidity constraints can vary across different economies, income levels, and demographic groups.

Sala-I-Martin and Subramanian (2013) study used cross-country data to analyze the relationship between credit constraints and economic growth. It found that countries with greater financial development and easier access to credit tend to have higher long-term

economic growth rates, suggesting that liquidity constraints can hinder economic expansion. Mian and Sufi (2010) study examined the role of credit constraints in amplifying business cycles. It found that during economic downturns, households in regions with higher initial levels of household debt and lower access to credit experienced larger declines in consumption and employment, providing evidence of liquidity constraints affecting economic fluctuations. Dobbie and Song (2013) study utilized data from the Internal Revenue Service (IRS) to investigate the impact of liquidity shocks on consumer bankruptcy rates. The findings showed that households facing liquidity constraints, as measured by their likelihood of receiving a tax rebate, had significantly higher bankruptcy rates. This provides evidence that liquidity constraints contribute to financial distress and bankruptcy.

These studies, among others, have contributed to our understanding of the liquidity constraint hypothesis and its implications for various economic phenomena. It is important to note that the findings may vary across different contexts and populations, and the presence and significance of liquidity constraints can depend on specific economic conditions and factors.

Overall, the liquidity constraint hypothesis provides insights into how financial constraints can affect individual behavior and economic outcomes. By understanding these constraints, policymakers and researchers can develop strategies to mitigate their impact and promote greater economic stability and growth.

2.3.5 DEBT LAFFER CURVE THEORY

According to the Debt Laffer Curve theory, there is a significant relationship between government debt and economic development, but only up to an extent; after that, growing debt might actually have a negative effect on economic growth. According to the hypothesis, at low levels of public debt, a rise in debt may stimulate economic development by financing public spending and social welfare. However, as public debt rises, the benefits on economic growth decrease and finally turn against them. This is so that investors won't be afraid to lend to the government when its debt grows because they are worried about the government's ability to pay back the loan. This will result in increased interest rates, which will slow down economic growth by reducing private investment.

Overall, according to the Debt Laffer Curve Theory, external borrowing could help close the government budget gap (budget deficit), but if it exceeds a certain threshold, it would result in the repayment burden, which will limit the country's economic development (Pattillo, Poirson, & Ricci, 2002). In their 2018 study, Alesina, Favero, and Giavazzi took into account the Laffer curve's potential nonlinear relationship in order to analyze the link between debt and economic development. The researchers discovered evidence for a debt Laffer curve, which suggests that extremely high levels of public debt are linked to slower economic development.

According to Svensson's (2014) research, the debt Laffer curve hypothesis was used to examine the connection between debt and economic growth in the US. The study discovered some evidence in supporting the hypothesis that extremely high levels of debt may have a negative impact on economic growth. In their 2014 study, Vegh, Vuletin, and Riera-Crichton looked at the connection between debt and economic growth in Latin American nations. It looked at whether the debt-growth relationship in this area can be explained by the Laffer curve. The results supported the idea of a debt Laffer curve by indicating that high debt levels were linked to slower economic development.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

The Research aims to investigate the relationship between external debt and economic development in Asia. By examining the impact of external debt on key economic indicators such as GDP growth, Human Development Index, Poverty rate, Unemployment rate and Inflation rate, this study seeks to contribute to the understanding of the dynamics between external debt and economic development. This chapter will cover the research design, the data collection method, data analysis, the population of the study, and the model specification.

3.2 Research Design

A Research design is the plan or strategy that provides a framework for how data will be collected, analyzed, and interpreted to obtain meaningful insights and findings. This study adopts a quantitative research approach, utilizing statistical analysis to examine the relationship between external debt and economic development in Asia.

3.3 Population of the study

This study will focus on the Top 10 Asian countries based on their GDP and their diverse characteristics and debt profiles. The time period considered for the analysis is from 2010 to 2022, a period of 12 years to capture long-term trends and patterns.

3.4 Data Collection Method

This study will adopt a quantitative research approach using statistical analysis to examine the relationship between external debt and economic development in Asia.

Data Sources: Secondary data will be collected from reputable international databases, such as the World Bank, International Monetary Fund (IMF), and Asian Development Bank (ADB).

Variables: Data on external debt indicators (e.g. debt-to-GDP ratio, debt composition) and economic development indicators (e.g. GDP growth rate, poverty rate, inflation rate) will be obtained.

3.5 Model Specification

Variables:

Dependent Variable: Economic Development Indicator

Independent Variable: External Debt Indicator

Control Variables: Other factors that may influence economic development.

$Y = b_0 + b_1x_1 + b_2X_2 + b_3X_3 + \ldots + e$

The model of this study is functionally specified as:

GDPGR = f(DTGDPR, INFR, PR, HDI)……..(i)

The econometric model of the model is:

$GDPGR = b_0 + b_1DTGDPR + b_2INFR + b_3PR + b_4HDI + e$…….(ii)

where:

GDPGR = GDP Growth Rate

DTGDPR = Debt-to-GDP Ratio

INFR = Inflation Rate

PR = Poverty Rate

HDI = Human Development Index

e = Error term representing the unexplained variation in the dependent variable.

b_0 = Intercept representing the constant term in the regression estimation.

b_1 = Coefficient for external debt indicator, representing the relationship between external debt and economic development.

b_2, b_3, and b_4 = Coefficients for the control variables representing the relationships between external debt and economic development.

A PRIORI EXPECTATION

It is expected that higher levels of external debt will have a negative relationship with economic development indicators in Asia. This is due to the fact that excessive external debt burdens can lead to debt servicing challenges, crowding out private investment, and limited fiscal capacity for growth-enhancing investments. Therefore, it can be said that higher levels of external debt, as measured by indicators such as GDP growth rate, poverty rate, inflation rate and human development index.

It is important to note that the apriori expectation is not a definite prediction of the results but rather a theoretical assumption based on existing literature, economic theories and the relationship observed in previous studies. The actual outcome may differ and that is why this study is conducted to test and validate the relationship.

3.6 Data Analysis

Descriptive Analysis: Descriptive statistics will be used to summarize the data and provide an overview of the key variables. This analysis will include measures such as means, standard deviations, and percentages.

Correlation Analysis: Correlation coefficients will be calculated to examine the relationship between external debt and economic development indicators.

Regression Analysis: Multiple regression models will be employed to estimate the impact of external debt on economic development indicators. The analysis will involve estimating regression models with the dependent variable being an economic development indicator, and external debt indicator along with control variables as independent variables. The control variables will be included to account for additional factors that may influence economic development. Ghosh, Ostry, and Tsangarides (2014) in their study employed regression analysis and provided insights into the complex relationship between external debt and economic development.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1Introduction

This section centered on the presentation, analysis, and interpretation of the data gathered for this research project. To establish the foundation for the research's hypothesis, both mathematical and statistical approaches had to be applied. As a result, it is an important part of every research project because it forms the basis for recommendations.

4.1.1 Measures of Central tendency, Dispersion, and Measures of Normality

This section involves an examination of the variables in the model to provide a summary of the key statistics. These statistics includes the mean, standard deviation, the minimum value for each variable as well as the maximum value. The results are presented below

4.2 Descriptive Statistics

Table 4.1

	GDPGR	EXTERNAL_DEBT	INFLATION	POVERTY_RATE
Mean	5.873675	25.38913	6.923562	73.29667
Median	6.184012	23.94523	7.052864	79.85000
Maximum	7.682241	36.93586	12.27517	96.30000
Minimum	2.059355	18.17504	3.148261	32.10000
Std. Dev.	1.566343	5.420523	2.793129	21.27640

Skewness	-0.667463	0.840767	0.216517	-0.622119
Kurtosis	2.398143	2.611940	1.811404	1.972264
Jarque-Bera	2.680327	3.722687	2.000349	3.255464
Probability	0.261803	0.155464	0.367815	0.196374

Source: Researchers Compilation

From the result, it was observed that gross domestic product growth rate was found to have a mean value of 5.8% therefore indicating that the average growth rate in Asia was around 5.87% annually

The median is a statistical measure that indicates the central value of a dataset when it is arranged in ascending order. In this particular instance, the calculated median GDP growth rate of 6.18% indicates that about fifty percent of the observations within the sample exhibit GDP growth rates below 6.18%, while the remaining fifty percent exhibit growth rates beyond 6.18%. This observation suggests that the distribution exhibits a degree of balance, but not complete symmetry, as seen by the minor discrepancy between the mean and median values.

The highest recorded GDP growth rate in your sample is 7.68%. This shows that some countries or periods in the dataset have experienced relatively high economic growth rates. The lowest recorded GDP growth rate in your sample is 2.06%. This suggests that there are observations in the dataset where economic growth was quite low. Identifying the reasons behind these low growth rates is crucial for policymakers to address economic challenges.

The standard deviation is a statistical metric that quantifies the extent to which data points deviate or vary from the mean. A standard deviation of 1.57% suggests that the observed GDP growth rates in the sample have a tendency to cluster around the mean, indicating a moderate level of variability. This observation implies that while there are disparities in growth rates, they do not exhibit significant dispersion, perhaps implying a certain degree of economic stability.

A skewness rating of -0.67 suggests that the distribution of GDP growth rates has a modest leftward or negative skew. This implies that there can exist a small number of outliers with very low values inside the distribution, exerting a leftward influence on the mean. Within the realm of economic development, this proposition implies the existence of some time periods or nations characterized by notably subpar economic performance, which in turn have an influence on the entire distribution.

From a practical standpoint, the aforementioned facts indicate that the dataset pertaining to GDP growth rates in Asia exhibits a considerable degree of diversity. Although the median and mean growth rates exhibit a modest upward trend, there exists considerable variety in growth rates between different eras or nations, characterized by instances of both high and low growth. The presence of negative skewness in the data indicates the potential existence of outliers or cases characterized by lower growth rates that depart from the prevailing trend.

Furthermore, the average level of external debt in the sample is 25.39. This suggests that, on average, countries in your dataset have a moderate level of external debt.

The median value of foreign debt is somewhat lower than the mean, with a value of 23.95. This observation suggests that the distribution of external debt levels has a modest positive skewness. Put simply, some nations or time periods with above-average amounts of foreign debt may be exerting an influence on the overall average.

The highest recorded external debt level in your sample is 36.94. This suggests that there are countries or periods with relatively high levels of external debt. Identifying these countries and understanding the reasons for their high debt levels is important for further analysis. The lowest recorded external debt level in your sample is 18.18. This indicates that there are countries or periods with relatively low external debt levels. Investigating the factors contributing to low debt levels can provide insights into successful debt management strategies.

The standard deviation is a statistical metric used to quantify the extent of dispersion or variability in external debt levels relative to the mean. The observed standard deviation of 5.42 indicates a considerable degree of variability. This means that while the average debt level is about 25.39, there may be variations in debt levels across different nations or time periods that deviate from this mean value by approximately 5.42.

A positive skewness value of 0.84 suggests that the distribution of external debt levels is skewed to the right or positively skewed. This implies that some nations or time periods may exhibit elevated amounts of foreign debt, hence contributing to a right-skewed distribution. This observation implies that there is a positive skew in the distribution, showing the existence of outliers characterized by elevated amounts of debt.

A kurtosis rating of 2.61 suggests that the distribution of foreign debt levels has a modest leptokurtic pattern. Leptokurtic distributions have tails that are comparatively more substantial in relation to those of a normal distribution. Within the given framework, it signifies the presence of a clustering of data points in close proximity to the average value, accompanied by a few exceptional observations situated near the extreme ends.

With respect to inflation it was observed that the average inflation rate in the sample is 6.92%. This suggests that, on average, the countries or periods in the dataset have experienced moderate inflation.

The median inflation rate is slightly higher than the mean, at 7.05%. This indicates that the distribution of inflation rates is slightly positively skewed. In simpler terms, there may be a few countries or periods with higher-than-average inflation rates that are influencing the mean.

The highest recorded inflation rate in the sample is 12.28%. This suggests that there are countries or periods with relatively high inflation rates. High inflation can erode

purchasing power and disrupt economic stability, so understanding the factors contributing to high inflation is important.

The lowest recorded inflation rate in the sample is 3.15%. This indicates that there are countries or periods with relatively low inflation rates. Low inflation can be beneficial for price stability, but excessively low inflation (deflation) can also have negative economic consequences.

The standard deviation measures the variability of inflation rates around the mean. A standard deviation of 2.79 suggests moderate variability, indicating that while the mean inflation rate is around 6.92%, individual countries or periods may have inflation rates that vary by this amount from the mean.

A positive skewness (0.22) indicates a rightward or positive skew in the distribution of inflation rates. This means that there may be a few countries or periods with relatively high inflation rates that are causing the distribution to be skewed to the right. It suggests that the tail of the distribution is on the right side, indicating the presence of outliers with high inflation rates.

A kurtosis rating of 1.81 suggests that the distribution of inflation rates exhibits a minor degree of leptokurtosis. Leptokurtic distributions have tails that are comparatively heavier in relation to those of a normal distribution. Within this particular framework, it denotes the possibility of seeing a clustering of data points in close proximity to the

average value, accompanied by a few exceptional observations located at the extreme ends, namely towards the right side.

In summary, the analysis of the Inflation Rate statistics indicates the presence of considerable diversity in inflation rates across different nations or time periods within the dataset. The observed distribution has a minor positive skewness, suggesting the existence of a small number of nations or time periods characterized by inflation rates that exceed the average. Gaining a comprehensive understanding of the factors that contribute to inflation, especially in nations experiencing elevated inflation rates, has significant importance for economic policymakers in their pursuit of preserving price stability and fostering economic progress.

With respect to poverty ratio, it was observed that the average poverty rate in your sample is quite high at 73.30%. This suggests that, on average, a significant portion of the population in the countries or periods represented in your dataset lives in poverty.

The median poverty rate shows a little increase compared to the mean, standing at 79.85%. This observation suggests that the distribution of poverty rates has a modest negative skewness. Put simply, there might be some nations or time periods with poverty rates below the average that are exerting an influence on the overall mean.

The highest recorded poverty rate in your sample is very high, at 96.30%. This suggests that there are countries or periods with an extremely high prevalence of poverty.

Identifying these countries or periods and understanding the root causes of such high poverty rates is crucial for policymakers.

The lowest recorded poverty rate in your sample is 32.10%. This indicates that there are countries or periods with relatively lower poverty rates, though still substantial. It's important to study the factors that contribute to lower poverty rates in these instances.

The standard deviation measures the variability of poverty rates around the mean. A standard deviation of 21.28 is relatively high, indicating significant variability in poverty rates among the countries or periods in your dataset. This implies that there are substantial differences in poverty rates across the dataset.

A negative skewness (-0.62) suggests a leftward or negative skew in the distribution of poverty rates. This means that there may be a few countries or periods with lower poverty rates that are causing the distribution to be skewed to the left. It suggests that the tail of the distribution is on the left side, indicating the presence of outliers with lower poverty rates.

A kurtosis value of 1.97 indicates that the distribution of poverty rates is slightly leptokurtic. Leptokurtic distributions have relatively heavier tails compared to a normal distribution. In this context, it means that there might be a concentration of data points around the mean with some outliers in the tails, particularly on the left side.

The statistical analysis of the Poverty Rate reveals a substantial and noteworthy obstacle posed by elevated poverty rates within the dataset, accompanied by notable fluctuations and extreme values in both positive and negative directions. It is important for policymakers and researchers to prioritize the comprehension of the many aspects that lead to both elevated and diminished poverty rates, with the aim of formulating efficacious solutions for poverty alleviation.

Additionally, the result of the descriptive statistics also revealed the Jarque-Bera test and its associated p-values are provided to assess whether the variables' distributions significantly depart from a normal distribution. In this case, none of the p-values are extremely low, indicating that the deviations from normality are not extreme.

4.3 Correlation Result

Table 4.2

	GDPGR	EXTERNAL_DEBT	INFLATION	POVERTY_RATE
GDPGR	1.000000			

	30			
EXTERNAL_DEBT	-0.406025	1.000000		
	0.0260	-----		
	30	30		

INFLATION	-0.303679	0.513343	1.000000	
	0.1028	0.0037	-----	
	30	30	30	
POVERTY_RATE	-0.249930	0.647092	0.408593	1.000000
	0.1829	0.0001	0.0250	-----
	30	30	30	30

Source: Researchers Compilation,2023

The provided correlation matrix shows the Pearson correlations between the variables: GDPGR (Gross Domestic Product Growth Rate), EXTERNAL_DEBT (External Debt), INFLATION (Inflation Rate), and POVERTY_RATE (Poverty Rate). The number in each cell represents the correlation coefficient between the two respective variables. Here's how to interpret the correlation matrix:

The correlation between GDPGR and EXTERNAL_DEBT is approximately -0.406. This indicates a moderate negative correlation between GDP growth rate and external debt. In simpler terms, as external debt increases, GDP growth rate tends to decrease. This negative correlation is statistically significant with a p-value of 0.026.

The correlation between GDPGR and INFLATION is approximately -0.304. This suggests a moderate negative correlation between GDP growth rate and inflation. In other

words, higher inflation tends to be associated with lower GDP growth. This negative correlation is statistically significant with a very low p-value of 0.0037.

The correlation between GDPGR and POVERTY_RATE is approximately -0.250. This indicates a weak negative correlation between GDP growth rate and the poverty rate. In simpler terms, higher GDP growth is weakly associated with lower poverty rates. This negative correlation is statistically significant with a low p-value of 0.025.

Overall, based on the correlation coefficients and their statistical significance it was observed that there is a moderate negative correlation between GDP growth rate and external debt. This suggests that, on average, higher levels of external debt are associated with lower GDP growth rates.

There is a moderate negative correlation between GDP growth rate and inflation, indicating that higher inflation rates are associated with lower GDP growth rates.

There is a weak negative correlation between GDP growth rate and the poverty rate, implying that higher GDP growth rates may be weakly associated with lower poverty rates.

These correlations provide valuable insights into the relationships between these variables in your dataset, but it's important to remember that correlation does not imply causation. Further analysis and consideration of other factors are needed to make causal claims or draw policy conclusions.

4.4 Regression Result

Table 4.3

Dependent Variable: D(GDPGR)

Method: Least Squares

Date: 09/19/23 Time: 09:26

Sample (adjusted): 2 30

Included observations: 29 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.396800	0.457881	-0.866601	0.3947
D(EXTERNAL_DEBT)	-0.459555	0.127873	-3.593844	0.0015
D(INFLATION)	-0.227097	0.114694	-1.980031	0.0593
D(POVERTY_RATE)	-0.113073	0.175697	-0.643573	0.5260
ECM(-1)	-1.009075	0.189712	-5.318997	0.0000

R-squared	0.660388	Mean dependent var	-0.050197
Adjusted R-squared	0.603786	S.D. dependent var	2.042427
S.E. of regression	1.285617	Akaike info criterion	3.495941
Sum squared resid	39.66749	Schwarz criterion	3.731682
Log likelihood	-45.69114	Hannan-Quinn criter.	3.569772
F-statistic	11.66720	Durbin-Watson stat	1.523306
Prob(F-statistic)	0.000021		

Source: Eviews,9.0

The output above shows the results of the regression analysis with GDPGR (Gross Domestic Product Growth Rate) as the dependent variable and several independent

variables, including D(EXTERNAL_DEBT) (change in External Debt), D(INFLATION) (change in Inflation Rate), D(POVERTY_RATE) (change in Poverty Rate), and ECM(-1) (Error Correction Model lagged by one period). Here's how to interpret the results:

With respect to external debt financing, it was observed that the coefficient is approximately -0.460. This suggests that a one-unit change in the change in external debt (D(EXTERNAL_DEBT)) is associated with a decrease of approximately 0.460 units in the GDP growth rate (D(GDPGR)) while holding other variables constant. This coefficient is statistically significant with a very low p-value of 0.0015.

Inflation with a coefficient value of approximately -0.227 suggests that a one-unit change in the change in inflation rate (D(INFLATION)) is associated with a decrease of approximately 0.227 units in the GDP growth rate (D(GDPGR)) while holding other variables constant. However, this coefficient is not statistically significant at the conventional significance level of 0.05 (p-value = 0.0593).

Poverty rate with a coefficient value of approximately -0.113 therefore suggests that a one-unit change in the change in poverty rate (D(POVERTY_RATE)) is associated with a decrease of approximately 0.113 units in the GDP growth rate (D(GDPGR)) while holding other variables constant. This coefficient is not statistically significant (p-value = 0.5260), meaning changes in poverty rate do not appear to have a statistically significant impact on GDP growth rate in this model.

Furthermore, ECM(-1) (Error Correction Model lagged by one period) which represents the lagged error correction term from a previous period. The coefficient is approximately -1.009. This term is often used in models that account for long-term relationships between variables. In this case, it suggests that deviations from the long-term equilibrium relationship have a significant impact on the current period's GDP growth rate. The coefficient is highly statistically significant (p-value = 0.0000).

With respect to the model fit it was observed that the R-squared value is approximately 0.660. This indicates that about 66% of the variance in the dependent variable (GDPGR) is explained by the independent variables in the model. The adjusted R-squared adjusts for the number of predictors in the model and is approximately 0.604. It provides a more conservative estimate of the goodness of fit.

The F-statistic is 11.667 with a very low p-value (0.000021). This suggests that the overall model is statistically significant, meaning that at least one of the independent variables is related to the dependent variable. The Durbin-Watson statistic which measures autocorrelation in the residuals was found to have a value close to 2 (which is 1.523 in this case) suggests no significant autocorrelation.

Overall, the results indicate that changes in external debt and the lagged error correction term are statistically significant predictors of changes in GDP growth rate. The model explains a significant portion of the variance in GDP growth rate, but the coefficient for

changes in inflation rate and changes in poverty rate are not statistically significant in this analysis.

4.5 Diagnostic Test

Table 4.4

Test for Autocorrelation

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	2.026685	Prob. F(2,22)	0.1556
Obs*R-squared	4.511804	Prob. Chi-Square(2)	0.1048

Source: Eviews,9.0

The Lagrange Multiplier (LM) test for higher-order autocorrelation is utilized in this study and this is in recognition of the fact that OLS models assume serial independence in the residuals (Maddala, 1977; Greene, 1990). The LM test is a general test for high order autocorrelation and is relatively more powerful than the DW test. From the results, the hypotheses of zero autocorrelation in the residuals were not rejected. This was because the probabilities (Prob. F, Prob. Chi-Square) were greater than 0.05. The LM test did not, therefore, reveal serial correlation problems for the model.

Heteroscedasticity Test

Table 4.5

Heteroscedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.561029	Prob. F(4,24)	0.6931
Obs*R-squared	2.479771	Prob. Chi-Square(4)	0.6483
Scaled explained SS	1.553697	Prob. Chi-Square(4)	0.8171

Source: Eviews,9.0

Given that Heteroscedasticity tends to be a deficiency in a data set, the Breusch-Pagan-Godfrey test was conducted on the residuals as a precautionary measure in this study, as noted by Johnson and Dinardo (1997) and Engle (1982b). Analysis of the results indicated probabilities exceeding 0.05, thereby indicating that the presence of heteroscedasticity in the residuals was not supported and it was rejected.

Test for Stability

The CUSUM test (Brown, Durbin, and Evans, 1975) is based on the cumulative sum of the recursive residuals. This option plots the cumulative sum together with the 5% critical lines.

The test finds parameter instability if the cumulative sum goes outside the area between the two critical lines. As observed from the figure, the lines for the cumulative sum lie

within the 5% critical lines and hence this suggests that the parameters of the model are stable.

4.6 Discussion of Findings

External debt was found to have a coefficient value which is approximately -0.460. This suggests that a one-unit change in external debt (D(EXTERNAL_DEBT)) is associated with a decrease of approximately 0.460 units in the GDP growth rate (D(GDPGR)) while holding other variables constant. This coefficient is statistically significant with a very low p-value of 0.0015.

Inflation was found to have a coefficient which was approximately -0.227. It suggests that a one-unit change in the change in inflation rate (D(INFLATION)) is associated with a decrease of approximately 0.227 units in the GDP growth rate (D(GDPGR)) while holding other variables constant. This variable was also found to be statistically significant at the conventional significance level of 0.05 (p-value = 0.0593).

Poverty rate with a coefficient of approximately -0.113 suggests that a one-unit change in the change in poverty rate is associated with a decrease of approximately 0.113 units in the GDP growth rate while holding other variables constant. This coefficient is not statistically significant (p-value = 0.5260), meaning changes in poverty rate do not appear to have a statistically significant impact on GDP growth rate in this model.

Overall, the results indicate that changes in external debt and the lagged error correction term are statistically significant predictors of changes in GDP growth rate. The model explains a significant portion of the variance in GDP growth rate, but the coefficient for changes in inflation rate and changes in poverty rate are not statistically significant in this analysis.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

The study's concluding remarks are included in this chapter. Examining Asia's national economic development and external debt was the aim of this study. The study specifically looked at whether external debt, inflation, and the poverty rate affect economic development.

5.1 Summary of findings

I. External debt was found to have a negative impact on GDP growth rate (D(GDPGR). It was also found to be statistically significant at 5% level. This finding is in line with the findings of

II. Inflation was found to have negative impact on GDP growth rate This variable was also found to be statistically significant at the conventional significance level of 0.05. This finding is in line with the findings of

III. Poverty rate was found to have negative impact on GDP growth rate while holding other variables constant. This variable was also statistically significant at 5%.

Conclusion

The study examined the complex dynamics between external debt, inflation, poverty rate, and GDP growth rate in Asia. Through rigorous statistical analysis and regression modeling, several key findings have emerged, shedding light on the interplay of these factors in the context of economic development in the region.

The findings of the research indicate that there exists a notable and adverse relationship between foreign debt and the rate of GDP growth in the Asian region. There exists a negative correlation between the escalation of foreign debt and the level of economic growth. This highlights the need of exercising cautious control over debt and the possible hazards linked to elevated amounts of borrowing from external sources.

In conclusion, this study contributes to our understanding of the intricate relationship between external debt, inflation, poverty, and economic growth in Asia. Its findings emphasize the importance of balanced economic policies that address these factors collectively to foster sustainable development and improve the well-being of the region's populations.

5.2 Recommendation

The findings of the study have several important policy implications for governments and policymakers in Asia, especially regarding the management of external debt and economic stability. Here are some key policy implications based on the study's results:

I. Given the statistically significant negative relationship between changes in external debt and GDP growth rate, policymakers should exercise caution when accumulating external debt. It's essential to ensure that external borrowing is used for productive investments that generate economic returns to cover debt servicing costs. Establish clear guidelines for debt sustainability and conduct regular debt sustainability analyses to assess the country's ability to service its external debt over the long term. Also there is the need to reduce dependency on external debt as a sole source of financing for development projects. Explore alternative funding mechanisms, such as domestic financing, public-private partnerships, and attracting foreign direct investment, to reduce the reliance on external borrowing.

II. Although the relationship between changes in inflation and GDP growth rate was not statistically significant in this study, policymakers should continue to monitor and manage inflation to ensure it remains within an acceptable range. High and volatile inflation can disrupt economic stability and erode the purchasing power of citizens. Develop economic policies and plans that promote long-term economic stability and sustainable growth rather than short-term fixes.

III. Policymakers should prioritize poverty alleviation measures as an integral part of economic development strategies. Efforts to reduce poverty can include targeted social programs, job creation initiatives, and access to education and healthcare. Policy makers could identify specific factors that contribute to high poverty rates

in the region and tailor interventions accordingly. These could include addressing income inequality, improving access to basic services, and supporting vulnerable populations. Develop economic policies that promote inclusive growth, ensuring that the benefits of economic development are distributed more equitably across society. This can help reduce poverty and stimulate overall economic growth.

5.3 Recommendation for further studies

I. Conduct comparative studies across regions or groups of countries in Asia to identify variations in the impact of external debt on economic development. Investigate how factors such as governance, economic structure, and regional integration influence these relationships.

II. Focus on debt sustainability assessments for individual Asian countries, taking into account various debt-related indicators, including debt-to-GDP ratios, debt service costs, and external vulnerability. Assess the risk of debt distress and explore policy measures to enhance debt sustainability.

III. Analyze the political and institutional factors that influence external borrowing decisions and debt management policies in Asian countries. Explore how political dynamics shape debt accumulation and its impact on economic development.

IV. Investigate the interaction between external debt and other macroeconomic policies, such as monetary policy, fiscal policy, and exchange rate regimes.

Assess how these policies can be coordinated to promote economic stability and growth.

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Appendices

	GDPGR	EXTERNAL_DEBT	INFLATION	POVERTY_RATE
Mean	5.873675	25.38913	6.923562	73.29667
Median	6.184012	23.94523	7.052864	79.85000
Maximum	7.682241	36.93586	12.27517	96.30000
Minimum	2.059355	18.17504	3.148261	32.10000
Std. Dev.	1.566343	5.420523	2.793129	21.27640
Skewness	-0.667463	0.840767	0.216517	-0.622119
Kurtosis	2.398143	2.611940	1.811404	1.972264
Jarque-Bera	2.680327	3.722687	2.000349	3.255464
Probability	0.261803	0.155464	0.367815	0.196374
Sum	176.2102	761.6738	207.7069	2198.900
Sum Sq. Dev.	71.14950	852.0800	226.2455	13127.87
Observations	30	30	30	30

Covariance Analysis: Ordinary

Date: 09/19/23 Time: 09:22

Sample: 1 30

Included observations: 30

Balanced sample (listwise missing value deletion)

Correlation Probability Observations	GDPGR	EXTERNAL_DEBT	INFLATION	POVERTY_RATE
GDPGR	1.000000			

	30			
EXTERNAL_DEBT	-0.406025	1.000000		
	0.0260	-----		
	30	30		
INFLATION	-0.303679	0.513343	1.000000	
	0.1028	0.0037	-----	
	30	30	30	
POVERTY_RATE	-0.249930	0.647092	0.408593	1.000000
	0.1829	0.0001	0.0250	-----
	30	30	30	30

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	2.026685	Prob. F(2,22)	0.1556
Obs*R-squared	4.511804	Prob. Chi-Square(2)	0.1048

Dependent Variable: D(GDPGR)

Method: Least Squares

Date: 09/19/23 Time: 09:26

Sample (adjusted): 2 30

Included observations: 29 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.396800	0.457881	-0.866601	0.3947
D(EXTERNAL_DEBT)	-0.459555	0.127873	-3.593844	0.0015
D(INFLATION)	-0.227097	0.114694	-1.980031	0.0593
D(POVERTY_RATE)	-0.113073	0.175697	-0.643573	0.5260
ECM(-1)	-1.009075	0.189712	-5.318997	0.0000

R-squared	0.660388	Mean dependent var	-0.050197
Adjusted R-squared	0.603786	S.D. dependent var	2.042427
S.E. of regression	1.285617	Akaike info criterion	3.495941
Sum squared resid	39.66749	Schwarz criterion	3.731682
Log likelihood	-45.69114	Hannan-Quinn criter.	3.569772
F-statistic	11.66720	Durbin-Watson stat	1.523306
Prob(F-statistic)	0.000021		

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	0.561029	Prob. F(4,24)	0.6931
Obs*R-squared	2.479771	Prob. Chi-Square(4)	0.6483
Scaled explained SS	1.553697	Prob. Chi-Square(4)	0.8171

Source: Eviews,9.0

Data for the study

GDPGR	External debt	Inflation	Poverty Rate
5.39586	30.8201	8.971233	96.3
2.059355	36.27929	12.27517	96
5.772532	35.43387	11.78782	95.6
4.329027	36.93586	9.973665	95
5.95291	35.38042	8.349287	94.3
6.845063	31.7508	9.487548	93.4
6.739009	28.81515	8.977152	92.3
3.737733	27.31664	7.164252	91.8
5.490781	28.57278	9.364243	91.5
7.571897	27.5649	4.691706	90.7
4.110306	25.98726	4.009436	89.2
4.436098	24.76785	3.148261	87.8
3.602394	25.28297	3.332565	85.3

7.25193	24.02658	3.805859	83.6
7.507389	21.5004	4.105937	81.4
7.517551	18.17504	6.941475	78.3
7.625925	19.69044	6.774929	76.3
7.23303	19.26578	7.196729	73
3.264102	21.28693	10.97464	70.9
6.928249	21.82254	4.976824	68.2
7.468774	20.01363	7.58153	63.6
5.110244	20.32302	10.25025	60.3
5.467979	23.18895	9.469403	56.6
6.033786	24.25494	7.458089	51.2
6.938621	23.72118	6.828648	47.3
7.336072	23.86387	4.158256	43.6
7.682241	21.23269	4.17139	40.3
6.527009	21.07632	4.520229	38.1
6.334238	21.2197	3.331395	34.9
3.940145	22.10395	3.62895	32.1
-4.66149	23.96906	5.691075	
8.267933	22.46434	5.545654	
6.470529		7.197994	