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Exploring the Impact of Foreign Direct Investment, Consumption, Inflation, and Unemployment on GDP per Capita

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Abstract

This study provides a comprehensive analysis of the economic landscape in South Asia by examining key variables such as foreign direct investment (FDI), final consumption expenditure, inflation, and unemployment. Covering the period from 1991 to 2014, the research captures evolving economic trends across Pakistan, India, Bangladesh, and Sri Lanka. Utilizing data sourced from the World Bank, the study explores both the individual impacts of these variables and their collective influence on GDP per capita. This approach offers valuable insights into the complex dynamics shaping economic growth in the region, informing policymakers, economists, and stakeholders. The findings suggest that inflation exhibits a positive but statistically insignificant relationship with GDP per capita across these South Asian nations, indicating that while inflation may influence economic growth, its impact lacks statistical significance. However, the results highlight a significant positive relationship between FDI and GDP per capita, emphasizing the importance of policies aimed at attracting foreign investment to enhance economic development. Governments should implement measures to facilitate FDI inflows as a means to stimulate growth. Additionally, controlling inflation through effective monetary and fiscal policies is recommended to ensure macroeconomic stability and sustainable development. The study further underscores the role of GDP per capita growth in reducing unemployment, suggesting that economic expansion policies can contribute to job creation in the region. By focusing on FDI attraction, inflation control, and economic growth strategies, South Asian nations can enhance their development trajectories and foster long-term economic prosperity.

Keywords: Foreign Direct Investment, Consumption Expenditure, Inflation, Unemployment, GDP per Capita

1. INTRODUCTION

Inflation, final consumption expenditure, and FDI are chosen as key variables for their potential impact on GDP per capita, serving as indicators of overall economic performance and development. This approach is consistent with earlier findings that emphasize the importance of macroeconomic indicators such as foreign direct investment and inflation in shaping national income levels (Zahid, 2018; Ahmad, 2018). Through empirical analysis and statistical techniques, the study seeks to uncover the extent to which these variables contribute to variations in GDP per capita, providing valuable insights for policymakers, economists, and stakeholders interested in understanding and fostering economic growth in the Asian region (Khan, 2019; Iqbal & Raza, 2018). However, three other variables, namely final consumption expenditure, unemployment, and GDP per capita, are found to be non-stationary at the level but become stationary at the first difference. This implies that these variables may exhibit trends or patterns in their original form, but these patterns can be eliminated by differencing them once. It is noteworthy that GDP per capita represents the total market value of all final goods and services produced within a country in a given period, and its stationarity at the first difference indicates a need to account for changes over time to analyze its behavior accurately.

Gross Domestic Product (GDP) serves as a comprehensive measure of a country's economic performance and development. It encompasses the total market value of all final goods and services produced within a nation's borders during a specific period, typically annually or quarterly. GDP is often considered an essential indicator of macroeconomic health and is crucial for policymakers, economists, and investors alike. This is reinforced by prior studies highlighting the connection between macroeconomic variables, investment patterns, and national income (Zahid, 2018; Khan,

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2019). There are two primary approaches to calculating GDP: the expenditure approach and the income approach. The expenditure approach sums up all expenditures made on final goods and services within the economy, including consumption, investment, government spending, and net exports (exports minus imports). On the other hand, the income approach calculates GDP by summing up all incomes earned by individuals and businesses within the economy, including wages, profits, rents, and taxes minus subsidies. Past work also shows the significance of these components in shaping household welfare and financial markets (Iqbal & Raza, 2018; Ahmad, 2018). Each component of GDP reflects different aspects of economic activity. Consumption expenditure represents household spending on goods and services, investment reflects business spending on capital goods and construction, government expenditure captures public sector spending on goods, services, and infrastructure, while net exports represent the difference between exports and imports (Ali, 2015).

Inflation, which refers to the general increase in prices of goods and services over time, can indeed impact various economic variables, including GDP. Past studies have shown that inflationary pressures influence investment, interest rates, and macroeconomic volatility in developing economies (Zahid, 2018; Iqbal & Raza, 2018). High inflation rates can distort economic signals, leading to misallocations of resources and affecting consumer and business behavior. For example, high inflation may reduce consumer purchasing power, leading to lower consumption expenditure, while also affecting investment decisions and international trade competitiveness. Furthermore, inflation can influence financial flows and monetary demand, which are critical components of GDP in open economies (Ahmad, 2018; Khan, 2019). Therefore, monitoring inflation is essential for understanding its potential impact on GDP and implementing appropriate monetary and fiscal policies to maintain economic stability and growth.

Indeed, there are different versions of GDP, including nominal GDP and real GDP, which serve distinct purposes in economic analysis. Nominal GDP represents the total monetary value of all goods and services produced within a country's borders during a specific period, without adjusting for inflation. It reflects current prices and does not account for changes in the overall price level over time. Nominal GDP is useful for understanding the current value of economic output and for measuring changes in aggregate production from one period to another. On the other hand, real GDP adjusts nominal GDP for changes in the price level, providing a measure of economic output that is corrected for inflation. Real GDP is calculated by using a base year's prices to remove the effects of price changes, allowing for meaningful comparisons of economic output over time. Previous studies have highlighted how adjusting for inflation enables clearer interpretation of income, investment, and welfare trends (Ali & Afzal, 2019; Zahid, 2018). By stripping away the influence of inflation, real GDP provides a more accurate picture of changes in the quantity of goods and services produced in an economy. Economic growth, often measured as the percentage change in real GDP over time, reflects the increase in an economy's potential output and actual output. Both growth paths are influenced by consumption, technological advances, and macroeconomic stability, as noted by past empirical analyses (Ahmad, 2018; Khan, 2019). Potential growth is driven by factors such as investment in physical and human capital, technological progress, and improvements in productivity. Actual growth, meanwhile, results from increases in aggregate demand, including consumption, investment, government spending, and net exports. Per capita GDP, calculated by dividing the total GDP of a country by its population, provides a measure of average economic output per person. It allows for comparisons of economic performance and living standards across countries, as it accounts for differences in population size. Per capita GDP is useful for assessing relative economic well-being and standard of living, as it reflects the average level of economic prosperity among a country's inhabitants. Comparing per capita GDP among countries helps to understand disparities in income and development levels (Ali and Ahmad, 2014).

A high per capita GDP signifies robust economic growth and enhanced living standards within a country, reflecting increased productivity and output per individual. Prior research suggests that economic expansion is closely tied to productivity gains, capital investment, and governance

structures (Khan, 2019; Ali & Afzal, 2019). Conversely, inflation, the general rise in prices of goods and services over time, can impede economic progress by eroding the purchasing power of money and introducing uncertainty into consumer and business decision-making. Excessive inflation can lead to various economic distortions, including reduced purchasing power, diminished savings value, and disruptions in economic planning (Zahid, 2018; Iqbal & Raza, 2018). To foster sustained economic growth, policymakers strive to maintain stable inflation rates. Additionally, there exists an inverse relationship between economic growth and unemployment, where periods of robust economic expansion often coincide with lower unemployment rates as businesses expand and hire more workers. This relationship has been empirically supported by findings in both regional and global contexts, reflecting macroeconomic responsiveness to growth cycles (Ahmad, 2018; Kumar, 2018). Conversely, economic downturns can result in higher unemployment as businesses scale back operations.

Achieving a balance between inflation control and promoting economic growth is essential for fostering stable and prosperous economic conditions. The relationship between unemployment and economic growth is complex and multifaceted. While an increase in the natural rate of unemployment can potentially dampen GDP growth by reducing labor force participation and productivity, the extent of this impact may vary depending on various factors such as government policies, labor market dynamics, and technological advancements (Ahmad, 2018; Kumar, 2018). However, it's important to note that the relationship between unemployment and economic growth may not always be statistically significant in empirical studies, as other factors and variables also play crucial roles in shaping economic outcomes. On the other hand, foreign direct investment (FDI) often has a positive effect on GDP growth by stimulating economic activity, enhancing productivity through technology transfer and capital investment, and creating employment opportunities (Zahid, 2018; Khan, 2019). FDI inflows can contribute to economic expansion by increasing aggregate demand, promoting export-oriented growth, and fostering innovation and competitiveness in domestic industries (Ali & Afzal, 2019; Iqbal & Raza, 2018). Overall, while unemployment may pose challenges to economic growth, FDI can serve as a catalyst for driving GDP growth and enhancing overall economic prosperity.

2. LITERATURE REVIEW

Pacione (2003) delves into the multifaceted concept of the quality of modern life within contemporary society. Employing a social geographical approach, the study meticulously investigates both the quality of life and urban environmental quality. Central to this exploration is a five-dimensional model developed to broaden the understanding of key concepts and methodological considerations in quality of life research. Through the lens of social geography, the study utilizes two representative case studies to elucidate the practical application of the five-dimensional framework in real-world contexts. By intertwining theoretical insights with empirical observations, Pacione's research offers valuable perspectives on comprehending and assessing the quality of life amidst the complexities of urban environments. The burgeoning interest in issues pertaining to life quality can be attributed to the dynamic nature of modern societies, characterized by rapid technological advancements and rising incomes. As societies evolve, there is a corresponding escalation in concerns regarding the quality of life, prompting a shift in focus towards factors beyond mere economic indicators like Gross National Product (GNP). This shift reflects a broader recognition of the multifaceted nature of well-being, encompassing social, political, and environmental dimensions. Consequently, there is a growing impetus to develop alternative indices that more accurately reflect the holistic health of a nation and align with the interests and aspirations of its citizens. This paradigm shift underscores the need for comprehensive measures that capture the nuanced complexities of contemporary living conditions and societal well-being.

Easterly's (1995) research delves into the relationship between income and happiness, challenging the notion that increased income universally leads to greater happiness. While conventional wisdom suggests that higher incomes correlate with increased happiness, Easterly's findings paint a different

picture. Through an analysis of reported happiness and average income data spanning several decades and numerous countries, the study reveals that income growth within a society does not necessarily result in a corresponding rise in happiness levels. Instead, Easterly suggests that factors beyond income, such as social connections, personal fulfillment, and overall well-being, play significant roles in determining individual and societal happiness. This nuanced understanding underscores the complexity of human happiness and calls for a broader perspective beyond economic indicators alone. Easterly's findings suggest a nuanced relationship between income and happiness, challenging the conventional assumption that rising incomes universally lead to increased well-being. While income growth may contribute to a general sense of improvement for the average individual within a society, Easterly's research indicates that subjective well-being, or happiness, does not consistently rise over time. This complexity underscores the need to reassess traditional notions of social welfare and public policy, moving beyond simplistic economic indicators to consider alternative pathways to societal well-being. By exploring the multidimensional nature of happiness and its relationship to economic development, Easterly's work prompts a reevaluation of policy frameworks to better address the diverse needs and aspirations of individuals and communities.

Michael and Shields (2001) delve into the intricate relationship between economic and social factors and their impact on psychological and psychosocial health. Their study reveals a negative correlation between household poverty and overall well-being, emphasizing the profound influence of socioeconomic status on mental and physical health outcomes. Additionally, they uncover the adverse effects of unemployment on both men and women, highlighting its detrimental consequences on mental health. Interestingly, they observe that residing in areas with high employment deprivation may mitigate some of these negative effects, hinting at the presence of social norms that can buffer against the psychological toll of unemployment. Through their investigation, Michael and Shields shed light on the complex interplay between economic conditions, social environments, and individual mental health, offering insights that can inform policies aimed at improving overall well-being in society. They assess individual psychological health using the General Household Questionnaire 12 score, which captures aspects of mental well-being. This score helps in understanding the subjective experiences of individuals regarding their life satisfaction and work contentment. By directly asking individuals about their feelings and experiences, psychologists can gain valuable insights into their overall happiness and psychological health. The reluctance of economists to incorporate self-reported subjective measures of utility, such as well-being, happiness, or life satisfaction, is indeed notable, as highlighted by Bertrand and Mullainathan (2001). However, the study conducted by Michael and Shields (2001) takes a different approach, delving into the social and economic determinants of psychological and psychosocial health for both men and women. They utilize data from the 1998 and 1999 Health Surveys to explore these determinants, providing valuable insights into the factors influencing mental well-being across genders. In our final analysis, we delve deeper into the statistical relationship between physical health and our measures of well-being. Specifically, we focus on understanding the comparative significance of recent acute illnesses versus the long-standing chronic conditions in shaping psychological health. By examining this specification, we aim to shed light on how different health factors contribute to overall well-being, providing valuable insights into the interplay between physical and psychological health.

Diawara (2013) delves into the intricate relationship between social capital and poverty, recognizing social capital as a concept that is elusive yet essential in understanding community cohesion. The study aims to elucidate the collaborative relationship between social cohesion and poverty levels among household heads in Senegal. By exploring how social networks, community trust, and shared norms contribute to poverty alleviation or exacerbation, the research seeks to provide insights into the role of social capital in shaping socioeconomic outcomes in the Senegalese context. The study utilizes data from the 2005 Senegalese Household Survey to construct an index of social capital, demonstrating its correlation with the economic conditions of households. By highlighting the relationship between social capital and household economic status, the research contributes to contemporary discourse within the international community and the field of development economics,

emphasizing the importance of investing in social capital. Given the multifaceted nature of social capital, which encompasses various definitions, interpretations, and applications, this study aims to provide empirical evidence of its significance in shaping socioeconomic outcomes in Senegal. The definition and measurement of social capital are often complex and not easily compatible. According to the World Bank, social capital pertains to the "institutions, relationships, and norms that shape the quality and quantity of a society's social interactions." It is commonly understood as a multidimensional concept that encompasses various levels and units of analysis. This multidimensionality makes it challenging to precisely define and measure social capital, as it encompasses diverse aspects of social relations and structures within a society. Social capital is often described as an elusive yet essential concept, ultimately seen as the glue that binds communities together. This study seeks to elucidate the relationship between social capital and household outcomes. To ensure the credibility of the findings, instrumental variables estimation is employed to address potential endogeneity issues associated with social capital. By using instrumental variables, this approach helps to correct for any biases that may arise from the endogenous nature of social capital, thus enhancing the reliability of the results regarding its impact on households. The impacts of social capital are found to be more pronounced for female-headed households compared to male-headed households, with particularly notable effects observed for household heads residing in rural areas compared to their urban counterparts. Ultimately, the study underscores the role of social capital factors in enhancing household welfare and reducing poverty levels, highlighting the significance of community ties and networks in fostering economic well-being

Lugo (2007) delves into the concept of employment as a potentially internationally comparable indicator. He emphasizes that employment serves as the primary source of income for most families worldwide. However, he notes that it does not necessarily guarantee a new dimension of well-being. Despite this, employment remains a focal point in human development studies and poverty reduction policies, indicating its significance in assessing societal progress and addressing economic disparities. He emphasizes the inclusion of seven indicators of employment in a multi-dimensional household survey, suggesting that this comprehensive approach is essential for gaining a deeper understanding of the causes and implications of poverty worldwide. This broader perspective acknowledges the multifaceted nature of poverty and its interconnectedness with various aspects of employment. Additionally, Lugo critiques the traditional two-pronged approach to the labor market, indicating a need for a more nuanced understanding that accounts for diverse employment situations and challenges. The aim is to complement traditional indicators with a broader set of questions to provide a more nuanced understanding of the relationship between the quantity and quality of employment. While income remains a primary assessment for employment, both in formal and informal sectors, it's essential to recognize that traditional indicators may not adequately capture the complexity of employment dynamics, particularly in developing economies. By including a broader set of questions, the survey can delve deeper into the various dimensions of employment, considering factors such as job security, working conditions, and access to benefits, which are crucial for assessing the well-being of households in diverse socio-economic contexts. The information gathered using advanced questionnaires and other included prevalent questionnaire data can be utilized to address numerous intriguing hypotheses related to individual well-being and poverty. By analyzing responses to these questions, researchers can uncover valuable insights into various aspects of individual and household welfare, including health, education, employment, and access to essential services. This data-driven approach enables policymakers and practitioners to develop targeted interventions and policies aimed at improving overall well-being and reducing poverty levels in communities. NNP stands for Net National Product, which is a measure used in economics to assess the overall economic performance and well-being of a nation. It represents the total value of all goods and services produced by the residents of a country within a given period, minus the depreciation of capital goods. NNP is an important indicator because it provides insight into the economic health of a nation by capturing the net output generated by its citizens. In terms of what NNP should include, it typically comprises

various components such as personal consumption expenditures, business investment, government spending, and net exports.

Essentially, it should encompass all economic activities that contribute to the production of goods and services within the country's borders. We are interested in NNP because it offers valuable insights into the economic performance and standard of living within a country. By analyzing changes in NNP over time, policymakers, economists, and researchers can assess the effectiveness of economic policies, identify areas of strength and weakness in the economy, and make informed decisions to promote sustainable growth and development. Dasgupta and Miler's study focuses on estimating the impact of NNP on wealth and social well-being. They argue that conventional measures of NNP may not fully capture the broader aspects of well-being beyond purely economic factors. Instead, they propose using a linear index as an alternative measure to assess economic policies, emphasizing the importance of considering non-monetary aspects such as social welfare and environmental sustainability. Their findings suggest that NNP, when adjusted to account for these broader considerations, can provide a more comprehensive understanding of overall well-being and economic progress. The study explores three potential approaches to measuring NNP and emphasizes the importance of incorporating subjective well-being (SWB) into these assessments. Helliwell et al. (2010) delve into the measurement and understanding of SWB, noting the increasing attention it has garnered in academic, policy, and public spheres. They highlight the main sources of SWB and provide examples of research findings that account for varying levels of happiness and satisfaction across different regions worldwide and within Canada. This focus on subjective measures of well-being reflects a growing recognition of the importance of considering individuals' perceptions and experiences in assessing overall societal welfare and progress. These findings suggest a holistic approach to designing life outcomes that are closely linked to subjective well-being (SWB), highlighting the significance of social factors that have often been challenging to quantify solely in terms of income equivalence. The primary objective is to convince economists of the value of subjective well-being data and the insights derived from analyzing them. This entails using diverse data sources to capture subjective well-being effectively. The variations in subjective well-being are observed to be substantial and enduring across individuals, communities, provinces, and nations. These differences are found to be significantly associated with life circumstances. Across the nation, there exists a strong positive correlation between per capita income and subjective well-being, while at the provincial level, the relationship tends to be negative. From an international perspective, many of the poorest countries face challenges related to inadequate healthcare facilities and limited support from families. These countries often struggle with providing essential healthcare services, including access to medical facilities, trained healthcare professionals, and essential medications. Additionally, weak family support systems further compound these challenges, as individuals may lack access to the necessary care and assistance needed to address their health concerns effectively. As a result, health outcomes in these countries tend to be poorer, with higher rates of preventable diseases, infant mortality, and overall lower life expectancy compared to wealthier nations. Addressing these issues requires significant investments in healthcare infrastructure, education, and social support systems to improve the overall health and well-being of the population in these countries.

Dietz and Niemeyer (2006) delve into the concept of weak and strong sustainability within the System of Environmental and Economic Accounting (SEEA) framework and its implications for measurement. They highlight the significant agreement and theoretical distinctions between weak and strong sustainability paradigms. The SEEA, being rooted in the capital approach to sustainability, plays a crucial role in defining sustainability metrics and guiding policy decisions. Weak sustainability suggests that natural and human-made capital are substitutable to some extent, allowing for trade-offs between environmental and economic objectives. In contrast, strong sustainability posits that certain forms of natural capital are irreplaceable and must be preserved regardless of economic considerations. Understanding these concepts is essential for developing comprehensive sustainability indicators and guiding decision-making processes towards more environmentally responsible outcomes. Indeed, weak and strong sustainability differ in their fundamental assumptions,

particularly regarding the substitutability of natural capital. Weak sustainability allows for the exchange of natural capital, viewing it as interchangeable with human-made capital to some extent, thereby enabling economic growth. Conversely, strong sustainability emphasizes the preservation of essential natural capital, recognizing certain aspects as irreplaceable and crucial for long-term well-being. To effectively measure sustainability and inform policy decisions, it's essential to consider the specific context and objectives. Developing models that capture the intricacies of natural capital exchange and preservation can provide valuable insights for crafting policies that balance economic development with environmental conservation.

Baronets and Holmes's (2008) research delves into the vital topic of social protection for the poor and the poorest segments of society in developing countries. Over the past decade, there has been remarkable progress in both the conceptualization and implementation of social protection programs in these regions. There is now a widely shared perspective that social protection initiatives serve as effective mechanisms for addressing poverty and vulnerability in developing countries, playing a crucial role in broader economic and social development strategies. This growing consensus underscores the importance of prioritizing social protection measures as part of comprehensive efforts to promote inclusive growth and improve the well-being of marginalized populations. This paper argues that the emergence of social protection represents a response to a globally recognized imperative, albeit with significant regional variations. It outlines the factors influencing the future trajectory of social protection initiatives and identifies critical areas requiring further research. The authors describe the rapid proliferation of what they term a 'quiet revolution' in developing countries – the expansion of social protection systems. These systems typically encompass three main strategies: fostering national development, promoting economic growth, and enhancing human development. The international focus on poverty reduction, exemplified by the Millennium Development Goals (MDGs), has played a pivotal role in driving the expansion of social protection programs worldwide. The paper concludes with a discussion on potential strategies for extending social protection at regional and sub-regional levels. It explores various pathways to illustrate the diversification of social protection responses, which depend on the existing institutional frameworks in different contexts.

Well's (2002) study focuses on understanding how life satisfaction varies across individuals and nations by combining individual and national-level variables. The study aims to elucidate the international and interpersonal differences in subjective well-being during the twentieth century. To accomplish this, the research utilizes data from three waves of the World Values Survey, which covers approximately fifty different countries. The study conducts a survey of experimental studies, presenting an overview of the main variables used, reporting results and tests, and engaging in discussions to establish connections among social capital, education, income, and well-being. The primary contribution of the paper lies in its advancement relative to earlier studies of subjective well-being, particularly through its utilization of large international samples of data that combine individual and societal-level variables. The study endeavors to explore descriptions rather than eliminate the possibilities for utilizing international well-being data to measure and elucidate differences in well-being within and between nations. International well-being data enable the combined utilization of individual and societal variables. While well-being research does not offer a definitive guide to choices for individual behavior and public policies, it does significantly broaden the scope for comparing the well-being outcomes of a wide range of distinct trends and for utilizing international evidence to elucidate national trends and issues. The utilization of well-being studies for comparing societies and assessing alternative policies is still in its early stages. There are numerous ways in which the preliminary research outlined here invites further testing and expansion. Finally, it is crucial to emphasize that in many instances, the methodology used in this and previous studies can demonstrate association or correlation but cannot prove the existence or direction of causality. It is important to heed this caution when considering policy initiatives that might support or promote activities linked to measures of well-being based on research findings. Indeed, while there may be a causal chain linking certain activities to well-being, it's essential to recognize that well-being alone

doesn't dictate or provide a complete guide for individual behavior or policy formulation. However, it does offer valuable insights into understanding the consequences of various trends and using international evidence to illuminate national trends and address pertinent issues.

Richard's (1998) study delves into the measurement of social well-being and critiques the Gross Domestic Product (GDP) as a poor indicator of social welfare. It highlights the historical context of income measurement dating back to the 17th century, with Sir William Petty's pioneering efforts in constructing national income estimates. The study acknowledges the significant contributions of national income statistics since 1945 but underscores the ongoing challenges in accurately capturing social well-being and sustainable development. It calls for continued efforts to explore alternative measures beyond GDP to better reflect societal welfare and progress. Edward's (1987) examination of sustainable economic development reflects a significant shift in development paradigms, emphasizing the need to challenge traditional notions of economic growth. The study underscores the importance of adopting a new approach that prioritizes meeting the basic needs of the poor, promoting inclusivity, and encouraging active participation in economic development processes. This shift in thinking acknowledges the limitations of conventional development models and calls for a more holistic and sustainable approach that prioritizes human well-being and equity alongside economic growth. The concept of sustainable economic development places significant emphasis on integrating economic, environmental, and social considerations into development processes. However, effectively applying this concept poses numerous challenges, particularly in defining development objectives and analyzing their impacts. There is a pressing need to ensure that sustainability principles guide the design and implementation of development projects and programs across various sectors, including agriculture, forestry, industry, and human settlements. This requires adopting holistic approaches that prioritize long-term ecological sustainability while promoting economic growth and social well-being. Moreover, it involves redefining the traditional notion of economic development to encompass a broader range of factors and stakeholders, thereby fostering inclusive and environmentally responsible development strategies.

3. THE MODEL

Data source and Model The study examines the impact of foreign direct investment, Inflation, unemployment, and final consumption expenditure on GDP per capita of South Asian countries namely; Pakistan, India, Bangladesh, and Sri Lanka, using the data for 1991 to 2014. The data is collected from the World Bank maintained databases like the world development indicator (WDI). The functional form of the model becomes as:

GDP per capita =F(FDII, INF, FCE,UN, FDIO)

Where;

FDI=Foreign direct investment inflow

INF= Inflation

FCE= Final consumption expenditure

UN= Unemployment

FDIO= foreign direct investment outflow

We are taking the log of dependent and some independent variables to acquire effective results for the model.

The econometric model is following:

LFCElit== a + B1LINFit +B2FDIIit + B3FDIOit + B4UTit +B5GDPPC+ Eit

Where

I= individual

T= time period

E= error term

4. EMPIRICAL RESULTS

Table 1 presents the results of the Levin, Lin & Chu (LLC) panel unit root test, which is used to determine the stationarity of the variables included in the model GDP per capita = f(FDII, INF, FCE, UN, FDIO). The test is conducted at both the level and first difference forms, with the null hypothesis assuming the presence of a unit root, implying non-stationarity. A variable is considered stationary if the null hypothesis is rejected, which occurs when the t-statistic is significantly negative and the p-value falls below conventional significance thresholds.

At the level form, none of the variables appear to be stationary. The variable LFCS, likely representing final consumption expenditure (FCE), has a t-statistic of 1.52341 and a p-value of 0.0608, which fails to reject the null hypothesis at the 5% level, though it is marginally significant at the 10% level. Inflation (INF) also shows non-stationarity with a t-statistic of −1.08326 and a p-value of 0.1384. The foreign direct investment outflow (FDIO) variable is strongly non-stationary, with a t-statistic of −1.34117 and an unusually high p-value of 0.7931, indicating no evidence against the null. GDP per capita shows a clear presence of a unit root with a highly positive t-statistic of 5.00972 and a p-value of 1.0000, confirming non-stationarity. Similarly, foreign direct investment inflow (FDII) has a t-statistic of 2.19583 and a p-value of 0.9732, indicating that the variable is non-stationary. Unemployment (UN) is also non-stationary in level, as shown by a t-statistic of −1.20136 and a p-value of 0.1152.

Table 1: Unit Root Test (Levin, Lin & Chu)

At Level		
Variable	t-Statistic	p-value
LFCS	1.52341	0.0608
INF	-1.08326	0.1384
FDIO	-1.34117	0.7931
GDP per capita	5.00972	1.0000
FDII	2.19583	0.9732
UN	-1.20136	0.1152
At First Difference		
GDP per capita	-2.51302	0.0000
LFCS	-4.11869	0.0000
INF	-5.41785	0.0000
FDIO	-2.10597	0.0175
FDII	0.23984	0.5924
UN	-7.61204	0.0000

At the first difference, most variables achieve stationarity. GDP per capita becomes stationary with a significantly negative t-statistic of −2.51302 and a p-value of 0.0000. LFCS also becomes stationary at first difference, as reflected in its t-statistic of −4.11869 and p-value of 0.0000. Similarly, INF displays strong stationarity with a t-statistic of −5.41785 and a p-value of 0.0000. FDIO achieves stationarity as well, with a t-statistic of −2.10597 and a p-value of 0.0175, confirming rejection of the null at the 5% level. UN also shows strong stationarity at first difference with a highly significant t-statistic of −7.61204 and a p-value of 0.0000. However, FDII remains non-stationary even after first differencing, as its t-statistic is 0.23984 and its p-value remains high at 0.5924. This result suggests that FDII may be integrated of order two, may contain structural breaks, or may require further transformation or alternative testing methods to confirm its integration order.

All variables except FDII become stationary after first differencing, indicating that they are integrated of order one, I(1). FDII's lack of stationarity even at the first difference presents a concern and calls for further investigation. Provided this issue is addressed, the data are suitable for techniques such as panel cointegration analysis or the ARDL bounds testing approach, which require variables to be either I(0) or I(1), but not I(2).

Table 2 presents the long-run estimation results of the ARDL (1,1,1,1,1,1) model where the dependent variable is the natural logarithm of GDP per capita (LGDPPC). The explanatory variables include foreign direct investment outflows (FDIO), foreign direct investment inflows (FDII), inflation (INF), final consumption expenditure (LFCS), and unemployment (UN). The results provide a comprehensive view of the long-term macroeconomic determinants of economic prosperity, as captured by GDP per capita.

The coefficient for final consumption expenditure (LFCS) is 0.9147 and is highly significant (p = 0.0000), suggesting that a 1% increase in consumption is associated with approximately a 0.91% increase in GDP per capita in the long run. This is expected, as consumption is a core component of aggregate demand and directly contributes to economic activity. This result is consistent with Keynesian economic theory, which emphasizes the role of consumption in driving economic growth (Keynes, 1936).

Inflation (INF) has a small and statistically insignificant coefficient of 0.0017 (p = 0.5535), indicating that, in the long run, inflation does not have a meaningful impact on per capita GDP. This may reflect a non-linear or threshold effect, where moderate inflation does not necessarily harm economic growth, especially if it occurs alongside stable macroeconomic policies (Barro, 1996).

Foreign direct investment outflows (FDIO) positively influence GDP per capita, with a significant coefficient of 0.1764 (p = 0.0004). This result suggests that outward investment by domestic firms may support economic growth through knowledge transfer, access to international markets, and repatriated profits. It reflects the modern understanding that outward FDI can enhance domestic firm competitiveness and promote productivity gains at home (Kumar, 2007).

Table 2: Long Run Estimates
Dependent Variable: LGDPPC
Method: ARDL (1, 1, 1, 1, 1, 1)

Variable	Coefficient	Std. Error	t-Statistic	p-value
LFCS	0.914732	0.198645	4.604219	0.0000
INF	0.001742	0.002921	0.596414	0.5535
FDIO	0.176392	0.046780	3.770821	0.0004
FDII	0.132580	0.033992	-3.901174	0.0003
UN	0.172316	0.013215	-1.429812	0.1559

Interestingly, foreign direct investment inflows (FDII) have a significant but negative coefficient of -0.1326 (p = 0.0003), indicating that in the long run, increased inward FDI is associated with a decrease in GDP per capita. While counterintuitive, this result may point to sector-specific or structural challenges, such as FDI flowing into low-productivity extractive industries, weak absorptive capacity, or profit repatriation that limits local reinvestment. In some developing countries, FDI may crowd out domestic investment or lead to economic enclaves that fail to integrate with the broader economy (Alfaro et al., 2004).

Unemployment (UN) also has a negative coefficient (−0.1723), though it is not statistically significant (p = 0.1559). While higher unemployment would generally be expected to reduce GDP per capita, the insignificance here could indicate that other included variables are already capturing most of the variation, or that structural unemployment persists independently of short-term economic performance.

Table 2 reveals that final consumption and outward FDI are strong long-term drivers of GDP per capita growth, while inflation and unemployment have no significant long-run effects in this model. The negative effect of inward FDI suggests that policy measures must ensure FDI is directed toward high-productivity sectors and is accompanied by institutional reforms to maximize its developmental impact.

Table 3 provides the short-run estimates from the ARDL (1,1,1,1,1,1) model with the dependent variable being the first difference of the natural logarithm of GDP per capita (D(LGDPPC)). These results capture the immediate or short-term effects of changes in macroeconomic indicators—final consumption expenditure (D(LFC)), inflation (D(INF)), foreign direct investment inflow (D(FDII)), foreign direct investment outflow (D(FDIO)), and unemployment (D(UN))—on GDP per capita growth, along with the adjustment term (Coined) reflecting the speed of correction back to long-run equilibrium.

The coefficient of the error correction term (Coined) is −0.1468 and is marginally significant at the 10% level (p = 0.0591). This negative sign indicates that approximately 14.7% of the disequilibrium from the previous period is corrected each period, confirming the presence of a long-run equilibrium relationship. Though slower than ideal, this adjustment speed signals that the model gradually converges back to its long-term path after short-run shocks, consistent with standard ARDL expectations (Pesaran et al., 2001).

Final consumption expenditure (D(LFC)) has a strong and statistically significant positive effect on GDP per capita growth, with a coefficient of 0.7932 (p = 0.0000). This reinforces the short-run importance of household and government consumption in driving immediate economic activity. Consumption-led growth is often observed in demand-driven economies, particularly in developing countries where private spending represents a large share of GDP (Keynes, 1936).

Inflation (D(INF)) has a small negative coefficient (−0.0009) but is not statistically significant (p = 0.1725), suggesting that short-term changes in inflation do not significantly affect GDP per capita growth in this model. This may reflect effective inflation targeting or price adjustment mechanisms that cushion output from temporary inflation shocks (Barro, 1996).

Table 3: Short Run Estimates
Dependent Variable: D(LGDPPC)
Method: ARDL (1, 1, 1, 1, 1, 1)

Variable	Coefficient	Std. Error	t-Statistic	p-value
Coined	-0.146801	0.076201	-1.926721	0.0591
D(LFC)	0.793210	0.094386	8.401282	0.0000
D(INF)	-0.000912	0.000658	-1.385027	0.1725
D(FDIO)	0.053781	0.044981	1.195517	0.2386
D(FDII)	0.011118	0.003586	3.101256	0.0042
D(UN)	-0.000472	0.007442	-0.063412	0.9497
C	-2.587310	1.429178	-1.811732	0.0776

Foreign direct investment inflow (D(FDII)) has a positive and significant short-run effect (coefficient = 0.0111, p = 0.0042), implying that increases in inward FDI provide a direct boost to economic activity in the short term. Unlike the negative long-run effect found in Table 2, this result suggests that FDI may have an initial positive stimulus effect—through job creation, capital injection, and technology inflow—that weakens or reverses over time if not supported by broader structural reforms (Borensztein et al., 1998).

Foreign direct investment outflow (D(FDIO)) shows a positive but statistically insignificant coefficient (0.0538, p = 0.2386), indicating that short-term changes in outward investment do not have a discernible impact on domestic GDP per capita. This could be due to the delayed nature of

returns from outward FDI, which typically benefit the home economy over a longer horizon through increased competitiveness and profit repatriation (Kumar, 2007).
Unemployment (D(UN)) is statistically insignificant ($p = 0.9497$), and the coefficient is very close to zero (−0.00047), indicating no measurable short-term impact on GDP per capita. This might be due to the relatively rigid labor markets or the time it takes for employment changes to translate into productivity and output effects.
The constant term (C) is negative (−2.5873) and marginally significant at the 10% level ($p = 0.0776$), possibly reflecting structural adjustments or baseline growth conditions during the study period.
Table 3 shows that short-run GDP per capita growth is primarily driven by changes in final consumption and foreign direct investment inflows, while other variables like inflation, unemployment, and FDI outflows have limited or insignificant short-run effects. The error correction term supports the existence of a long-run relationship and validates the use of the ARDL framework for analyzing these dynamics.

5. CONCLUSION

The study investigates the impacts of foreign direct investment, final consumption expenditure, inflation, and unemployment on GDP per capita across four South Asian nations: Pakistan, India, Bangladesh, and Sri Lanka. By analyzing these variables, the research aims to discern their individual contributions to the economic well-being of these countries and understand the intricate interplay between investment, consumption, inflation, unemployment, and GDP per capita. Through empirical investigation, the study seeks to provide valuable insights into the dynamics of economic growth and development in the region, offering implications for policy formulation and decision-making. The statistical analysis in this study utilizes data spanning from 1991 to 2014, sourced from the World Bank database known as the World Development Indicators. This comprehensive dataset offers a wealth of economic and social indicators, allowing for a rigorous examination of the relationship between foreign direct investment, final consumption expenditure, inflation, unemployment, and GDP per capita in the selected South Asian countries over a significant time period. By leveraging this rich dataset, the study aims to conduct robust econometric analyses to uncover meaningful patterns and relationships within the data, facilitating a deeper understanding of the factors influencing economic performance in the region. The findings suggest that inflation has a positive but statistically insignificant relationship with GDP per capita in Pakistan, India, Bangladesh, and Sri Lanka. This indicates that while inflation may influence economic activity, its impact on per capita GDP is not significant within the observed period. On the other hand, the results highlight the importance of foreign direct investment (FDI) in driving positive and significant relationships with GDP per capita. Therefore, policymakers in these South Asian countries should focus on attracting and facilitating FDI inflows to stimulate economic growth and enhance per capita income levels. Additionally, the results suggest that government expenditure plays a crucial role in influencing GDP per capita. Increasing government spending on key sectors such as infrastructure, education, healthcare, and innovation can lead to higher levels of economic output and ultimately contribute to raising per capita income. Therefore, policymakers should prioritize investment in these areas to foster sustainable economic development and improve living standards for the population. Overall, the study underscores the importance of adopting pro-growth policies, including promoting FDI inflows and increasing government expenditure, to bolster GDP per capita and achieve long-term economic prosperity in South Asian countries like Pakistan, India, Bangladesh, and Sri Lanka.

REFERENCES

Ahmad, K. (2018). Addressing demographic challenges: Strategies for sustainable economic growth in Pakistan. *Journal of Business and Economic Options, 1(4)*.
Alfaro, L., Chanda, A., Kalemli-Ozcan, S., & Sayek, S. (2004). FDI and economic growth: The role of local financial markets. *Journal of International Economics*, *64*(1), 89–112.

Ali, A. (2015). *The Impact of Macroeconomic Instability on Social Progress: An Empirical Analysis of Pakistan*. Ph.D Thesis, NCBA&E, Lahore, Pakistan, 1-52.

Ali, A., & Afzal, M. (2019). Human capital development and economic growth: A panel data analysis. *Journal of Policy Options*, *2(1)*.

Ali, A., & Ahmad, K. (2014). The Impact of Socio-Economic Factors on Life Expectancy in Sultanate of Oman: An Empirical Analysis. *Middle-East Journal of Scientific Research*, 22(2), 218-224.

Ana Lugo, M. A. R. Í. A. (2007). Employment: A Proposal for internationally comparable indicators. *Oxford Development Studies*, *35*(4), 361-378.

Barro, R. J. (1996). Inflation and growth. *Federal Reserve Bank of St. Louis Review*, *78*(3), 153–169.

Borensztein, E., De Gregorio, J., & Lee, J. W. (1998). How does foreign direct investment affect economic growth? *Journal of International Economics*, *45*(1), 115–135.

Dasgupta, P., & Mäler, K. G. (2000). Net national product, wealth, and social well-being. *Environment and development economics*, *5*(1), 69-93.

Diawara, B. Social Capital and Poverty: Evidence from Senegal.

Dietz, T., Fitzgerald, A., & Shwom, R. (2005). Environmental values. *Annu. Rev. Environ. Resour.*, *30*, 335-372.

Easterlin, R. A. (1995). Will raising the incomes of all increase the happiness of all?. *Journal of Economic Behavior & Organization*, *27*(1), 35-47.

Helliwell, J. F. (2003). How's life? Combining individual and national variables to explain subjective well-being. *Economic modeling*, *20*(2), 331-360.

Hulme, D., & Baronets, A. (2008). Social Protection for the Poor and Poorest in Developing Countries: Reflections on a Quiet Revolution.

Iqbal, K., & Raza, A. (2018). Impact of foreign exchange rate volatility on money demand in Pakistan: An empirical analysis. *Journal of Policy Options, 1(3).*

Keynes, J. M. (1936). *The General Theory of Employment, Interest, and Money*. Macmillan.

Khan, M. N. (2019). Institutional governance, population dynamics, and economic growth: Insights from a global panel. *Journal of Business and Economic Options, 2(1).*

Kumar, D. (2018). Exploring the impact of remittances on human development: Insights from developing countries. *Journal of Policy Options, 1(4).*

Kumar, N. (2007). Investment and technology linkages between domestic and foreign firms. *Economic and Political Weekly*, *42*(52), 4994–5005.

Pacione, M. (2003). Urban environmental quality and human wellbeing—a social geographical perspective. *Landscape and urban planning*, *65*(1), 19-30.

Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics*, *16*(3), 289–326.

Shields, M. A., & Price, S. W. (2001). Exploring the economic and social determinants of psychological and psychosocial health.

Zahid, M. (2018). Economic misery, exchange rate, interest rate, and foreign direct investment: Empirical evidence from Pakistan. *Journal of Policy Options, 1(2).*