REMITTANCE AND ITS IMPACT ON ECONOMIC GROWTH OF NEPAL

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Certification of Authorship

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled **REMITTANCE AND ITS IMPACT ON ECONOMIC GROWTH OF NEPAL**. The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor it has been proposed and presented as part of requirements for any other academic purposes.

The assistance and cooperation that I have received during this research work has been acknowledged. In addition, I declare that all information sources and literature used are cited in the reference section of the dissertation.

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Report of Research Committee

Binod Paudel has defended research proposal entitled **REMITTANCE AND ITS IMPACT ON ECONOMIC GROWTH OF NEPAL** successfully. The research committee has registered the dissertation for further progress. It is recommended to carry out the work as per suggestions and guidance of supervisor Mr. Laxman Raj Kandel and submit the thesis for evaluation and viva voce examination.

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Approval Sheet

We, the undersigned, have examined the thesis entitled **REMITTANCE AND ITS IMPACT ON ECONOMIC GROWTH OF NEPAL** presented by Binod Paudel, a candidate for the degree of **Masters of Business Studies (MBS)** and conducted the viva voce examination of the candidate. We hereby certify that the dissertation is acceptable for the award of degree.

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Abbreviation

NRB	Nepal Rastra Bank
EU	European Union
FDI	Foreign Direct Investment
CBS	Central Bureau Statistics
GNP	Gross National Product
IMF	International Monetary Fund
GDP	Gross Domestic Product
MoF	Ministry of Finance
ODA	Official Development Assistance
OLS	Ordinary Least Square
WB	World Bank
WTO	World Trade Organization
RGDP	Real Gross Domestic Product
US	United States
SAARC	South Asian Association for Regional Cooperation

Abstract

The study investigates how remittance inflows, funds transferred from abroad, impact the economic growth of Nepal, a developing nation where such inflows play a crucial role. The primary objective was to analyze remittances' effect on Nepal's economy while describing the situation of remittance inflows and real GDP growth from 2002/03 to 2021/22. Utilizing secondary data, the research employed descriptive and causal relationship designs. Descriptive, correlation, and regression analyses were conducted to obtain relevant results aligned with the objectives. Correlation analysis revealed a significant relationship between economic growth and remittances, money supply, capital formation, and foreign direct investment (FDI) in Nepal. Regression analysis demonstrated a positive, significant link between economic growth and remittance inflows. The regression model accounted for 98.4% of variation in economic growth.

The study concludes that remittance inflow is a major contributor to Nepal's economic growth. It recommends policymakers prioritize remittance inflows and their productive utilization within the economy. Channeling remittances into productive sectors could boost growth. Further investigation into remittances' impact on Nepal's economy is suggested to build on these findings.

Key Words: Real Gross Domestic Product, Remittance Inflow, Money Supply, Capital Formation, Foreign Direct Investment

CHAPTER I

INTRODUCTION

1.1 Background of the study

Remittance is the term used to describe financial transactions made by migrant workers between nations. Furthermore, remittances are sums of money that citizens of one nation send to citizens of other nations where they work. It has served as the primary source of income for people who live in rural areas of the nation to meet their basic needs and receive an education. Most of the money sent is spent on both basic needs and the acquisition of products and services. Basic needs include housing, food, clothing, health care, and education for kids. Any money left over after basic needs are met is put towards various types of investments. Remittances are important for a nation's foreign exchange development. The effect of remittance on long term growth remains inconclusive in economies where the financial system is underdeveloped. Remittance appear to alleviate credit constraints and may stimulate economic growth (Mishra,2007). The money that migrant workers return home has a direct impact on economic expansion. People in the nation are leaving the country in search of employment abroad to support their families financially and because family incomes are poor. By the Johansen cointegration and error correction method using annual data of remittance from the variables, GDP per capita, consumption and investment there is cointegrating relationship between these variables and that on increase in remittance deteriorates GDP per capita growth in Nepal (Uprety, 2013).

Nepal is a developing nation in South Asia that receives a lot of remittances and sends a sizable portion of its economically active population to work abroad. According to the World Bank (2018), Nepal is among the top five nations in the world for receiving remittances as a percentage of GDP, and the amount of remittances is significant. Although Nepal has long seen a high rate of foreign employment, the number of individuals leaving is rising because of the implementation of liberal policies. This has gotten worse in the twenty-first century. Regarding trade, Nepal has very relaxed laws in the financial, trade, and other commercial spheres. Remittances have a negative impact on Nepal's tradable sectors through real currency rate appreciation consistent with Dutch disease, according to research on the macroeconomic and household levels of the country. However, remittances also have a positive influence on reducing poverty and inequality. Beginning in the mid-1980s, the government of Nepal implemented several liberal economic and financial policies that facilitate trade, such as the industrial strategy and the regional development concept. The volume of trade has been steadily rising, with more goods being imported than being exported. In Nepal, the ratio of imports to exports is over 90%, and trade accounts for around 50% of GDP. MOF (2018).

Nepal is a beautiful small nation with diverse natural, cultural, and physical attributes. The nation is landlocked. The country is a stunning mountainous landscape with 147516 square kilometers. Over 64% of people still lack access to basic physical facilities that are essential to everyday life. The traditional agricultural system is the focus of the nation's majority population. To boost productivity and draw young people into the agricultural industry, the government should concentrate on the development and modernization of agricultural technology. The nation's general atmosphere is unfavorable to economic expansion. Large-scale projects are dependent on subsidies from abroad, there is a shortage of infrastructure, policy uncertainty, and political instability.

International migrants use both official and unofficial means to transfer money back to their home countries. Money transfer companies and banking channels are connected to formal channels. Certain migrant workers may turn to unofficial channels due to language problems and a lack of knowledge about banking channels for money transfers. Consequently, to facilitate the flow of remittances through the official channel, it is imperative to make this sector more methodical and to take further action. Making institutional arrangements to provide skills and training to increase the need for Nepalese laborers abroad and direct remittance flow to the productive sector is a challenge (Chowdhury & Chakraborty, 2021).

Remittances are the second-largest source of external funding in developing nations, behind foreign direct investment, and amount approximately three times the amount of official development assistance. Both macroeconomic and microeconomic levels of economies depend on remittances. It is discovered that remittances have a qualitative effect on the macroeconomic level. Remittances are recognized as a significant and reliable source of foreign funding in nations impacted by political and economic problems. In these kinds of nations, remittances are among the most reliable and safe sources of foreign exchange when compared to the other three capital flows, which include official development assistance and foreign direct investment. Remittances, which provide impoverished and marginalized individuals with an alternate source of income, have improved livelihoods on a small scale. Remittances play a big part in reducing poverty. Remittances have impacted the community as well as the welfare and capabilities of the receiving households (Chhetri et al., 2020).

The Asia-Pacific region has been the world's greatest recipient of remittances over the past decade, with total inflows estimated that they reached $254 billion in 2015. This is based on data from the World Bank (World Bank, 2017). (making up 43.6% of the entire developing world) and increased by 4% over the prior year. In addition, remittance inflows to the Asia-Pacific area increased eighteen times faster than in 1990, from $14.2 billion to $244 billion in 2015. Furthermore, twenty nations in the Asia-Pacific area had remittance inflow rates over GDP in 2015 that were higher than 1%; in seven of these countries, the rate exceeded 5% of GDP. More astonishing information is that five of the nations in this region—China, India, Bangladesh, Pakistan, and the Philippines—are among the top ten countries in the world for receiving remittances (measured by receiving value). (Tung, 2018)

Globalization is crucial for facilitating the seamless migration of individuals between different countries. Globalization facilitates the study of the economies of other countries. Globalization is advantageous for the mobility of both capital and labor. Individuals globally migrate to various countries for employment opportunities. In addition to jobs, individuals are driven to move to foreign nations to attain their desired level of success. Globalization facilitates the progress of communication, transportation, and information technology, which in turn promotes the interdependence of cultural, economic, political, technological, and social aspects. This interconnectedness links individuals, societies, communities, businesses, and governments worldwide. Globalization facilitates the flow of capital and data, in addition to commodities and services. Migration is increasingly attracting attention in numerous emerging countries due to valid reasons. Migrant associations have a crucial role in contributing to both the economic prosperity and survival of many countries through worker remittances and donations. The global economy is being increasingly impacted by international migration. (Tandukar, 2010)

Particularly in the banking industry, the inflow of remittances from outside can help the financial system's lending capacities grow. Numerous research studies have shown that improving financial systems in developing or rising nations plays a significant role in economic growth. In a number of nations, the growth in remittances involves an increase in bank liquidity; this is something to take into account if banks use the cash to lend to small and medium-sized businesses more readily. Still, banks would rather purchase Treasury bonds even if they were funding small private businesses (Yaseen, 2012). The fact that this effect varies depending on the level of financial growth attained in the nation. For developing nations like Nepal, remittances represent a significant source of foreign revenue. Remittance amounts have increased significantly in recent years. It is money that is sent by foreign workers to their families back home on a regular or periodic basis. It is one of the main sources of funding that developing nations often receive. It affects the country's economy both locally and nationally. One of the main ways to earn foreign currency is through employment abroad, which has also strengthened Nepal's balance of payments. (Dhungana, 2012)

Over the past few years, Nepal's remittance inflow has increased continuously, which has increased the country's disposable income as well. Due to remittance money and other factors, the nation's economy is progressively shifting towards consumerism. other circumstances, leading to a catastrophic decline in the rates of saving and investing (Dhungana, 2012). Nepali immigrants began working abroad when they went to Lahore in the early 1800s to work for Sikh emperor Ranjit Singh. After the Sugauly Treaty of 1814 A.D., foreign migration began, and remittances have been a significant part of Nepal's economy ever since the country began to publicly receive remittances through the export of brave Gurkha soldiers to Britain. Remittances now make up a sizable portion of the GDP of the nation and play a vital role in the economy. Their growing volume is significant not only in the Nepalese context but also on a global scale. The World Bank reports that remittances have been increasing continuously over the previous few decades, with remittances to low- and middle-income nations expected to have increased by an astounding 7.3 percent to $589 billion in 2021.

The International Monetary Fund (IMF) stated that remittances are a measure of household income from outside economies that primarily originate from persons moving there temporarily or permanently. Cash and noncash remittances are sent through legal channels. Channels, such as electronic wire transfers, or through unofficial routes, like cross-border commodities or money transfers. They mostly consist of money and non-cash time contributions made by people who have moved to a new economy and settled there, as well as the net pay of temporary workers engaged in border, seasonal, or other non-resident economies. In the first eight months of the fiscal year that just ended 2022/2023, the nation collected a total of Rs 794.32 billion, according to the most recent report released by Nepal Rastra Bank. There has been a 25.3% increase in remittance inflow. The amount of remittances received decreased by 1.3 percent compared to the same time in the prior year. Even expressed in US dollars, the remittance inflow has grown by 14.8%, totaling $6.09 billion.

Relationship between Economic Growth and Remittance

Labor migration and remittance inflows have increased dramatically as the world's situation has become more globalized. Nowadays, it is regarded as one of the major industries in the world (Czaika & Haas, 2014). The movement of labor migration and remittance inflows generates a significant amount of output and wealth worldwide. In recent decades, remittance inflows have played a significant part in total foreign capital flows. For developing countries, remittances have become the primary source of income and capital formation. For many developing nations, remittances contribute to a large portion of international financial flows, surpassing expert income, foreign direct investment, and aid. Remittances have become a popular topic in international finance literature over the last few decades due to their volume and potential to eliminate poverty and drive economic growth in poor nations. Many previous research evaluated the relationship between remittances and growth using various approaches and concluded that openness promotes economic growth (Frankel & Romer, 1999). The empirical investigation concluded that trade openness has a favorable and considerable impact on economic growth (Wacziarg, 2001; Sachs & Warner, 1995). Another study introduces the 'trade structure' variable, which demonstrates substantial evidence of a beneficial effect on growth (Shon and Lee, 2006). A comprehensive evaluation of the factors of economic growth reveals a positive association between remittances and financial development (Agrawal, 2011; Senbeta, 2013).

1.2 Problem statement

The amount of money that individuals remit to their birth nation from abroad is known as a remittance. Remittances are a significant source of foreign exchange revenue in poor nations like Nepal. Individuals from developing nations relocate abroad in search of better job possibilities. A nation such as Nepal benefits greatly from remittances in addition to jobs since they are essential to the nation's economic growth. In both the macro and micro economies, remittances are significant. Remittances have both a quantitative and a qualitative influence on macroeconomics, as well as a qualitative impact on microeconomics. Remittances and several economic indicators of developing nations, including GDP, employment, poverty, inflation, liquidity, capital fund, and so forth, are related to one another. Most experts have made note of the need for thorough statistical analyses regarding the effects of remittances on the national economy.

In the current era of globalization and the twenty-first century, remittances have emerged as the most crucial component of any developing nation's financial progress. Although the circumstances in developing nations may vary, it is impossible to overlook the contribution that remittances make to national development. Without outside influences like remittances, developing nations today cannot accomplish financial development and progress. Remittances are a significant source of economic stabilization and the maintenance of financial and economic growth in Nepal in the current circumstances. According to CBS, the rising trend in remittance revenue has caused Nepal's per capita income to rise from US $240 to US $1223.

Since globalization and liberalization have progressed, there has been an increase in the remittance flow. It basically happens at a higher rate in developing economies. For the past five years, Nepal's average remittance flow has exceeded 20% of the country's GDP. Remittance flows connect economies and synchronize the impact of the international business cycle on recipient nations (Barajas, 2012). Thus, macroeconomic variables are influenced by both the money supply and remittances. The researchers fail to consider the combined role of remittances and the money supply on the Nepalese economy. The industry that fosters competition in the economy is the primary driver of a country's economic growth. That industry is the primary one that makes larger investments in innovative concepts and goods, which boosts the economy's national income and generates jobs.

The majority of remittance revenue has been utilized domestically for things like building and land management, childcare, entertainment, and medical expenses. Additionally, it is somewhat utilized in the productive and commercial sectors to run both tiny and large-scale enterprises. For the underdeveloped countries to boost economic development and increase production, a significant quantity of capital is required. In Nepal, one of the main drivers of capital formation is remittance income. Additionally, the migration of unskilled workers overseas allows them to learn transferable and practical skills upon their return home. Due to their growth in size and volume as well as the surge in global migration, remittances have become a significant topic in the literature on international finance during the past ten years and are probably here to stay (Dhungana 2012).

Remittances are a popular subject and are crucial to the economies of underdeveloped nations. Money from overseas jobs is transferred to homes through unofficial methods because of a variety of issues, including a lack of knowledge about rules and other issues. The new issue with remittance inflows is the movement of funds through unofficial means. The current situation has resulted in a decrease in remittance inflows through the banking channel; however, the overall remittance inflow remains unchanged due to the inflows through the informal channel. It is among the major obstacles to remittance inflows. The growing trend of remittance inflows through unofficial routes has an impact on gathering precise and real data on remittance flow. However, there were a lot of risks associated with sending money through the wrong means (Tandukar, 2010).

Remittances have become a new, hot topic in the Nepalese economy. Every fiscal year, the percentage and contribution of remittances to the gross domestic product rise. Increases in local consumption, investment, capital formation, and production are other benefits of remittance inflows. Remittances play a beneficial role and influence macroeconomic factors in a good way. Inflows of remittances have a favorable effect on real GDP growth as well as economic expansion. Remittances now constitute a substantial portion of the GDP of the nation and play a vital role in the economy. Their growing volume is noteworthy not only in the Nepalese context but also globally. The World Bank reports that during the previous few decades, there has been a steady increase in the overall amount of remittances. Remittances, which are essential to the Nepalese economy, are the main source of income for the country. The purpose of this study is to examine the current situation and determine how remittances affect the Nepalese economy. Thus, the general goal of this study is to address the research question that follows:

- What is the present scenario of Nepal's gross domestic product and remittance inflows?
- Is there any relationship between remittance inflows and GDP, capital formation, money supply, and foreign direct investment (FDI)?
- What impact do remittances, GDP, capital formation, money supply, and foreign direct investment have on Nepal's economy?

1.3 Objectives of the study

The overall objective of this research is to identify the impact of remittance on the Nepalese economy. This investigation will find out certain conclusions and effects. Considering the above-given problem description, research questions and review of literature the purpose of the study will be to find out the impact of remittance on a developing country's economy based on the Nepalese economy. The specific goals are as follows:

- To evaluate the present condition of remittances inflow and gross domestic product of Nepal.
- To study the relationship between remittance inflow and gross domestic product, capital formation, money supply, and foreign direct investment.
- To assess the effects of foreign direct investment, remittances, gross domestic product, and capital formation on the Nepalese economy.

1.4 Rationale of the study

These days, remittances are a popular topic in poor nations like Nepal. It has been proven to positively correlate with both financial development and economic growth, and it plays a crucial role in contributing to macroeconomic variables. Nepal has experienced a negative impact on both international trade and production. The nation's economic development and sustainable economic growth are significantly influenced by remittances. the influence of remittances on productivity, international trade, financial development, and the accumulation of human capital on Nepal's economic progress. This study examines how remittances through the industrial and entrepreneurship channels affect growth. The results show that remittances have a favorable correlation with entrepreneurship but a negative correlation with manufacturing.

The study emphasized the role that remittances play in eliminating poverty as well as how they contribute to economic growth, development, and other macroeconomic indicators. Inflows of remittances constitute a significant portion of the national income sources for households in Nepal. However, it makes up more than one-third of the GDP of Nepal. As a result, this study draws in researchers, policymakers, and anybody else who is genuinely interested in learning more about how remittances affect the economy of Nepal. In the same way, all financial institutions should benefit from this study's various strategies and programs. In conclusion, the researcher should find it useful to do more research using factors beyond those included in this study in order to examine the effects of remittance inflows on the economy. The purpose of the study is to gather data and understanding on the qualitative and quantitative effects of remittances on developing nations, with a focus on Nepal's economy. Remittances are essential to the Nepalese economy's general growth in all sectors.

Better remittance policies and decisions can be made thanks to the study, ensuring the country's economic progress proceeds smoothly. The significance of remittances for nation-building will become evident in light of studies aimed at identifying the various factors. In the same way, anyone wishing to investigate the effects of remittances on the domestic economy further will find value in the conclusions and production figures. On top of that, the study will offer some useful and relevant teachings for further studies on remittances and their effects on the national economy in order to create favorable conditions for the nation's economic development.

1.5 Limitation of the study

Besides the above-stated procedure and strength of the study, there are some limitations of the study that are not being overcome while doing the study. The study has limited resources and methods that might cause difficulties in finding new aspects and new theories. The reliability of the relevant data and information and lack of experience are becoming major limitations of this study. Furthermore, some other limits of this study are presented as follows:

- The research is based on secondary data sources.
- The last twenty years of data, from 2002/03 to 2021/22, were used for this analysis.

- It Ignores unofficial records and the socio-political impact of these variables in Nepal.
- Limited time, money, and literature were used in the preparation of this study.
- This study ought to be conducted for academic purposes.
- The study is only concerned with the impact of the remittance inflow in the Nepalese economy. Research is unable to address another indicator of economic development.
- Only a few variables are used in this study.
- Being the macro level study, it has used secondary data. Required secondary data has been obtained mainly from government publications. So, the accuracy of data used in this study fully depends upon the accuracy of data published in government publications.

CHAPTER II

LITERATURE REVIEW

This chapter represents the overview of the previously published research on a specific topic. The literature review aims to go through the previous research and books to know the research issues in detail and find out the research gap and appropriate methodology. There are various types of studies on the impact of remittance in developing countries. Various empirical studies in line with the dependent as well as independent variables are also reviewed to develop the theoretical framework of the study.

2.1 Theoretical review

Globally, remittances are becoming a hot topic. Many researchers are interested in studying remittance issues and their impact on the economy globally as the rate and amount of remittances have grown tremendously. Transferring or sending money from one party to another is referred to as remittance. The phrase "remittance" generally refers to the sending of money abroad. Remittances essentially help us maintain our family's financial stability in one nation while we reside in another. Remittances can be broadly classified as either inward or outward. The primary indicator of a nation's growth and development globally is its economy. Numerous academics have demonstrated how economic growth contributes to the nation's overall improvement. Many researchers have explained the role played by economic expansion. The impact of remittance inflows on the national economy was explained by this research. The contribution of remittances to keeping foreign exchange reserves stable, lowering unemployment and poverty, and preserving the balance of payments. The trend of overseas employment is growing daily due to increased globalization and liberalization, which contributes to the quick increase in the quantity of remittances that Nepal receives. Remittance inflows and their effect on the Nepalese economy are significantly correlated (Chhetri, KC, and Dhakal, 2020).

Shah (2019) conducted research on Nepal's economic development and remittances. The purpose of the study is to supply useful data and information for the "Remittance and Economic Development of Nepal" research project. The study is mainly based on secondary sources of information and the study approach is analytical and has descriptive methods. The country's economy has greatly benefited from remittances, which have also improved people's standards of living. However, it is linked to overshadowing tragedy. 7 percent of the households' total remittances are used for loan repayment, and the remaining 79 percent are primarily used for everyday expenditure. In the same way, it is utilized for capital formation (2%), property (5%), education (4%), and other reasons (3%). The country's GDP is rising along with household income thanks in large part to remittances. About 30 percent of Nepal’s GDP comes in the form of remittance money which is sent home by Nepalese working abroad and it helps to reduce the country’s poverty rate.

The macroeconomic conditions of the country influence both economic growth and development. The inflow of remittances has a significant influence on the country's economy in several macroeconomic scenarios. The effect of remittance on long-term growth remains inconclusive in economies where the financial system is underdeveloped, remittance appears to alleviate credit constraints and may stimulate economic growth. Remittance may contribute to national savings which is reflected as a result of national resources, interest rates, and as well as national investment. So, remittance creates higher investment which increases potential economic growth.

Classical Economic Growth Theory

Classical economists focused primarily on the challenges of economic progress of the nations. Implicitly Adam Smit and David Ricardo contributed a significant addition to the analysis of economic growth by talking in terms of broad economic principles but by the economic growth theory. Classical economists aimed to identify the many economic forces that drive economic growth and the mechanism behind the economic growth process. The division of labor, the gain from commerce, and the accumulation of capital were considered the main sources of economic progress. Adam Smith and other classical economists had a substantial influence on the economic growth hypothesis. Barro and Sala-i-Martin (2003) state that classical economists, such as (Adam Smith,1776), (David Ricardo,1817), (Thomas Malthus,1798), and, much later (Frank Ramsey,1928), (Allyn Young,1928),(Frank Knight,1944), and (Joseph Schumpeter,1934) provided many of the basic ingredients that appear in modern theories of economic growth.

The key elements determining the engine of economic growth are population expansion, capital growth, the division of labor (technological progress), and institutional framework of the economy (competitive-free traded market economy)

(Adam Smith,1776). land as a significant input had diminishing results because of the fixed supply of land. This attribute of land leads to increased land rents and increasing cost of living for workers, so increasing the cost of agriculture production causes a decrease in the profits of the capitalists, which disturbs the capital accumulation (Ricardo, 1817).

Neoclassical Economic Growth Theory

The neoclassical theory of growth is an economic theory that was first developed by Robert Slow and Trevor Swan in 1956. The idea illustrates how a stable economic growth rate emerges from the combination of three driving forces labor, capital, and technology. The model first considered exogenous population increases to set the growth rate but, in 1957, Solow integrated technology changed into the model. The neoclassical economic theory claims that the short-term equilibrium emerges from fluctuating amounts of labor and capital in the production function. The thesis claims that technological changes have a huge influence on the economy of the nations and economic growth depends upon the technical advancements and economic growth cannot continue without technological improvement. This growth theory believes that the accumulation of wealth inside an economy and how people use that capital is vital for economic growth. Further, the connection between capital and labor in an economy determines its output. Finally, technology is supposed to improve labor productivity and increase the production capacities of labor. Harlod and Domar’s model depict the path of stable and unstable growth but also shows the market mechanism stability for economic growth. The Solow assumption is of the constant link between the capital and labor model under neoclassical settings. Harold and Domar’s model emphasize the contrast between the natural rate of growth and the warranted pace of growth. A model helps to understand how growth has occurred and how it may occur again in the future. Growth strategies are the items a government might add to replicate the outcome provided by the model. There is no possibility of substituting labor for capital in manufacturing (Solow, 1956). The idea especially illustrates and discusses the relationship between labor, capital, and technological growth.

The production function of neoclassical growth theory is used to quantify the growth and equilibrium of an economy. That function is $Y = AF (K, L)$.

Where,

Y= Gross Domestic Product (GDP)

K= Capital

L= Labor

A= Level of Technology

Endogenous Economic Growth Theory

Endogenous economic growth theory developed in the 1980s as the alternative to neoclassical economic growth theory. Endogenous economic growth theory says that the enhancement of the nation's human capital will lead to economic growth by generating new kinds of technology and efficient and effective means of production. The idea behind it is that in a knowledge-based economy, the spillover effects from investment in technology and people keep creating benefits. Influential knowledge-based sectors such as telecommunication, software, and other high-tech industries play a very crucial role here. The endogenous economic growth hypothesis contends that the growth rate of a nation's economy is driven by internal processes such as human capital, innovation, and investment capital rather than external, uncontrollable forces, disputing the idea of the neoclassical theory of economics. Endogenous growth theory stresses on innovation process and makes it possible to bridge the gap between theories and diverse empirical and theoretical literature (Crafts, 1996). It provides the capabilities to tackle endogenous technological change and innovation within a dynamic general equilibrium framework. These tools bring to bear all that we have learned in economics discusses the incentives, organization, and institutions not only about economic growth but many other economic phenomena that interact with growth (Davis& Haltiwahger,1992). Technical augmentation factor is related to economy-wide aggregate capital in a process of "learning-by-doing" (Arrow,1962).

New Economic Growth Theory

According to new growth theory, a country's economic development is determined by its citizens' wants and requirements. Increased personal ambition and per capita consumption lead directly to economic growth. The basic belief is that people's combined efforts, purchases, investments, and personal profit will boost the gross domestic output. To put the idea into practice, governments must promote entrepreneurship, innovation, and technology. According to the theory, innovation and new technologies do not arise at random. Rather, it is determined by the amount of people looking for new inventions or technology, as well as how hard they search for them. People have control over their knowledge capital, including what they learn and how hard they study. If the economic incentive is high enough, people will choose to invest in human capital and pursue new inventions.

The key concept of the new growth theory is that knowledge is viewed as a growth asset that is not subject to finite constraints or diminishing returns, as are other assets such as capital or real estate. The physical world exhibits diminishing returns. A lack of physical objects causes diminishing rewards. The distinction between items and ideas is that concepts are not scarce, and the process of discovery in the realm of ideas is not subject to diminishing returns. (Romer, Kurtzman, 1997)

Remittance has become a hot topic in the international financial industry in recent years, as the volume and rate of change of remittances have increased. Many scholars are interested in analyzing the impact and issues of remittances, as well as their effect on the national economy. Chhetri and Dhakal (2020) investigate remittances and their impact on the Nepalese economy, analyzing the effects of remittances on poverty and unemployment reduction, foreign exchange reserves preservation, and balance of payments maintenance. According to the examination of current data, increasing inflows of remittances in Nepal have a favorable relationship with financial development and human capital accumulation, but a negative link with international commerce. Ratha (2007) believes that remittances improve rural people's consumption levels, which may have significant multiplier effects because they are more likely to be spent on locally produced commodities. Giuliano and Ruiz-Arranz (2005) examined data from more than 100 developing nations from 1975 to 2002 and discovered that remittances can only contribute to economic growth in less financially developed countries.

2.2 Empirical review

2.2.1 International Scenario

Abdul-Malik Abdulai (2023) published a paper on “The impact of remittances on economic growth in Ghana”. The study examines how remittances affected Ghana's GDP growth between 1990 and 2020. To investigate the long-term relationship between the chosen variables, the ARDL estimation technique was employed. The findings highlighted the long-term relationships between the GDP growth rate and official development assistance, trade, remittance inflows, foreign direct investment, unemployment, inflation, and population growth rate. Finally, the GDP growth rate is adversely impacted in both runs by the mediating effect of unemployment on remittance inflows.

Hosan, Rahman, and Saha (2023) conducted study on “Remittances and multidimensional energy poverty: Evidence from household survey in Bangladesh”. With a sample of 46080 families, this study uses a nationally representative household income and expenditure survey to investigate the effects of remittances on multidimensional energy poverty in Bangladesh. Generalized ordered logistic regression, two-stage least square, and linear regression have all been used in this work. The results of this study indicate that remittance growth contributes significantly to reducing energy poverty in Bangladesh and probably other developing countries. The country should prioritize creating laws that support migrant laborers, cutting household energy expenses, and putting remittance income into cutting-edge technologies that guarantee and improve access to sustainable energy sources.

Tchekoumi and Nya (2023) studied the title “Remittances and Economic Growth: What lessons for the CEMAC Zone”. The study's primary goal is to identify the connection between migrant remittances and economic expansion. This paper offers a response based on econometric evidence, collecting data from six CEMAC zone members from 1990 to 2018. The findings imply that trade openness, private investment, and political stability are the primary determinants of the nonlinear link between remittances and economic growth.

Besmir Çollaku (2021) has published an article on “The impact of remittance in economic growth: empirical evidence from the western Balkan countries”. This paper aims to investigate the effects of remittances on the emigrants' nation of origin. Performed a quantitative study utilizing the ordinary least squares method (OLS), i.e., pooled regression, to accomplish a goal. With a focus on Kosovo, the empirical study examined how remittances affected the economic activity of WB nations. Findings support other previous research in the area and show a statistically significant relationship between remittances and economic growth. Discovered that, when all other factors are held equal, the GDP will grow by 0.12% on average for every

1% increase in remittances from Western Balkan countries. The economic activity in the nation of origin is directly impacted by the wise utilization of remittances.

Yadeta and Hunegnaw (2021) studied on “Effect of International Remittance on Economic Growth: Empirical Evidence from Ethiopia”. The primary goal of the study is to investigate the relationship, both short- and long-term, between remittances and economic growth. The study examines the nature and short- and long-term effects of remittances and real gross domestic product, respectively, over the years 1980 to 2015, using the Granger causality test. Based on the availability of all economic variables and the historically high growth in the amount of remittances received throughout the study period, time series data were used. The study focuses on how remittance inflows considerably raise real gross domestic product over the long term but have a negative short-term impact on economic growth. Remittances and economic growth have a unidirectional causal relationship, according to the Granger causality test. Additionally, the data shows that a 1% increase in remittance inflows causes short-term and long-term improvements in the real GDP domestic product of 1.87 percent and 1.13 percent, respectively. Remittance inflows and economic growth are significantly correlated, according to the final figure.

Pal, Villanthenkodath, Patel and Mahalik (2021) conducted a study on “The Impact of Remittance Inflow on Economic Growth, Unemployment and Income Inequality: An International Evidence” The study uses completely modified ordinary least square estimates together with fixed and random factors to examine the effects of remittance inflows on economic growth, unemployment, and income inequality for high-, middle-, and low-income countries between 1991 and 2020. The results demonstrate that remittance inflows promote economic growth in high-income as well as low-income nations. Remittance inflows, however, cause unemployment to rise in high-income nations while falling in low- and middle-income nations. Remittance inflows have been shown to mitigate income disparity in all nations, according to the income inequality model.

Azizi (2020) studied “Impact of Remittances on Financial Development”. This article examines how foreign remittances affect the financial development of underdeveloped nations. A panel of 124 emerging nations of the years 1990–2015 are the subject of the study. The primary goal of the study is to understand how remittance inflows affect developing countries. The fixed effect model of instrumental variables serves as the foundation for the empirical data. The contribution of remittance inflows to the GDP ratio, domestic credit to the private sector, bank deposits, bank credit, and liquid liabilities was determined by the study's findings. Remittances have a significant impact on financial development in underdeveloped nations primarily because financial development lowers poverty and promotes long-term growth. In order to calculate the weighted gross national income, per capita income, and real interest rates of the remittance-sending countries, the study estimates bilateral remittances. The fixed effect model yielded the following results: a 10% increase in the ratio of remittances to GDP; additionally, the domestic credit to the private sector to GDP ratio is 1.7%; the credit to GDP ratio increases by 1.9%; the deposit to GDP ratio increases by 1.2 percent; and the liquid liability increases by 0.8% percent.

Sutradhar (2020) studied on “Impact of Remittances on Economic Growth in Bangladesh, India, Pakistan and Sri Lanka”. Using balanced panel data from 1977 to 2016, this study examines the effect of worker remittances on the economic growth of four rising South Asian nations. The objective of this paper is to examine the relationship. between the remittances from workers and the economic growth of four South Asian nations, with India being the world's biggest recipient of remittances annually. The models employed in this study are empirically implemented, and associated tests are conducted. The World Bank (WB) and International Monetary Fund (IMF) databases provided secondary data for this study. Except for India, the regression results show a negative correlation between remittances and economic growth in South Asian nations. According to the empirical findings, for every 1% increase in remittance growth, GDP per capita growth in Bangladesh, Pakistan, Sri Lanka, and India increases by 0.017%, decreases by 0.05, 0.021, and 0.004%, respectively. As a result, it represents profitable operations related to remittance inflows. While increase in exports and gross capital formation are similarly statistically significant but have a positive effect on per capita GDP growth, other control factors like FDI growth and exchange rate growth are negatively associated to economic growth.

Mondal and Khanam (2018) conducted research on “The Impact of Remittance on Reducing Volatility of household consumption of developing countries”. The study focuses on investigating the long-run and the short-run implication of international remittance in developing countries. Research has used a panel database of 84 developing countries during the period from 1980 to 2014. The focus of this study is to show the impact of remittance inflows on the volatility of household consumption in developing countries. The results of the paperwork show the volatility of household consumption can significantly reduce by international migrant remittance. The results and findings of this study explained that international migrant remittance contributes significantly to household welfare by reducing the volatility of consumption.

Mulatu F. Zerihun (2020) conducted research on “Remittances and Economic Growth: Evidence from Ethiopia, Kenya, and Uganda”. The goal of this study is to examine the potential impact of overseas remittances on the growth of the economies of Ethiopia, Kenya, and Uganda—three economies that are members of the Intergovernmental Authority on Development (IGAD). One important connection between development and human mobility is the inflow of remittances. Empirical results, however, on the relationship between remittances and economic growth are, at best, contradictory. This study investigates the impact of remittances from inflows of foreign migrants on the economic development of three IGAD member nations. The research employs quantitative analysis utilizing World Bank annual data from 1990 to 2017 and covers the nations. This study is interesting because it asks questions about the short- and long-term relationships between remittance flow and economic growth using several methodologies. The logarithm of remittances has a positive but statistically insignificant impact on the dependent variable, economic growth, according to the pooled estimate result from fully modified least squares (FMOLS). The data do not provide enough evidence to support the null hypothesis, as demonstrated by the Kao panel residual cointegration test. The variables in the series have a long-term, statistically significant relationship with one another. This suggests that the economic growth of the nations included in this study is influenced over the long term by overseas remittances. Furthermore, remittances Granger contribute to economic growth, notably at a five percent significance level over an extended period. As a robustness check, fixed-effects and random-effects estimation are employed to validate the outcomes of dynamic panel regression. The results of the fixed-effects and random-effects estimations support the panel regression results' conclusions.

2.2.2 National Scenario

Thapa and Adhikari (2023) conducted a study on “Impact of Worker’s Remittance on Financial Development of Nepal”. This study examines how Nepal's financial progress is impacted by remittance inflows. The money supply and total bank deposits are chosen as the dependent variables, and the exchange rate, inflation, per capita income, foreign direct investment, and remittance inflow as GDP increments are chosen as the independent variables. The Ministry of Finance's Economic Survey, Nepal Rastra bank's Quarterly Economic Bulletin, and the World Bank's World Development Indicators are the main data sources. The analysis is based on secondary data that was gathered during a 31-year span, from 1990 to 2021. The long-term co-integrating relationship between remittances and financial development has been examined using co-integration analysis. It is discovered that there is a long-term, co-integrating relationship in Nepal between remittance inflow and financial development. Furthermore, there is a long-standing positive correlation between total deposits and remittance inflow. This suggests that the total deposits would increase in proportion to the remittance inflow. The results also demonstrate a positive correlation between the total deposit and money supply and per capita income, inflation, and exchange rates. This suggests that a rise in per capita income eventually causes a rise in total deposits and the money supply. Similarly, the analysis shows that a longer-term increase in inflation would also result in an increase in total deposits and the money supply. Granger Causality's conclusion demonstrates the unidirectional causal relationship between remittances, total deposits, and money supply. This suggests that remittances contribute to an increase in Nepal's total deposits and money supply.

Adhikari (2023) has published an article on “Impact of Remittance on Gross Domestic Savings in Nepal”. This research uses the Autoregressive distributed lag model to investigate how remittances affect Nepal's gross domestic savings. Remittances have little impact on gross domestic savings over the long and short terms, as the study has shown. This runs counter to studies that demonstrate both a positive and a negative correlation between gross domestic savings and remittances. The study also demonstrates the beneficial relationship between gross domestic saving and other factors like the gross domestic output. Therefore, it is advised that planners and decision-makers take the economy's high rate of remittance income consumption seriously and implement the consumption reduction that increases savings and advances the growth and development of the country.

AK Chaudhary, AK Mishra (2023) has published an article on “Impact Assessment of COVID-19 on Remittance Inflow; A Systematic Review in Case of Nepal”. The paper's main goal is to review the Effect of COVID-19 on Nepal's Remittance Inflow. The main purpose of the article is to determine whether COVID-19 has a positive or negative effect on remittance inflow as a result of the pandemic. The relevant literature was carefully examined, along with authorized data from the World Bank Survey Report, International Labor Organization, Central Bureau of Statistics (CBS), Nepal Rastra Bank, Ministry of Finance, Department of Foreign Employment (DoFE), Nepal Migration Report, Current Macroeconomics and Financial Situation of Nepal, and other pertinent organizations. Prior to the COVID-19 pandemic, remittances from overseas employment were trending higher and higher in Nepal. Following the government of Nepal's lockdown on March 24, 2020, and the discovery of the COVID-19 pandemic in Wuhan, China in November 2019, remittances to Nepal have decreased by 0.49% to NPR. 875 billion from NPR. 879.3 billion, which had increased by 16.5% the year prior to the COVID-19 discovery. While the COVID-19 epidemic has gradually reduced in recent years, remittance inflows have been gradually rising from the fiscal year 2020–2021. It rises to NPR. 961.05 billion in the fiscal year 2020–2021, a 9.8% increase. In the same way, it rises by 4.8% to NPR. 1007.31 billion in the fiscal year 2021/22, which is a long time ago. Following similar patterns, in the first half of the current fiscal year 2022–2023 remittance inflows to Nepal from foreign employment increased by 24.3% to NPR. 585.08 billion. These days, remittance inflows have been rising.

Dhakal, Paudel (2023) has published an article on “Remittance in Nepal: Status, Trend and Economic Impacts”. This study uses 20 years of data, from 2002 to 2021, to evaluate the trend, status, and economic impact of remittances in Nepal. Remittances are the portion of household income that people send home with their earnings from the overseas economy. In poor nations, remittances are a vital source of foreign exchange that considerably boosts the GDP of those nations. The study's data came from secondary sources, including official reports from numerous organizations, research papers that were published in different journals, and other scientific materials. Using MS-EXCEL for correlation analysis and descriptive statistics, the data were examined. Remittance inflow into Nepal is trending upward. Nepal is ranked 19th in the world in terms of the quantity of remittances received and their share of the GDP. The national gross domestic product (r=0.9817), the trade deficit (r=0.96), final consumer expenditure (r=0.985), and gross capital creation (r=0.954) all exhibit high positive correlations with remittances. There was a negative correlation between remittances and the agricultural gross domestic product (r=-0.7715), but there was a weak positive correlation (r=0.315) between remittances and inflation. Less remittance use in the productive sector has detrimental effects on long-term economic welfare and sustainability, even while it is growing in importance as a source of income and raising household consumption levels.

Dahal (2022) conducted research on “Effect of remittance on the macroeconomy: A structural VAR study of Nepal”. The paper analyses the immediate macroeconomic effects of remittances by focusing on Nepal, a country that receives a significant amount of remittances in relation to its GDP. The quantitative effect of remittances on the Nepali economy has not been well investigated, despite the significant increase in remittances throughout the early 2000s. Macroeconomic modelling of the Nepali economy is in its early stages mainly because of the lack of dependable data. This report intends to address the gaps in research by analyzing the impact of remittance and other macroeconomic shocks on Nepal's small open economy from 2004 to 2019 using new quarterly GDP data. This study discovered that remittances impacted various macroeconomic indicators in Nepal. Remittance shock leads to an increase in the money supply, prices, and appreciation of the actual exchange rate. The substantial increase in remittances to the Nepali economy did not have a major influence on the real GDP during the research period. The study indicates that remittances are mostly influenced by external factors, especially the performance of overseas partners. The study indicates that policymakers in Nepal should be aware of the advantages and disadvantages of excessive remittances and should improve their management to mitigate negative effects like inflation and exchange rate fluctuations. Given that Nepal’s demographic divide is anticipated to endure until the mid-2030s, young people are likely to continue travelling outside Nepal to hunt for better prospects Therefore, remittances will remain a significant source of external income in the near future.

Acharya and Paudel (2021) investigated the “Effects of Remittance on Economics Growth in Nepal”. The study included Gross Domestic Product as the dependent variable and Remittance, Investment, Consumption, and Government Expenditure are independent variables. The investigations have employed a basic regression equation computed using the ordinary least square (OLS) method. Other analytical tools including the unit root test, heteroscedasticity test, normality test, serial correlation test, R-squared test, t-test, F-test, D-W test, have been utilized. Thus, the research implies that Remittance and government expenditure are statistically inconsequential to economic growth. But remittances are negatively connected, and government expenditure has a positive relationship to economic growth. There is a large and positive association between investment and consumption with Gross domestic product. This study indicated that remittance should be used in the productive sector by adopting proper policies.

Chhetri, KC and Dhakal (2020) conducted research on “Remittance and its Impact on Nepalese Economy”. This essay evaluates the state of remittances today and how it affects the economy of Nepal. For the study, secondary data from a variety of sources were employed. Descriptive statistics and correlation were two of the statistical methods applied. Every year, there are more and more Nepalese nationals seeking work abroad. When remittances are evaluated as a proportion of GDP, Nepal comes in fourth place and ranks 19th among the top receiving nations worldwide. When compared to the GDP to remittance ratio, the percentage increase in inflation was lower. The results indicated no correlation between the increase of agricultural land and the remittance inflow. Remittances have benefited Nepal's economy in a number of ways, including lowering unemployment and poverty, preserving foreign exchange reserves, and balancing the books. At the 10% significance level, a positive and substantial association was discovered between GDP and annual remittance inflow. Remittances showed a negative and strong correlation with GDP percentage, as well as with the share of agriculture, forestry, and fisheries. It was discovered that while remittances as a percentage of GDP were rising, the country's GDP from forestry, fisheries, and agriculture was declining. The lack of labor for both agricultural and non-agricultural jobs is a real issue since young people are actively seeking employment abroad. People's reliance on remittances is growing as the volume of remittances increases quickly, and the Nepalese economy is progressively shifting towards consumption. Additionally, the economy of Nepal is shifting from being dependent on agriculture to being dependent on remittances. Therefore, it is advised that suitable policies be developed and put into place to tap and utilize incoming remittances into the productive sector.

Poudyal and Bhaskar (2020) conducted research on “Inflow of Remittance and its impacts on the Economics Growth of Nepal.” This study evaluates the current state of remittances and their impact on GDP and economic expansion. Remittances have been helping at both the macro and micro levels, which is essential for the development of a nation. Remittances help in reducing the main issues of poverty and unemployment. Remittances also kept the balance of payments and the foreign exchange reserve intact. However, the majority of Nepalese are moving to the Gulf region in search of better living conditions and necessities. Due to the simplicity of obtaining a visa, Malaysia, Qatar, and the United Arab Emirates are popular destinations for overseas employment. Nepal's economy has been growing thanks in part to remittances. The COVID-19 pandemic has caused remittances to have a detrimental effect on Nepal's GDP. Remittance ratios are dropping from 7.1% to 2.8%, which has a significant impact on domestic development. The study employed correlation and multiple regression analysis to examine the impact of remittances on a range of variables, including poverty reduction, national growth, investment rate, migration, industrial growth, inflation, import, and export.

Chhetri, Paudel and Dhakal (2020) conducted research on “Current remittance status and impact on the Nepalese economy.” Every year, there are more and more Nepalese nationals seeking work abroad. Nepal is ranked 4th in terms of remittances as a proportion of GDP and 19th among the top receiving countries of remittances worldwide. When comparing the percentage increase in inflation to the GDP proportion of remittances, the former is higher. According to the study's findings, remittances help the Nepalese economy by reducing unemployment and poverty, preserving foreign exchange reserves, and balancing the books. The analysis comes to the conclusion that remittances gradually replaced agriculture as the main driver of the Nepalese economy.

2.3 Research gap

Studies start with a research proposal, and identifying a legitimate research gap is the initial step in drafting a research proposal. The researcher has attempted to discover the gap in past study that has not been addressed by earlier studies. A research gap occurs when an issue or problem has not been addressed by any previous studies or research.

A research gap is a question or problem that has not been sufficiently addressed in existing research and requires updating.

Several research studies have been conducted on the impact of remittances on the Nepalese economy. Remittance has been a prominent subject in the economic sector, motivating numerous scholars to focus their studies on this topic. Several studies have investigated the effects of remittance and analyzed its correlation with poverty, inflation, foreign currency reserves, household consumption, and other factors. The study and research each offer their own findings and suggestions. Upon reviewing the literature on the topic, it was discovered that there may be differences between this study and previous research. There is a limitation of studies in Nepal that examine the statistical significance of the influence of remittances on the Nepalese economy.

The outcome of the literature review is restricted usage of data in analyzing the impact of remittance on economic growth in Nepal. Many researchers have tracked only one variable in their economic model i.e. remittance inflows. From the literature review and previous investigations, there is a clear research need for this subject. The study includes remittance inflows, money supply, capital formation, and FDI as independent factors by considering previously investigated variables. This study has evaluated 20 years of data for analysis such as descriptive analysis, correlation, and regression analysis. The examination of data and research techniques reveals that remittance has a strong and positive association with economic growth.

CHAPTER III

RESEARCH METHODOLOGY

Research methodology is the procedure that helps to systematically advance in steps to solve a research topic. It is a broader term that covers not only the research methods but the rationale behind the research methods in the context of a given research study and it explains the reasons for employing various research methods and statistical techniques. It helps to attain study objectives with accuracy, appropriateness, and validity. It refers to the aggregate of the study design employed, data gathering strategy, sampling design, statistical tools and techniques. The objectives of Research cannot be obtained without adequate research methodology. For the aim of fulfilling the objectives of the study, a proper and adequate technique should be used. Research methodology explains the tools and approaches to achieve objectives based on the preceding literature review. Therefore, this chapter highlights the approach that will be employed in the process of future study.

3.1 Research design

Research design is an approach for answering research questions using empirical data. Simply research design specifies how the research process goes on. It is the broad planning and development of the framework for the work. It helps to allocate limited resources by making key choices in methodology. Research design may involve numerous forms such as historical research, descriptive research, development research, correlation research, case study research, casual comparative research, real experimental research, quasi-experimental research, action research and explorative research.

This study is based on descriptive and causal comparative research design to examine the impact of remittance inflows on the Nepalese economy. For this study, data will be obtained from the Central Bank, the Ministry of Finance, books on remittance and different magazines and papers. Various conceptual conceptions and ideas are developed concerning the success of the research from the literature review in the previous section. The statistical methods have been employed along with the research design to examine the influence of remittance on the Nepalese economy which is generalized to achieve the findings and conclusion of this study.

3.2 Population and Sample

Population refers to the complete number of people, events, or things in a certain geographical area at a particular moment and acting as a unit. There is growth in the number of people working for international work and its results are observed in the national economy. The study is related to studying the influence of remittance on economic growth in Nepal. Remittance is one of the subjective topics so there are some difficulties in identifying the research sample and population. Remittance inflows in Nepal the whole year as a population of the study. This study has used 20 years of data from 2002/03 to 2021/22 A.D. of remittance inflows as the sample of the research.

3.3 Sources of data

The source of data is the entire location where the researcher discovered useful information for their unique person. Because this topic is about remittances, the data should be in the form of time series and derived from secondary sources. The primary sources for the study include government entities such as Nepal Rastra Bank, the Ministry of Finance's yearly statistical reports, and the Ministry of Labor and Employment. Primary data is collected to gain more knowledge about the research issue. Secondary data and other needed information will be obtained from relevant organizations and regulatory bodies. The required information, data, reports, and facts are gathered by the following agencies.

- Annual Report (NRB)
- Economic Survey (MoF)
- Ministry of Industry Commerce and Suppliers (MOICS)
- Economic Bulletin (NRB)

3.4 Research Framework

The research framework shows the identified dependent variables and their relationship based on the literature review and the relevant diverse research topics. The research framework determined dependent and independent variables and their relationship is described as follows.

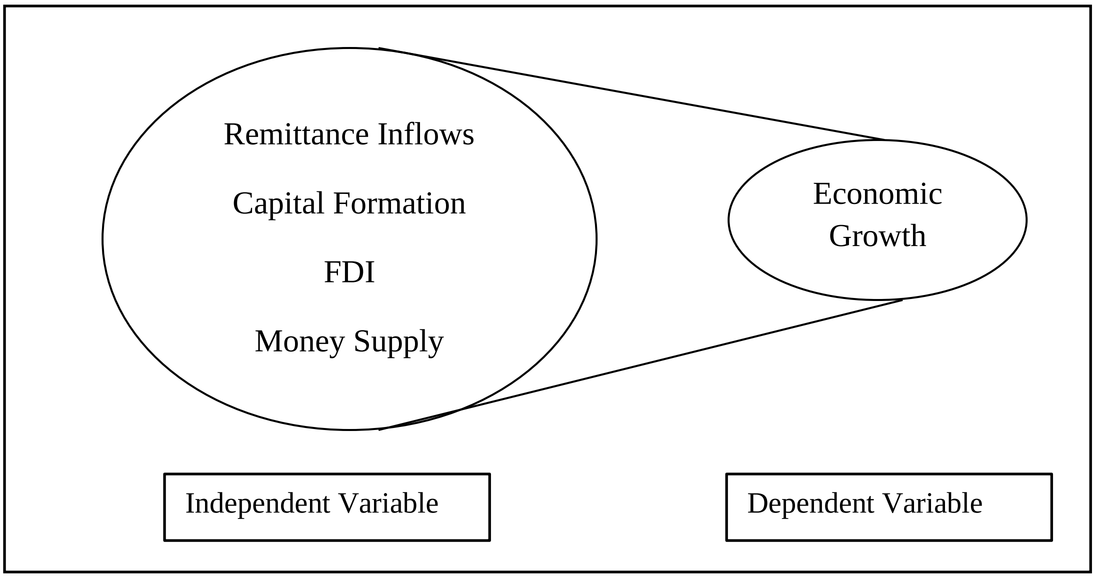

Figure 1: Research Framework

The research framework includes remittance inflows, money supply, capital creation, and FDI as independent variables, with economic growth based on Real GDP as the dependent variable.

3.5 Definition of Variables

Remittance Inflows

Remittance refers to a portion of income sent by migrants from their destination country back to their home country, serving as a crucial source of foreign revenue for developing nations such as Nepal. Remittance is an important source of income for households in development countries. The flow of remittance is the least influenced by economic downturn and remains the stables sources of income (Alfieri, Havinga & Hvidsten, 2005). They are the private savings of workers and families that are spent in the home nation for food, clothes, and other expenses and which drive the home economy. For many poor nations, remittances from residents working abroad are an essential source of much-needed income. In certain circumstances, funds from remittances exceed aid from the developed world and are only exceeded by foreign direct investment (FDI). Remittance inflows are taken as the independent variable for the ongoing investigation.

Capital Formation

Capital formation refers to the accumulation of capital goods within a country during a specific accounting period. This includes acquiring assets such as machinery, tools, transportation, and infrastructure. The process involves increasing wealth and generating further economic value. For instance, if a country produces an abundance of goods and services, it can boost income levels. Capital accumulation or formation refers to the process of amassing or stoking of assets of value, the increase in wealth of the creation of further wealth (Ugochukwu & Chinyere, 2013). To accumulate capital, a nation needs to encourage savings from households and implement government policies that promote investment. Countries with higher rates of household savings have greater potential to accumulate funds for producing capital goods more rapidly. Additionally, governments with budget surpluses can invest excess funds into capital goods. Capital formation is often considered as an independent variable in ongoing research endeavors. Capital formation is considered an independent variable in the current study.

Foreign Direct Investment (FDI)

Foreign direct investment (FDI) refers to an investment made by an individual, company, or government from one country into another, typically involving an ownership stake in a foreign company or project. This can involve expanding one's business operations into a foreign market. FDI is widely recognized as a significant indicator and a key influence on political decision-makers, including both national governments and international organizations. Foreign direct investment (FDI) is critical to economic growth, and it accomplishes this through two channels: capital accumulation and technology transfer (Fazaalloh,2024). The inflow of FDI is seen as essential for driving economic development. However, the impact of FDI on host economies can vary, with both positive and negative effects depending on factors such as the host economy's level of development, the nature of the investment, and the strategic importance of the investment site to the investor. FDI plays a crucial role in the national economic development process and is currently a prominent topic of global discussion. Foreign direct investment is included as another independent variable in the ongoing research.

Money Supply

The entire amount of money that the central money authority injects into the economy throughout a specific period of economic time is known as the money supply. It is mainly divided into two terms narrow money supply and broad money supply (Gyawali, 2019). The money that is in circulation includes cash, banknotes, money in deposit accounts, and other liquid assets. Economists and decision-makers can formulate new policies or modify current ones of the expansion or contraction of the money supply with the help of money supply valuation and analysis. The valuation is significant as it ultimately affects the business cycle and consequently affects the economy. The money supply is taken as the independent variable for ongoing research.

Economic Growth

Economic growth refers to the increase in the production of goods and services during a specific timeframe, typically measured by measures like Gross Domestic Product (GDP) or Gross National Product (GNP. It relates to economic advancement and Gross Domestic Product (GDP). Economic growth can be measured by the increase in real GDP or gross national product (GNP) during a specific timeframe. Economic growth is the long-run motivation for attracting increased remittance inflows to promote economic development in recipient countries. (Christian R.K. & Deodat. E., 2008). It is a crucial measure of a nation's economic well-being and can result in raised employment levels, enhanced living conditions, and boosted investment. Economic growth is impacted by various variables such as technical progress, enhanced productivity, capital investment, infrastructural development, and government policies supporting entrepreneurship and innovation. Economic growth is the primary reason for seeking more remittance inflows to support economic development in recipient nations in the long term.

3.6 Methods of Analysis

This study employs descriptive and causal research methodologies, thereby minimizing the necessity for complex mathematical computations. Instead, the focus lies on utilizing statistical tools and techniques for effective data presentation and analysis. Various statistical methods are employed to ensure accurate results based on the literature review and the chosen methodology. Tabulation, a commonly used tool, involves organizing data into rows and columns to simplify presentation and aid in the comparison of related information, thus facilitating result interpretation. Additionally, diagrams serve as another means of data presentation, representing statistical information through geometric forms like points, bars, lines, and charts. Furthermore, simple mathematical calculations such as ratios, percentages, trends, and correlations are employed for analysis. The study also utilizes various other statistical tools and techniques for data analysis.

Descriptive Analysis

Descriptive analysis involves examining both current and historical data to uncover patterns and relationships. Serving as the initial stage of data analysis in this study, it aims to depict, summarize, and elucidate the connections among different data points, potentially revealing significant patterns. This analytical process is crucial for understanding the data distribution, identifying similarities among variables, and laying the groundwork for further statistical analysis. Descriptive analysis is particularly valuable for illustrating changes over time and utilizing trends to inform decision-making processes. By detecting anomalies, clarifying data distributions, and highlighting variable similarities, it prepares the data for subsequent statistical analyses. Various tools for descriptive analysis are discussed below.

Mean

The mean, a fundamental concept in mathematics and statistics, represents the average or most frequently occurring value within a set of numbers. Mean is the value, which reflects the group of values and gives an idea about the concentration of values in the central section of the distribution. An average gives us a point, which is the most indicative of the data. It helps to examine a bunch of numbers by providing the average, helping to contextualize each data point. The value of the mean is calculated by adding together all the elements and by dividing this sum by the number of items.

Mathematically,

Mean = $\sum X / N$

Where,

$\sum X$ = Sum of all the Values of the variable X

N = Number of Observations

Standard Deviation

Standard deviation is the measure of the dispersion of a set of data from its mean. It quantifies the absolute variability of a distribution, the larger the dispersion or variability, the greater the standard deviation and the bigger will be the degree of the deviation of the value from their mean. The standard Deviation (σ) measures the absolute dispersion. The bigger the standard deviation, the greater will be the magnitude of the departures of the data from their mean. A small standard deviation suggests a high degree of uniformity of the observations as well as homogeneity of a series and vice versa.

Correlation Analysis

Correlation analysis is the statistical method used to analyze the closeness of the relationship between two or more variables. The correlation coefficient measures the degree of link between two sets of variables. The correlation of the collection of figures can be positive or negative. It is denoted by "r" and the correlation lies between the ranges of-1 to +1. When +1 is denoted to there is the perfect positive relationship between the variables on the other hand -1 denoted the perfectly negative link between the variables.

Coefficient of Determination

A statistical measure that determines the proportion of variance in the dependent variable that can be explained by the independent variable. In other words, the coefficient of determination gives the ratio of predicted variance to the overall variance. This measure is given as a value between 0.0 and 1.0, where a value of 1.0 represents a perfect correlation. Thus, it is a credible model for future forecasts, while a value of 0.0 shows that asset prices are not a function dependent on the index. The coefficient of determination is determined by the square of the correlation coefficient. i.e. So, the coefficient of determination equals Square of correlation = ().

Regression Analysis

Regression analysis is a statistical method used to examine the relationship between one dependent variable (usually denoted as Y) and one or more independent variables (usually denoted as X). It aims to understand how the dependent variable changes when one or more independent variables are varied. Regression analysis presents the simple regression equation of the dependent and independent variables. It describes the variation in the value dependent variable of a given change in the value of independent variables.

Regression model:

$EGROWTHt = \beta 0 + \beta 1 RIt + \beta 2 MSt + \beta 3 CFt + \beta 4 FDIt + eit$

Where,

EGROWTHt:- Economic Growth for ‘t’ period

RI:- Remittance Inflows for ‘t’ period

MS:- Money Supply for ‘t’ period

CF:- Capital Formation for ‘t’ period

FDI:- Foreign Direct Investment

$\beta 0$, $\beta 1$, $\beta 2$, $\beta 3$, $\beta 4$:- Regression Coefficient Parameters

eit:- Random error term

Test of Significance

A formal technique for comparing observed data with the hypothesis, the reality of which is being examined is known as a test of significance. It is the statement containing a few of the parameters like the population proportion P and population mean μ. It is used to test a claim regarding an unknown population parameter. A significant test uses the data to evaluate the hypothesis by comparing sample point estimates of parameters to values predicted by the hypothesis. Test of significance is used for testing the significance and insignificance relationship between dependent and independent variables.

CHAPTER IV

RESULT AND DISCUSSION

This chapter involves presenting, tabulating, discussing, and analyzing the relevant data specified in the research question introduced in the first chapter to achieve the objectives through the application of different statistical methods and regression analysis as detailed in the third chapter. This study uses a descriptive and causal research design. Utilizing statistical tools to analyze and present relevant data aims to answer the research question. The analysis aims to show the correlation between dependent and independent variables within the research framework. Data presentation and analysis are performed using SPSS software.

4.1 Remittance and its Growth in Nepal

Remittance is a major pillar of the Nepalese economy. It is an important source of income in Nepal. The amount of remittances has steadily increased in recent years, and Nepal is one of the top remittance-receiving countries among developing countries. Nepal has the highest contribution of remittances to GDP among developing countries. Remittance trends steadily increase as the number of Nepalese people working abroad grows. Figure 2 shows the remittance inflows to Nepal and their growth in each fiscal year. The growth ratio of remittances has been increasing over the last 20 years. As remittance trends in Nepal continue to rise, so does the share of remittances in Nepal's GDP. In recent years, Nepal's remittance inflows have continued to grow. The amount and percentage of remittance income increased year after year. This situation shows the impact of remittance inflows on the Nepalese economy as it benefits the national economy, raises living standards, reduces poverty, maintains the balance of payment, creates job opportunities, etc.

4.1.1 Trend of Remittance Inflows in Nepal

This section presents the annual remittance inflows in Nepal from 2002/03 to 2021/22. Nepal's remittance inflows increased from Rs 54.2 billion in fiscal year 2002/03 to Rs 1017.31 billion in fiscal year 2021/22. (Economic Survey, MoF). Figure 2 shows remittance inflows and growth in Nepal from 2002/03 to 2021/22. Figure 2 illustrates the trend of remittance inflows in Nepal.

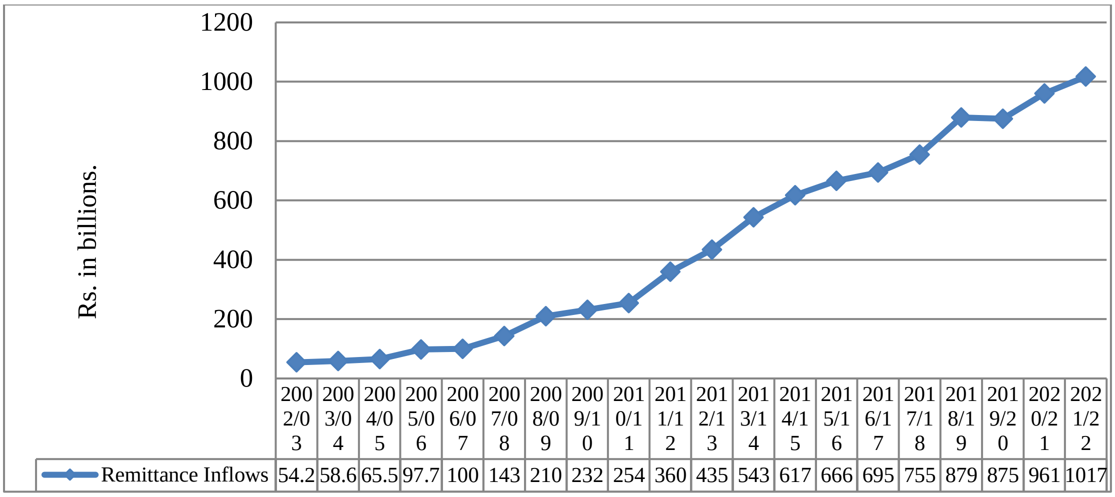

Figure 2: Trend of Remittance Inflows in Nepal yearly (in billions)

Source: Appendix-1

Figure 2 shows the yearly remittance inflows and growth over the last 20 fiscal years. In the figure, remittance inflows in 2002/03 were Rs 54.2 billion and in 2003/04 were Rs 58.59 billion, an increase of Rs 4.39 billion, or 8.10 percent, over the previous year. In 2004/05, remittance inflows were Rs 65.54, up 11.86 percent from the previous year. In 2005/06, remittance inflows increased by 49.05 percent, from 65.54 billion to Rs 97.69 billion. Similarly, remittance inflows were 100.14 billion, 142.68 billion, 209.70 billion, 231.72 billion, 253.6 billion, 359.6 billion, 434.6 billion, 543.3 billion, and 617.3 billion for the years 2006/07, 2007/08, 2008/09, 2009/2010, 2010/11, 2011/12, 2012/13, 2013/14, and 2014/15, respectively, and increased by 2.50, 42.48, 46.97, 10.50, 9.44, 41.80, 20.86, 25.01, and 13.62. According to the trend of remittance inflows in Nepal, the flow of remittances is continuously increasing. In 2019/20, remittance inflows decreased by 0.49 percent, from Rs 879.37 billion to Rs 875.03 billion. The most recent remittance inflows in 2020/21 increased by 9.84 percent from Rs 875.03 billion to Rs 961.05 billion, while the most recent remittance inflows in 2021/22 increased by 5.82 percent from 961.05 billion to 1017.31 billion. The figure shows the increasing trends and growth rate of remittance inflows in Nepal over the previous 20 years, from 2002/03 to 2022/23. Remittance inflows are increasing year after year, however at a slower rate than the previous year.

4.2 Remittance Inflows and Real GDP of Nepal

This section examines the relationship between remittance inflows and real GDP of Nepal. Both remittance inflows and real GDP increased between 2002/03 and 2021/22.

Remittance inflows increased from Rs 54.20 billion in 2002/03 to Rs 1017.31 billion in 2021/22, while GDP increased from Rs 1052.8 billion to Rs 2261.8 billion over the same period. The data illustrates that as remittance inflows increase, Nepal's real GDP also increases. Figure 3 shows the relationship between remittance inflows and real GDP, as shown below.

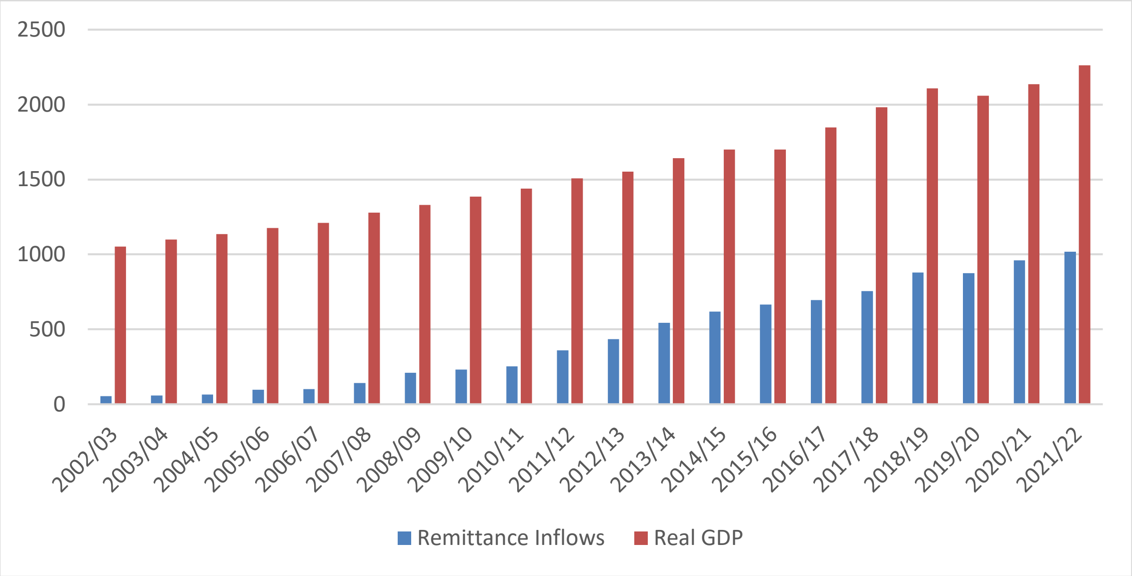

Figure 3: Trend of Remittance Inflows and Real GDP of Nepal

Source: Appendix-2

The growth rate of real GDP and remittance inflows from 2002–03 to 2021–22 is shown in Figure 3, which shows a steady upward trend. Real GDP grew steadily, rising from Rs 1052.8 billion in 2002–03 to Rs 2261.8 billion in 2021/22. However, real GDP fell from Rs 2109.3 billion to Rs 2058.1 billion in 2019 due to the Covid-19 pandemic. Despite this setback, the total data shows a positive relationship between Nepal's real GDP and remittance inflows, indicating that rising remittances support the growth of the country's economy.

4.3 Money Supply and Real GDP of Nepal

The money supply is defined as the total amount of money that the central bank injects into the economy during a given economic period. The increasing trends in the money supply have a positive effect on real GDP. Remittance inflows increase the money supply, which boosts Nepal's economic growth.

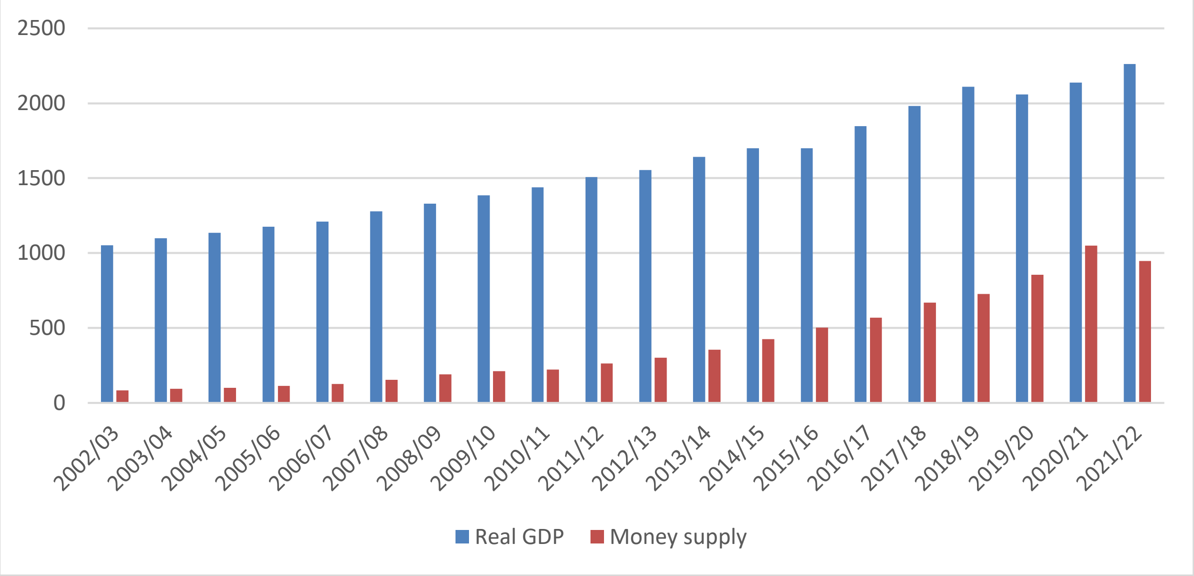

Figure 4: Trend of Real GDP and Money Supply

Source: Appendix-4

The money supply and real GDP trends from 2002–03 to 2021–22 is shown in Figure 4, which shows a steady upward trend in both variables. The real GDP grew from Rs 1052.8 billion to Rs 2261.8 billion during the same period, while the money supply increased from Rs 83.75 billion in 2002–03 to Rs 948.11 billion in 2021/22. For the fiscal years 2003/04 through 2015/16, the amounts of money supply were as follows: Rs 93.97 billion, Rs 100.21 billion, Rs 113.06 billion, Rs 126.46 billion, Rs 154.28 billion, Rs 190.91 billion, Rs 212.1 billion, Rs 222.35 billion, Rs 263.71 billion, Rs 301.59 billion, Rs 354.83 billion, Rs 424.75 billion, and Rs 503.29 billion. Both indicators showed steady increases. The size of the money supply and real GDP are shown in Figure 4, which shows that the two variables have a positive relationship. The expansion of Nepal's real GDP is positively impacted by the growing money supply.

4.4 Capital Formation and Real GDP of Nepal

Capital formation is the process of accumulating or developing valuable assets, increasing wealth, or creating additional wealth. It is the net accumulation of capital goods such as machinery, tools, vehicles, and electricity. This section discusses the relationship between real GDP and capital formation. It helps in analyzing the impact of growing remittance inflows, which leads to an increase in capital formation, thereby increasing Nepal's contribution to Real GDP and economic growth.

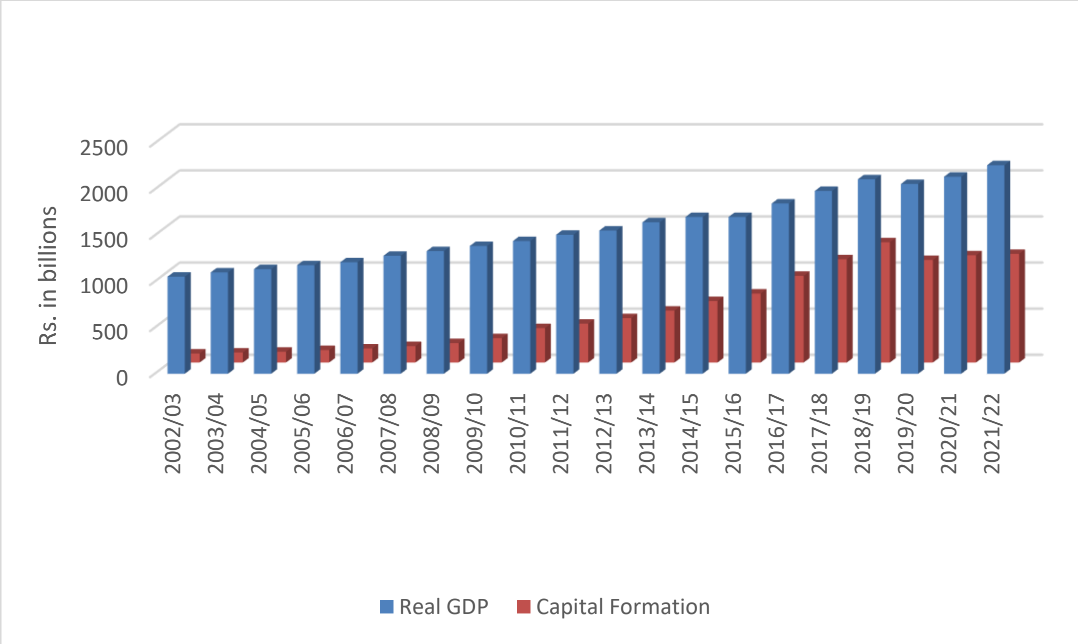

Figure 5: Trend of Real GDP and Capital Formation

Source: Appendix-5

Figure 5 shows the capital formation and real GDP from 2002/03 to 2021/22. Capital formation was Rs 98.07 billion in 2002/03, increasing to Rs 1179.3 billion in 2021/22. Real GDP was 1052.8 in 2002/03, increasing to Rs 2261.8 in 2021/22. The highest capital formation was in 2018/19, at Rs 1304.90. Both capital formation and real GDP were steadily increasing. Figure 5 shows the size of Real GDP and Capital Formation. The figure shows a positive relationship between Real GDP and capital formation. Increasing capital formation has a positive impact on Nepal's real GDP growth.

4.5 Foreign Direct Investment and Real GDP of Nepal

Foreign direct investment is a stake in a foreign company or project acquired by an investor, company, or government from another country. It can be obtained by expanding one's business in a foreign country. This section examined the status of foreign direct investment. The increase in remittance inflows results in an increase in foreign direct investment, which boosts Nepal's real GDP growth.

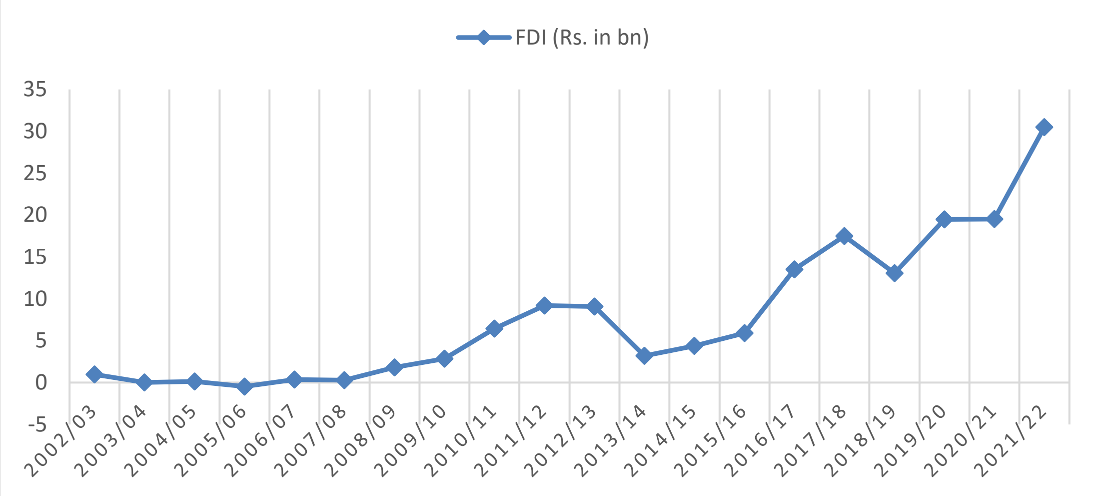

Figure 6: Trend of Foreign Direct Investment

Source: Appendix-6

Figure 6 shows the history of foreign direct investment (FDI) in Nepal. Between 2002/03 and 2021/22, FDI increased from Rs 0.9614 billion to Rs 18.5603 billion. At the same time, Real GDP increased from Rs 1052.8 billion to Rs 2261.8 billion during the same period. There was no FDI recorded in 2003/04, but Real GDP was Rs 1099.3 billion. In 2016/17, FDI increased by 128.071%, to Rs 13.5039 billion from Rs 5.9209 billion, while real GDP increased by 8.60%, from Rs 1700.4 billion to Rs 1846.5 billion. FDI figures for 2017-18, 2018/19, 2019/20, and 2020/21 were Rs 17.5046 billion, Rs 13.0652 billion, Rs 19.4787 billion, and Rs 19.5127 billion, respectively. The real GDP figures for the same years were Rs 1982.7 billion, Rs 2109.3 billion, Rs 2058.1 billion, and Rs 2137.0 billion, respectively. Both FDI and real GDP showed continuous growth, indicating a positive trend in FDI. Increased foreign direct investment has a positive impact on Nepal's real GDP growth.

4.6 Descriptive Statistical Analysis of GDP, RI, MS, CF and FDI

This section of the study explained the relationship between the variables based on the collected data. The statistical table below shows the minimum, maximum, mean, and standard deviation values for the variables from 2002/03. to 2021/22.

Table 1

Descriptive Statistics

	GDP	RI	MS	CF	FDI
Mean	1580.4000	450.8460	398.2235	567.4005	7.2901
Std. Deviation	382.03082	335.22998	307.06371	428.31994	7.20744

Variance	145947.548	112379.141	94288.119	183457.971	51.947
Minimum	1052.80	54.20	83.75	98.07	-.47
Maximum	2261.80	1017.31	1049.41	1304.90	19.51

Source: SPSS Result

The table 1 shows the overall descriptive statistics mean, standard deviation, variance, minimum value and maximum value of the associated dependent and independent variables real GDP, remittance inflows, money supply and capital formation during the 20 years of period. The mean of the real GDP is 1580.400, standard deviation is 382.03082, variance is 145947.548 and range is “between” 1052.80 to 2261.80. The mean of remittance inflows is 450.8460, standard deviation is 335.22998, and variance is 112379.141 and range “between” 54.20 to 1017.31. The mean of money supply is 398.2235, standard deviation is 307.06371, variance is 94288.119 and range is “between” 83.75 to 1049.41. Similarly, the mean of capital formation is 567.4005, standard deviation is 428.31994, variance is 183457.971 and the range is “between” 98.07 to 1304.90 during the period started from 2002/3 to 2021/22. The mean of foreign direct investment is 7.2901, standard deviation is 7.20744, variance is 51.947 and range is “between” -.47 to 19.51. The table shows the result that real GDP, which is a dependent variable, has the highest mean value, that is 1580.400 and foreign direct investment which is one of the independent variables has lowest mean value i.e.7.2901. Similarly, the highest standard deviation is 428.31994 and lowest standard deviation is 7.20744.

4.7 Correlation Analysis

The direction of the linear relationship between the dependent and independent variables is shown in this section of the study. Real GDP is the dependent variable, and FDI, capital formation, money supply, and remittance inflow are the independent variables. The dependent and independent variables' Pearson's correlation coefficients have been calculated; the result is shown in the table below.

Table

Correlation Analysis

	GDP	RI	MS	CF	FDI
GDP	1				
RI	.991**	1			

MS	.968**	.969**	1		
CF	.983**	.980**	.959**	1	
FDI	.924**	.903**	.933**	.921**	1

**. Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS Result

Table 2 shows Pearson's correlation coefficient between dependent and independent variables. The correlation coefficient (r) value between real GDP and remittance inflows is 0.991 which shows a high positive association between both the variables. The P value is <0.01 which means the relationship is statistically significant. Likewise, the table indicates the dependent variable i.e. Real GDP positively correlated with other independent variables money supply, capital formation and foreign direct investment with the value of, 0.968, 0.983 and 0.924 at 1% levels of significance. The result shows the growth of Real GDP increases with higher money supply, capital formation, remittance inflows and foreign direct investment. So, there is a highly positive correlation and significant relationship between dependent and independent variables.

4.8 Regression Analysis

This section of the study showed how the money supply, capital formation, remittance inflows, and foreign direct investment are related to real GDP. The relationship between the dependent and independent variables in the data from 2002/03 to 2021/22 is explained by the multiple regression analysis. Below is an equation for the relationship between dependent and independent variables as determined by multiple regression analysis:

The multiple regression equation is.

$$EGROWTHt = \beta 0+\beta 1RIt+\beta 2MSt+\beta 3CFt+\beta 4FDIt+eit$$

Table

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.994[a]	.988	.984	47.81779

a. Predictors: (Constant), FDI, RI, MS, CF

Source: SPSS Result

Table 3 shows the regression relationship of the dependent variable Real GDP to the independent variable’s money supply, capital formation, remittance inflows, and foreign direct investment. The table shows that the R square, which refers to the variable's coefficient of multiple determination, is 0.988, and the adjusted R square is 0.984. The R square measure compares the variability of the dependent and independent variables. The value of R square 0.984 indicates that the regression model explains 98.4% of the variation in the dependent variable, which is Real GDP. The regression model excludes the remaining 1.6% of variation in the dependent variable caused by other independent variables.

Table

ANOVA test on Real GDP

Model		Sum of Squares	df	Mean Square	F	Sig.
		ANOVA[a]				
1	Regression	2738705.304	4	684676.326	299.438	<.001[b]
	Residual	34298.116	15	2286.541		
	Total	2773003.420	19			

a. Dependent Variable: GDP

b. Predictors: (Constant), FDI, RI, MS, CF

Source: SPSS 25 result

The table 4 represent the value of F statistics is 299.438 and F (sig) is equal to the value 0.001 that is (F sig. 0.001<0.05) explained the independent variables are significantly associated with dependent variable.

Table

Regression coefficient

Coefficients

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	1081.408	19.426		55.667	<.001
	RI	.822	.205	.721	4.010	.001
	MS	-.041	.174	-.033	-.235	.817
	CF	.162	.144	.182	1.126	.278
	FDI	7.245	4.625	.137	1.566	.138

a. Dependent Variable: GDP

Source: SPSS 25 result

Table 5 illustrates the T-statistics and p-value of the independent variable associated with the dependent variable. The T-statistics and p-value of the remittance inflows are 4.010and 0.001 respectively. The value of P is less than 0.05 level of significance (i.e. p-value (0.001<0.05). It indicates that there is a significant relationship between remittance inflows and Real GDP growth. The T-statistics and P-value of money supply are -0.235 and 0.817, the value of P is more than 0.05 level of significance (i.e. 0.817>0.05). It indicates an insignificant relationship between money supply and Real GDP growth. Similarly, the T statistics and the P- value of capital formation are 1.126and 0.278, the value of P is more than 0.05 level of significance (i.e. 0.278>0.05). It indicates that there is an insignificant relationship between capital formation and Real GDP growth. The T-statistics and P-value of FDI are 1.566 and 0.138, the value of P is less than 0.05 level of significance (i.e. 0138<0.05). It indicates that there is a insignificant relationship between foreign direct investment and Real GDP growth. The result finds that remittance inflow plays vital roles in the growth of the Nepalese economy. Foreign direct investment, money supply, and capital formation are not important variables for the impact of the Nepalese economy as per the findings of the study.

The regression model can be explained.

$$EGROWTH= 1081.408 + 0.822RI + (-0.41MS) + 0.162CF + 7.245FDI$$

4.9 Discussion

This study examined the impact of remittances on Nepal's economy, specifically its real GDP growth. The dependent variable in the study is real GDP growth, while the independent variables are money supply, capital formation, remittance inflows, and foreign direct investment. The study covers data from 2002/03 to 2021/22. The study aims to analyze the trend and impact of remittance inflows on Nepalese economic growth, as measured by Real GDP. Descriptive, trend, correlation, and regression analysis are used to analyze the impact of remittance inflows on Nepalese GDP growth. This study examines remittance inflows, their trends, and their impact on economic growth in Nepal from 2002/03 to 2021/22.

Many theoretical and empirical investigations have explored the impact of remittance inflows on a nation's economic growth and development. These studies consistently indicate a positive and significant relationship between remittance inflows and economic growth, particularly in the context of Nepal, as indicated by their effect on Real GDP. Descriptive statistics reveal that remittance inflows show the highest mean value i.e. 450.8460 among independent variables, while capital formation demonstrates the highest standard deviation i.e. 428.31994. Moreover, Pearson's correlation coefficient shows a strong positive correlation between Real GDP growth and variables such as money supply, capital formation, remittance inflows, and foreign direct investment. Multiple regression analysis further confirms a significant and positive relationship between remittance inflows and economic growth, with a R square value of 0.988, indicating that remittance inflows can account for 98.8% of the variation in the dependent variable.

The coefficient matrix displays the T-statistics and p-value of the independent variable associated with the dependent variable. The p-value for remittance inflows is 0.001, indicating a significant relationship between remittance inflows and economic growth as measured by Real GDP. The p-value for foreign direct investment is 0.138, indicating an insignificant relationship between FDI and economic growth measured in real GDP. The money supply p-value is 0.817, indicating that there is no significant relationship between money supply and economic growth measured in real GDP. Similarly, the capital formation p-value is 0.278, indicating an insignificant relationship between capital formation and economic growth as measured by Real GDP.

As compared to this study, Aslam and Alibuntto (2023) agreed that worker remittances have a positive long-run relationship with per capita GDP. The estimated coefficient of the error correction term indicates that the dependent variable approaches the long-run equilibrium path. Workers' remittances have a short- and long-term causal relationship with per capita GDP. The IRF analysis shows that a one-standard-deviation shock to workers' remittances has an immediate significant positive impact on economic growth, which is consistent with this study's findings on the importance of remittance inflows to GDP. In the long run, remittance inflows significantly boost real GDP, but they have a negative impact on short-term economic growth. Furthermore, the results show that a 1 percent increase in remittance inflows increases real GDP by 1.13 percent in the long term and 1.87 percent in the short term, which is consistent with the findings of Yadeta and Hunegnaw (2021). Furthermore, the contribution of remittances to GDP has increased dramatically over the decades, reaching 24.9% in fiscal year 2017/18, consistent with the findings of Banjara, Karki, and Dumrey (2020). Similarly, the studies of Chhetri, Paudel, and Dahal (2020), Aziz (2020), Shah (2019), and Kaphle (2018) yield consistent and significant results with this study.

Unlike this study, Chowdhary, Dhar, and Gazi (2022) do not agree that remittance inflows have a positive impact on the national economy. The study's findings indicate that remittances have a significant negative impact on the economic progress of the sample countries. In Bangladesh, there is no short-term or long-term relationship between remittances and GDP per capita, whereas in Vietnam, there is a short-run causality from remittances to GDP per capita and vice versa. Dahal's (2020) study concluded that there was no significant relationship between remittance inflows and the country's real GDP. Despite the massive inflow of remittances into the Nepali economy, the impact on real GDP was negligible during the study period. Similarly, the studies of Acharya and Paudel (2021), Sutradhar (2020), and Kaphle (2018) produced insignificant and inconsistent results with this study.

The study's findings show the relationship between the dependent variable (economic growth based on Real GDP) and the independent variables (remittance inflows, money supply, capital formation, and foreign direct investment). The overall trend analysis, descriptive analysis, correlation analysis, and regression analysis show that remittance inflow is the most valuable variable, with a positive significance, positive relationship, and a positive correlation with the dependent variable, which is economic growth based on Nepalese Real GDP.

CHAPTER V

SUMMARY AND CONCLUSION

This section briefly describes the overall study of the topic. The study's conclusion is based on the major presentation and findings. The primary goal of this chapter is to provide an overview of the study based on major findings and conclusions, as well as recommendations based on the findings and results of the impact of remittance inflows on economic growth as measured by Nepalese GDP. The chapter consists of three major parts: summary, conclusion, and implication.

5.1 Summary

The primary indicator of a country's economic progress is its economic growth, as measured by real GDP. The correlation between real GDP growth and remittance inflows provides a comprehensive overview of the nation's economic situation. Remittance inflows play an important part in influencing economic growth, given their increasing significance in the macroeconomic landscape. Over the past few decades, the ratio of remittance inflows to real GDP has been steadily rising. This trend shows the growing contribution of remittances to various sectors within Nepal's economy, driven by an increasing number of Nepalese seeking employment abroad. Therefore, this research aims to assess and analyze the impact of remittance inflows on Nepal's economic growth, considering remittances as a key source of external financing for developing nations like Nepal.

Remittance inflows play a crucial role in driving economic growth and reducing unemployment issues in Nepal. The growing importance of remittances on the global stage is evident due to their significant flow into developing nations. The upward trend of remittance inflows in recent years has significantly contributed to various aspects such as real GDP, foreign currency reserves, balance of payments, and tackling unemployment. These inflows influence numerous macroeconomic indicators, including economic growth, GDP, foreign currency reserves, and inflation. This study focuses specifically on the impact of remittances on economic growth as measured by real GDP. Secondary data from sources such as the Economic Survey (MoF), MOICS, and Economic Bulletin (NRB) have been utilized for a macroeconomic analysis spanning two decades from 2002/03 to 2021/22. By addressing key research questions regarding the relationship between remittance inflows and economic growth, the study aims to analyze their impact on the Nepalese economy's real GDP.

The study has used descriptive and causal relation research design. Other statistical tools have been used with research design to find out the objectives of the study. This study represents the trend line of remittance inflows and the trend of Real GDP, a trend of growth rate based on Real GDP presented in the graphical form. Descriptive statistics, simple correlation, and multiple regression models are used to find out the result and measure the relationship between remittance inflows and economic growth based on Real GDP. The Real GDP based on economic growth is taken as the dependent variable and remittance inflows, money supply, capital formation and FDI are taken as independent variables. From the correlation analysis, the study concludes that there is a significant and positive relation between the dependent and independent variables.

Based on the comprehensive descriptive analysis, the mean values of remittance inflows, money supply, capital formation, and FDI over the 20-year period are 450.8460, 398.2235, 567.4005, and 7.2901, and the standard deviations are 335.22998, 307.06371, 428.31994, and 7.20744.5580125 respectively. Correlation coefficient analysis indicates a positive correlation between the dependent variable, economic growth measured by Real GDP, and the independent variables including remittance, money supply, capital formation, and FDI. The positive correlation coefficients for Real GDP with remittance, money supply, capital formation, and FDI are 0.991, 0.968, 0.983, and 0.924 respectively. Multiple regression analysis further confirms the significant relationship between remittance inflows and economic growth based on Real GDP.

The linear regression analysis reveals the relationship between the dependent variable and independent variables. The R-square value, at 0.989, indicates that 98.9% of the variation in real GDP is explained by the independent variables - remittance inflow, money supply, capital formation, and FDI. The remaining 1.1% of the variation is attributed to factors not considered in the regression model. Significance level values of 0.01, 0.817, 0.278, and 0.138 for remittance, money supply, capital formation, and FDI respectively, indicate significant and insignificant relationships between the dependent and independent variables. Additionally, remittance inflows demonstrate a significant relationship with economic growth based on Real GDP, while money supply and capital formation and FDI show insignificant relationships. Overall, the descriptive, correlation, and regression analyses suggest that remittance inflow significantly and positively impacts economic growth based on Real GDP, while other factors like money supply, capital formation and FDI have less importance in influencing the Nepalese economy's economic growth.

5.2 Conclusion

The objective of this study is to examine the impact of remittance inflows on the economic growth of Nepal. The upward trend of remittance inflows in recent years has been observed to impact economic growth as measured by Real GDP positively. The findings reveal a significant and favorable relationship between remittance inflows and economic growth based on Real GDP. Over the observed period, there has been a noticeable increase in both the trend of remittance inflows and their contribution to GDP in Nepal. This suggests a substantial role of remittance inflows in driving economic growth in the country. The study analyses several independent variables including remittance inflows, money supply, capital formation, and FDI, providing light on their respective contributions to variations in economic growth based on Real GDP. Correlation analysis shows the significant and positive relationship between economic growth and these independent variables. Specifically, higher levels of remittance inflows, money supply, capital formation, and FDI are associated with increased economic growth as measured by Real GDP in Nepal. Finally, the study concludes that remittance inflows stand out as one of the primary contributors to Nepal's economic growth, with increasing trends in remittance inflows leading to smoother growth slopes and contributing to the country's Real GDP.

5.3 Implication

This section of the research discusses the implications and recommendations for policymakers, stakeholders, the academic community, and other relevant parties involved in this area of study. Remittance has emerged as a significant concept in Nepal, and understanding and analyzing its inflows, trends, growth patterns, contribution to Real GDP, and its ratio within the GDP are crucial for various purposes. The insights provided by this study will be valuable to researchers seeking knowledge and expertise in this field. Below, the key findings of the study are expanded upon based on the results obtained.

- Policymakers should develop and implement efficient policies and systems to encourage remittance inflows through formal channels.
- The proportion of remittance inflows to Real GDP has been declining in recent years, despite the steady increase in remittance inflows. Policies need to be formulated to enhance the contribution of remittance inflows to economic growth and bolster their share in Nepal's Real GDP.
- The study aims to explore the correlation between remittance inflows, money supply, capital formation, foreign direct investment, and economic growth within the context of the Nepalese economy. And the upcoming studies can investigate the relationship of remittances with other macroeconomic indicators.