IMPACT OF REMITTANCE ON ECONOMIC DEVELOPMENT IN NEPAL

A Dissertation Submitted to the Office of the Dean, Faculty of Management in Partial Fulfillment of the Requirements for the Masters of Business Studies (MBS)

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CERTIFICATION OF AUTHORSHIP

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled **"Impact of Remittance on Economic Development in 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

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APPROVAL SHEET

We, the undersigned, have examined the dissertation entitled **"Impact of Remittance on Economic Development in Nepal"** presented by Mr. Prakash Shrestha for the degree of Master of Business Studies (MBS Semester) and conducted the Viva voce examination of the candidate. We hereby certify that the dissertation is worthy of acceptance.

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ABBREVIATIONS

ADRL	:	Autoregressive Distributed Lag
CBS	:	Central Bureau of Statistics
FDI	:	Foreign Direct Investment
FY	:	Fiscal Year
GDP	:	Gross Domestic Product
IMF	:	International Monetary Fund
INF	:	Inflation Rate
IR	:	Interest Rate
MOF	:	Ministry of Finance
NRB	:	Nepal Rastra Bank
RMT	:	Remittance
SPSS	:	Statistical Package for the Social Sciences
TO	:	Trade Openness
TU	:	Tribhuvan University
UR	:	Unemployment Rate
WB	:	World Bank

ABSTRACT

This study investigates the impact of remittance on economic development in Nepal, with Gross Domestic Product (GDP) as the key indicator. The major objective is to assess the role of remittance in shaping Nepal's economic trajectory, with three specific objectives: (i) to assess the current status of remittance inflows and GDP, (ii) to examine the relationship between RMT, FDI, INF, TO and UR with GDP, and (iii) to analyze the effects of these variables on GDP. The research adopts a descriptive and causal research design. The population comprises Nepal's complete economic data, with an initial and revised sample covering 30 fiscal years (1994/95–2023/24) selected through purposive sampling. Secondary data were sourced from authoritative national and international institutions such as NRB, CBS, MOF, World Bank, and IMF. Data were analyzed using SPSS Version 29, employing descriptive statistics (mean, standard deviation, minimum, maximum), correlation analysis, and multiple regression analysis. Remittance is the primary independent variable, while FDI, INF, TO, and UR are control independent variables; GDP is the dependent variable. Descriptive statistics indicated substantial growth in remittance and GDP, with moderate to high fluctuation in other variables. Correlation analysis revealed a very strong positive relationship between remittance and GDP, a strong positive relationship for FDI, a negligible relationship for INF, a moderate negative relationship for TO, and a moderate positive relationship for UR. Regression analysis confirmed remittance and FDI had significant positive impacts on GDP, while INF had a statistically insignificant positive effect. TO had a significant negative impact and UR showed a significant positive effect. The study concludes that remittance plays a vital role in Nepal's economic development, while trade openness poses challenges that require policy reform. The implications suggest channeling remittance into productive investments, promoting FDI, reassessing trade strategies, and addressing labor market complexities to support sustainable growth.

Keywords: *Gross Domestic Product, Remittance, Foreign Direct Investment, Inflation, Trade Openness, Unemployment Rate.*

CHAPTER I
INTRODUCTION

1.1 Background of the Study

The impact of remittances on economic growth has been studied broadly in mixed economies with combined results. Remittances have been a significant means of foreign capital inflows, particularly for developing countries such as Nepal, with implications for macroeconomic indicators such as GDP, investment, consumption and poverty alleviation (Abdulai, 2023). A study concluded that remittances triggered economic growth as they increased household income, increased the rate of savings and investments, and stabilized foreign exchange reserves (Adjei et al., 2020). Other scholars argued that excessive reliance on remittances would lead to economic imbalances, reduce the incentive to participate in labor and a less productive consumption economy (Barajas et al., 2009).

Remittances had constituted a large proportion of GDP in Nepal, much larger than other types of financial inflows such as foreign direct investment (FDI) and official development assistance (Ojha, 2019). Remittances had contributed to over 25% of GDP in Nepal, a very migrant-dependent nation (World Bank, 2022). The remittance flow contributed to inducing poverty reduction and improvement in living standards, but sustainability and contribution to economic productivity in the long term were concerns (Islam, 2022). Remittances remained the driving force of the Nepali economy in 2023, though growing dependence on the flow was a reason for concern regarding its impact on the country's economic progress (Acharya & Shrestha, 2023). Along with this, the concern was increasing that the dependence on remittances would suppress investment and innovation domestically, choking the economic growth opportunities of the country towards self-sufficiency.

Some other research studies looked at the effect of remittances on economic growth and found negative and positive contributions. While some evidence indicated remittances had a fundamental role in economic development by financing business, education and health (Meyer & Shera, 2016), others have demonstrated that remittances can have an inflationary effect and cause exchange rate appreciation and

thus erode trade competitiveness (Chami et al., 2003). Remittance and its interaction with other macroeconomic variables such as FDI, inflation, openness and unemployment was the other broad area of interest of empirical research studies (Nsiah & Fayissa, 2011).

Foreign Direct Investment or FDI is discovered to play a significant part in the creation of economic growth in developing economies. It generated transfer of technology, productivity improvement, and employment generation (Carkovic & Levine, 2002). Nepal had also been struggling to attain efficient FDI due to political instability, regulatory constraint, and infrastructural deficiencies. Despite this, FDI remained an important stimulus of economic growth, complementing remittances in attaining sustainable development (Shirazi et al., 2018). Recent attempts at improving the business environment and foreign investment promotion, such as regulatory reforms and infrastructural development, were promising to improve FDI inflows into the country.

Inflation was another main driver of economic growth, whose effect varied in proportion to the level and type of control. Low inflation boosted economic activity in terms of higher spending and investment while high inflation curtailed purchasing power and long-term investment (Peterson, 2017). Trends in inflation in Nepal were affected by global economic trends, supply shocks and fluctuations in remittance receipts (Islam, 2022). Nepal suffered from high inflation in the year 2023 due to the global movement in commodity prices and supply chain disruptions that added to the misery of the general household (Rai & Ghimire, 2023).

Openness to trade, as represented by the ratio of trade volume and GDP, was an important factor in economic growth determination in the form of better resource allocation, productivity enhancement, and enhanced international competitiveness (Nketiah et al., 2020). Empirical studies found that trade liberalization had a beneficial impact on GDP growth, particularly for developing countries that founded economic development on exports and imports (Sarkar et al., 2018). Nepal's trade openness remained constrained by geographical factors, narrow industrial base, and reliance on a narrow export commodity base (Shihab et al., 2014).

Unemployment rate was also one of the major economic indicators with effects on labor market efficiency, income disparity and economic performance (Jushi et al., 2021). Unemployment lowered aggregate demand, slowed down economic growth and increased remittance dependency. In Nepal, overseas out-migration of a significant section of the nation's workforce maintained the country's unemployment level below but caused brain drain as well as shortages of labor in major sectors (World Bank, 2021). The migration trend also continued to dominate the Nepali labor market as the majority of the working class migrated to international destinations to work, reducing some of the unemployment and making remittance dependence the cornerstone of economic stability (Acharya & Ghimire, 2023).

While the economic development of Nepal still relied on remittances, it was crucial to analyze how this influx was being channeled into sustainable development. Its policy response to remittances has officially been to encourage productive use of the funds in agriculture development and SMEs. However, despite all this, its lack of coordination mechanism in mobilizing the utilization of remittances towards productive investment was a titanic problem. Existing literature has illustrated that while remittances financed consumption, they were not always invested either in the generation of jobs or in the investment in the key infrastructure that would be sustainable (Rai & Ghimire, 2023).

Furthermore, increasing dependence on remittances in Nepal created fears regarding the vulnerability of the country to a series of external forces such as host country economic downturn and changing needs for foreign labor. With the onset of global uncertainties, especially the overarching risk of economic downturn and geopolitical tensions, Nepal was exposed to a downturn in the remittance inflow. This study is undertaken to assess the long-term consequence of such remittance dependence and ascertain how Nepal can diversify its economic base for growth independent of foreign incomes.

With the above variables, the objective of this study is to examine the role played by remittances, foreign direct investment, inflation, openness to trade and unemployment levels in contributing to GDP in Nepal. Based on empirical methods, this

investigation seeks to generate an insight into the dynamic interactions among these macroeconomic determinants and their development and policy implications.

1.2 Problem Statement

Remittances are a significant foreign exchange earner for Nepal and a key driver of economic development. They limit poverty, add to household incomes, and social welfare, and form part of the livelihoods of the majority of Nepalese households. Remittances have beneficial effects on the economic growth, poverty reduction, and financial development of developing countries as indicated by various research studies such as Chaudhary (2022) and Singh and Pradhan (2023). Notwithstanding this, the role of remittances to the economic growth of Nepal remained debatable. While some research work had indicated that remittances contributed significantly to GDP growth (Amir & Amir, 2024) others had argued that remittances might have had negligible long-term effects on sustainable economic growth (Shakya & Gonpu, 2021). Such different arguments were reflections of the complexities and uncertainties of the role of remittances to the overall economic growth of Nepal.

While the recognized gains, Nepal being highly reliant on remittances due to its large diaspora faced the challenge of ensuring these flows were optimally invested in productive activity rather than being mere consumption. As much as remittances clearly added to family income, augmented social welfare, and as a shock absorber for hard-pressed families, growing concern was voiced regarding the sustainability of an economy so extremely reliant on external financial inputs. Previous research had established that whereas remittances made important contributions towards poverty reduction and household incomes rises in the short term, they had been unable to long-term finance sectors such as infrastructure, manufacturing, or agriculture for development (Lacheheb & Ismail, 2020). Too much reliance on remittances helped to cultivate consumption-based economy by default, and this could not be supported sustainably over the long term. While remittances did contribute meaningfully to financing consumption and living expenses, their capacity to channel investment into productive such as technology, innovation, and infrastructure development was fairly unexplored in the literature.

Additionally, Acharya and Paudel (2021) and Chaudhary (2022) research findings indicated that although remittances were capable of mitigating poverty in the short

term, their economic development contribution in Nepal in the long term was offset by their poor contribution to the productive economy sectors. This limitation in past literature had contributed to the existence of one glaring research gap, namely the dearth of an overall study which had considered remittances expenditures and whether these were being utilized efficiently in productive areas. Remittances were always faulted for short-term economic windfalls, but the adverse effect of the tendency of such flows to induce dependency on consumption and de-industrialize home growth was still researched on the fringes. Additionally, little was researched on how the multiplier effect of remittances impacted entrepreneurship, local firms, and innovation, which were essential to long-term development. Earlier research was focused on macroeconomic impacts of remittances without considering microeconomic drivers of how these remittances impacted local industries and the overall development of the economy.

Other studies established that remittances were used by most households in healthcare, education and debt repayment (Gautam & Dhungana, 2020), while other studies claimed to believe that there would be room for such remittances to be invested in the productive economy (Koirala & Shrestha, 2021). Others had even established that remittances would have the function of helping to enhance financial inclusion through enhancing savings and investment behaviors. Nonetheless, the use of remittances per se was not studied in depth, particularly how its role was in the domestic long-term economic viability. Since there was a growing remittance inflow in Nepal, it was required to examine if remittances were being invested in income generation and employment in manufacturing industries or utilized to pay for the same level of consumption without structural adjustment.

As the remittance economic development relationship is complex, there is a pressing need to examine how remittances are invested in Nepal and if they are invested in the productive sectors of Nepal. Additionally, studies on remittances and their role in long-term economic stability and industrial development are scarce. While remittances will certainly make a household richer, it is uncertain how much they contribute to the development of a more diversified, stronger economy. The research therefore attempts to fill the gap by exploring the impact of remittance inflow on Nepalese economic growth and the relationship between remittances and GDP

growth, poverty reduction, and investment trends. Through the process, the study will be able to provide some illumination regarding remittances and their contribution towards Nepal's economic future and will be able to help in responding to the following research questions:

i. How is the current status of remittance inflows and gross domestic product in Nepal?
ii. What is the relationship between remittance, foreign direct investment, inflation, trade openness, and unemployment rate with gross domestic product in Nepal?
iii. Do remittance, foreign direct investment, inflation, trade openness, and unemployment rate effect on gross domestic product in Nepal?

1.3 Objectives of the Study

The general objective of the study is to analyze the impact of remittance on economic development in Nepal. To achieve this general objective and address the research issues, the specific objectives of the study are as follows:

i. To assess the current status of remittance inflows and gross domestic product in Nepal.
ii. To examine the relationship between remittance, foreign direct investment, inflation, trade openness, and unemployment rate with gross domestic product in Nepal.
iii. To analyze the effect of remittance, foreign direct investment, inflation, trade openness, and unemployment rate on gross domestic product in Nepal.

1.4 Rationale of the Study

This study is important since it attempts to contribute evidence regarding the effect of remittances to Nepalese economic development on, for instance, a country where remittance inflows constitute a high proportion of the country's GDP. Although the majority of researchers have documented the positive short-term effect of remittances, such as poverty reduction and household income growth, they have not ventured far enough to ascertain their long-term effect on the economic sustainability and development of the country. By highlighting the correlation between remittances, GDP growth rate, foreign direct investment, inflation, trade openness, and unemployment rate, this research will enlighten how remittances can be made to

contribute to not only short-term household well-being but also to help achieve sustainable development. The findings would inform the policymakers the way they could use remittances more efficiently towards increased usage, encourage productive investment, and discourage habit of consumption, towards ultimate long-term goal of helping to enhance the economic base of Nepal. The study would also reveal existing policy loopholes and offer the advice on how to use remittances as an instrument of long-term economic growth and stability. By analyzing such dynamics, this research tries to make more detailed analysis possible on how the receipts of remittance can be incorporated into the overall economic development plan of Nepal in a better way.

1.5 Limitations of the Study

Every study has its limitations, and like other research, this study on the "Impact of Remittance on Economic Development in Nepal" also has some constraints, which are outlined as follows:

i. This research has utilized a descriptive and causal-comparative research design.
ii. The study population includes all economic data of Nepal, with the sample spanning from 1994/95 to 2023/24 selected using a purposive sampling technique.
iii. The research has relied on secondary data obtained from relevant national and international financial reports, government publications and databases like the World Bank and Nepal Rastra Bank.
iv. The study has analyzed the data through descriptive statistics and inferential statistics including correlation analysis and regression analysis to ensure a thorough exploration of the findings.
v. The research has treated remittance as the main independent variable, while foreign direct investment, inflation, trade openness, and unemployment rate have been considered control variables, with gross domestic product in Nepal being the dependent variable.

CHAPTER II
LITERATURE REVIEW

This chapter has involved examining research studies related to the "Impact of Remittance on Economic Development in Nepal," establishing a knowledge foundation by highlighting current literature on this topic. It provides a comprehensive analysis of existing work in the field. This chapter has been organized into two key sections: the theoretical review, which discusses the theories and frameworks that explain the relationship between remittance inflows and economic development, and the empirical review, which summarizes and evaluates findings from research studies conducted in previous years that have explored the impact of remittances on economic growth, poverty reduction, and investment patterns. The further details of these two sections have been described below:

2.1 Theoretical Review

The theoretical review has explored theories related to the impact of remittances on economic development, focusing on how remittance inflows have influenced GDP growth and overall economic stability. It has examined key theories that have explored the relevant information for the current study and its variables. Key theories include:

Human Capital Theory

Human Capital Theory was developed by Gary S. Becker in 1964 and posited that investments in education, training and migration (in the context of remittances) increased individual and collective productivity, contributing to economic development. This theory assumed that migration resulted in an accumulation of skills, which when migrants sent remittances back home, could foster local economic growth by improving human capital in the receiving country. Initially, Becker's theory was applied in studies of migration and labor economics, with later applications by authors such as Ratha (2003); Lucas (2005) and Adams (2009) who explored the impact of remittances on development. This theory is relevant to the current study as it helps explain how remittance inflows can contribute to economic development by enhancing human capital in Nepal, through education, skills, and labor productivity.

As remittances are often used for education, health, and entrepreneurial activities, they enhance human capital formation, which can lead to long-term economic growth. The future scope of this theory includes exploring how remittances can be strategically utilized to foster sustainable growth by investing in human capital formation, particularly in developing economies that rely heavily on remittances for their growth.

Migration and Development Theory

The Migration and Development Theory, proposed by Hein de Haas in 2010, explored the relationship between migration and development, suggesting that migration was not only a result of economic imbalance between countries but also a driver of economic growth through remittances. The theory assumed that remittances played a vital role in reducing poverty and improving the economic situation of migrants' families back home. De Haas's work was the first to analyze migration and remittances as interconnected and mutually beneficial, while subsequent scholars like Carling (2008), Stark (2004) and Massey (1998) expanded on this. This theory is highly relevant to the current study as it directly addresses how remittances contribute to economic development, especially in poverty alleviation and improvement of living standards in Nepal. The increased flow of remittances helps bridge the income gap, alleviate poverty, and even improve social infrastructure like healthcare and education. The future scope of this theory lies in understanding how policies can enhance the productive use of remittances for long-term development, ensuring that these funds are invested in sectors that stimulate economic growth and productivity.

Neoclassical Growth Theory

Neoclassical Growth Theory, introduced by Robert Solow in 1956, suggested that economic growth was driven by capital accumulation, technological progress, and labor force growth. This theory assumed that remittances acted as a source of capital inflow, which could boost the economy by increasing investments in productive sectors. Initially used to explain disparities in growth rates across countries, the theory was later applied by Barro (1991), Romer (1990) and Mankiw (1992), who explored how capital accumulation, including remittances, affected economic output. In the context of the current study, this theory helps explain how remittances can contribute to GDP growth in Nepal by increasing capital stock and potentially fostering

technological and industrial advancements. The future scope of this theory includes studying the long-term effects of remittance-driven capital on sustainable growth and how remittances can be strategically directed into productive investments.

Keynesian Economic Theory

Keynesian Economic Theory, developed by John Maynard Keynes in 1936, emphasized that aggregate demand drove economic growth, particularly in times of economic recession. The theory assumed that an increase in household income, including remittances, stimulated consumption, thereby raising demand for goods and services, which in turn boosted economic activity. Keynes's work was initially applied during the Great Depression to explain the need for government intervention to manage aggregate demand, and later economists like Samuelson (1948) and Hicks (1967) extended it to understand consumption dynamics, including remittances. This theory is particularly relevant to the current study as it explains how remittance inflows can increase consumption in the recipient country, driving demand and stimulating GDP growth. The future scope of this theory includes further exploration of the longer-term impact of consumption-driven growth and how remittances contribute to demand-side economic stabilization.

Dual Economy Model

The Dual Economy Model, introduced by Arthur Lewis in 1954, assumed that economies consisted of two sectors: the traditional (agricultural) sector and the modern (industrial) sector. Remittances, by increasing household income, could stimulate investment in the modern sector, thus promoting economic diversification and industrialization. Lewis's model focused on the transformation of economies from agricultural to industrial economies and was later expanded by Ranis and Fei (1961) and Todaro (1969) to examine how remittances could help bridge the gap between traditional and modern sectors in developing economies. This theory is relevant to the current study as it highlights the potential role of remittances in accelerating industrialization and economic diversification in Nepal. The future scope of this theory lies in further exploring how remittances can be channeled into the industrial sector, promoting long-term structural transformation and economic growth.

2.2 Empirical Review

Amir and Amir (2024) analyzed the impact of remittances on economic growth in African nations, utilizing panel data from 42 countries between 2001 and 2020. The study employed a fixed effect model as the primary analytical tool, and the unemployment rate (UR) was used as an instrumental variable in the generalized method of moments (GMM) estimation to address the endogeneity issue. The results indicated a significant positive relationship between remittances and economic growth in Africa. The findings concluded that remittances play a crucial role in boosting the economic growth of African nations. Furthermore, the study highlighted the importance of remittances in enhancing household incomes, reducing poverty, and fostering economic development. The authors suggested that policy interventions should focus on maximizing the potential of remittances for sustainable growth in the region.

Azizi et al. (2024) investigated the impact of international remittances on the economic growth of remittance-receiving countries by analyzing data from 113 developing nations between 1990 and 2015. The study employed a novel approach to address the potential endogeneity of remittances, estimating bilateral remittances and utilizing them to create weighted indicators of remittance-sending countries, which were then used as instruments for remittance inflows. The independent variable was remittance inflows, while the dependent variable was economic growth. The findings indicated that remittances positively influenced economic growth in developing countries with high human capital but did not contribute to growth in nations with low human capital. Further analysis revealed that remittances had no impact on labor supply in countries with high human capital but reduced labor supply in those with low human capital. Additionally, remittances increased investment in physical capital in high-human-capital countries but had no effect on investment in low-human-capital countries. The study concluded that remittances serve as a driver of economic growth only when supported by sufficient human capital, highlighting the importance of education and skill development in maximizing the benefits of remittance inflows.

Khan (2024) checked the impact of positive and negative remittance inflow shocks on the sustained economic growth of India using a time series dataset from 1976 to 2021.

The study applied a nonlinear autoregressive distributed lag (NARDL) model to examine the effect of remittance inflows, along with control variables such as broad money and service sector performance, on economic growth. The findings revealed that positive shocks in remittance inflows had a significant positive impact on India's economic growth, both in the short and long runs, while negative shocks did not affect economic growth. The study suggested that policymakers in India could use these findings to develop remittance-friendly policies to promote sustainable growth, with relevance to initiatives like the SDGs. It also filled a gap in the literature by investigating the nonlinear effects of remittance inflows on sustained economic growth in India.

Ali et al. (2024) explored the impact of remittances on Pakistan's economic growth through the transmission channel of investment using time series data obtained from the World Development Indicators. The study employed the Autoregressive Distributed Lag (ARDL) bound test to analyze the relationship between remittances and economic growth. The independent variable was remittance inflows, while the dependent variable was economic growth, with investment serving as the transmission channel. The findings demonstrated that remittances had a positive and significant impact on Pakistan’s economic growth, particularly when directed through investment. The study emphasized the importance of utilizing remittances in high-return investment projects to enhance economic growth. It was recommended that the government implement effective policies to channel remittances through formal financial systems to maximize their economic benefits. As an original contribution derived from a PhD thesis, this study was the first to examine the role of investment as a transmission channel for remittances in Pakistan, highlighting its critical role in fostering economic development.

Chowdhury et al. (2023) surveyed the contribution of remittances to economic progress in three low-income Asian frontier countries such as Bangladesh, Sri Lanka, and Vietnam using panel data from 1990 to 2019. The study employed pooled ordinary least squares (OLS), fixed effects, and random effects models to assess the aggregate impact of remittances on economic development, while also utilizing the vector error correction model (VECM) and Granger causality tests to examine country-specific impacts. The regression results revealed a significantly negative

impact of remittances on economic progress in the sample countries. Specifically, in Bangladesh, there was no short-run or long-run association with remittances, while in Vietnam, a short-run association existed but no long-run relationship. In Sri Lanka, short-run causality ran both from remittances to GDP per capita and vice versa. The study concluded that excessive consumption and investment in unproductive sectors of remittance money negatively affected economic development. The findings suggested that policymakers should focus on directing remittances into productive sectors to foster economic growth.

Abdulai (2023) evaluated the impact of remittances on GDP growth in Ghana from 1990 to 2020, addressing the gap in empirical research on this topic. The study employed the ARDL estimation technique to examine the long-run relationship between remittance inflows as the independent variable and GDP growth as the dependent variable, along with other variables such as foreign direct investment, unemployment rate, inflation, trade, population growth rate, and official development assistance. The results revealed a significant long-run relationship between GDP growth and the selected variables, with unemployment negatively mediating the impact of remittances on GDP growth in both short and long runs. The study concluded that to ensure sustained GDP growth in Ghana, the government should focus on enhancing the reliability of remittance transfers and reducing transfer costs.

Singh and Pradhan (2023) assessed the impact of remittances on economic growth in Nepal for the period 1990-2021 using the autoregressive distributed lag (ARDL) model. The study examined real GDP as the dependent variable, with workers' remittances as the main explanatory variable, alongside gross fixed capital formation, trade openness, foreign aid, and human capital as control variables. The results of the bound test indicated a long-term relationship between remittances and economic growth. Remittances, gross fixed capital formation, and foreign aid were found to have a positive effect on real GDP, while trade openness and human capital negatively impacted real GDP in both short and long runs. The study also highlighted that a significant portion of remittances in Nepal is spent on private consumption rather than investment in productive sectors, which weakens their positive impact on economic growth. Based on the findings, the authors suggested the need for policies

that encourage savings and investments in productive sectors, along with reducing the transaction costs of remittances to promote economic growth.

Bucevska (2022) measured the relevance of remittances as a factor of economic growth in South-East European (SEE) countries, using quarterly balanced panel data from Albania, Bosnia and Herzegovina, Croatia, Montenegro, the Republic of North Macedonia, and Serbia (SEE6) from 2008Q1 to 2020Q2. The study employed panel regression with a fixed-effects model to account for potential cross-section heterogeneity. The results provided original econometric evidence that remittances had a significant positive impact on economic growth in the SEE6 countries. The findings suggested that remittances could play a crucial role in accelerating economic convergence with the EU. The study recommended that policymakers focus on directing remittances into productive investments to further stimulate economic growth in the region.

Qutb (2022) examined the impact of migrants' remittances on economic growth in Egypt using annual data from 1980 to 2017. The study employed the Augmented Dickey–Fuller test and Johansen's Co-integration test to establish long-run relationships between variables, and applied the vector error correction model (VECM) to assess both long-run and short-run dynamics. Granger causality tests were also conducted to explore causal relationships. The study found that remittances had a long-term negative impact on economic growth, suggesting a countercyclical relationship. Additionally, the Granger causality test revealed significant relationships between remittances, inflation rate, and imports. The findings concluded that the increase in remittances does not necessarily translate into positive economic growth for Egypt, highlighting the complex interactions between these economic variables.

Islam (2022) explored the relationship between remittances and economic growth in selected South Asian economies using annual panel data from 1986 to 2019, with trade openness and foreign direct investment (FDI) inflows as control variables. The study employed various methods, including cross-sectional dependency tests, second-generation panel unit root tests, panel generalized least squares (GLS), fully modified OLS (FMOLS), and Dumitrescu-Hurlin (D-H) panel causality tests. The GLS and FMOLS estimations confirmed a positive impact of remittances on economic growth, while the D-H causality test revealed unidirectional causality running from

remittances to economic growth. The findings suggested that South Asian economies should focus on attracting more remittances by promoting international migration, adopting migration-friendly policies, providing training and support for migrants, diversifying exports, and being selective with FDI inflows to foster sustainable economic growth in the region.

Adhikari (2022) studied on the implications of remittances on Nepal's economic growth using an ARDL model with annual time series data spanning 43 years. The study aimed to clarify the inconclusive results from existing literature regarding the impact of remittances on economic growth. The analysis revealed cointegration among remittances, GDP, total consumption, and private sector capital formation. The findings indicated a positive impact of remittances on short-term economic growth, suggesting an immediate boost to the economy. However, in the long run, the influence of remittances exhibited a negative trend, potentially leading to an 11% decrease in real GDP if remittances increased by 10%. The study also highlighted that while remittances support household consumption, they may not necessarily contribute to sustainable economic growth if not channeled into productive investments. The study contributed updated empirical evidence on the complex relationship between remittances and economic growth in Nepal, offering insights into the potential risks of dependency on remittance inflows for long-term economic development.

Shrestha (2022) reviewed dynamic role of remittances in Nepal's economic growth using time-series data from 1981 to 2017. The study employed tools like the vector error correction model, Granger causality test, and variance decomposition analysis. The results revealed a bidirectional long-run relationship between remittances and economic growth, while no relationship was observed in the short run. Remittances were found to influence variables such as investment, financial development, and human capital, which indirectly affect economic performance. The study concluded that remittances could promote financial development in the short run and that negative shocks in remittance inflows could have a lasting negative impact on educational attainment. The paper recommended creating an investment-friendly environment and promoting remittance flow through formal channels and financial literacy to enhance remittances' role in economic growth. Additionally, it highlighted

the importance of prioritizing the education sector to mitigate the effects of remittance shocks.

Chaudhary (2022) looked into the contribution of remittances to GDP and private gross fixed capital formation in Nepal using the ARDL bound test approach. The study incorporated financial development and institutional quality as additional regressors alongside macroeconomic variables. To confirm the suitability of the variables, Perron's (1997) innovation outlier model was employed for the breakpoint unit root test. The findings revealed a positive effect of remittances on GDP but a negative impact on private gross fixed capital formation. The study concluded that remittances in Nepal function more as compensatory transfers for recipient households rather than as a source of capital flows. It recommended implementing a remittance-focused policy that encourages recipients to invest in productive activities such as self-employment and financial investments, along with providing advisory and training support.

Acharya and Paudel (2021) tasted the effect of remittances on economic growth in Nepal for the period 1989/90 to 2017/18, using the Augmented Dickey Fuller Unit Test (ADF) to check the stationarity of variables. The study employed Gross Domestic Product (GDP) as the dependent variable, with remittances, investment, consumption, and government expenditure as independent variables. Data were collected from Nepal Rastra Bank, the Economic Survey, and the Ministry of Finance. The empirical analysis used simple regression via the Ordinary Least Squares (OLS) method, along with various diagnostic tests such as unit root, heteroscedasticity, normality, serial correlation, R-squared, t-test, F-test, and Durbin-Watson test. The findings revealed that investment and consumption had a statistically significant positive effect on Nepal's economic growth, while remittances and government expenditure showed a statistically insignificant but positive effect. The residuals were homoscedastic, free from serial correlation, and normally distributed.

Sghaier (2021) observed the conditional effects of remittances on economic growth in seven MENA countries like Tunisia, Morocco, Algeria, Egypt, Jordan, Lebanon, and Turkey using panel data from 2000 to 2018. The study employed the system generalized method of moments (GMM) to analyze the relationship between

remittances and economic growth. The independent variable was remittance inflows, while the dependent variable was economic growth, with financial development considered as a complementary factor. The findings provided strong evidence of a positive relationship between remittances and economic growth, emphasizing that financial development played a crucial role in enhancing the impact of remittances. The study highlighted that a well-developed financial system could facilitate the effective utilization of remittance inflows, ultimately leading to greater economic benefits. It was concluded that policymakers should focus on strengthening financial institutions to attract more remittances and maximize their contribution to economic growth in the MENA region.

Collaku and Merovci (2021) measured the impact of remittances on economic growth in Western Balkan countries, with a particular focus on Kosovo. The study employed a quantitative approach using the ordinary least squares (OLS) method, specifically the Pooled Regression model, to examine the relationship between remittances and economic activity. The independent variable was remittance inflows, while the dependent variable was economic growth. The findings indicated that remittances had a statistically significant effect on economic growth, with a 1% increase in remittances leading to an average GDP growth of 0.12%, holding other variables constant. The study emphasized that the productive use of remittances played a crucial role in enhancing economic activity in the country of origin. It was concluded that policies promoting the efficient utilization of remittance inflows could further strengthen their contribution to economic growth in the Western Balkan region.

Kevin and Fabien (2021) investigated the effects of remittances on the economic growth of Cameroon by analyzing data from the World Bank Development Indicators covering the period from 1980 to 2017. The study employed correlation analysis and multiple regression techniques using STATA-14, with pre-tests conducted to check for stationarity, multicollinearity, and heteroscedasticity. The independent variables included remittances paid and remittances received, while the dependent variable was GDP. The findings revealed a positive and statistically significant correlation (0.495) between remittances and GDP. The regression results showed that remittances paid had a significant positive effect on economic growth, whereas remittances received had a positive but statistically insignificant impact on GDP. The study concluded that

facilitating remittance inflows through reduced transaction costs and policy incentives could enhance their contribution to economic growth. It was recommended that the Cameroonian government create a conducive environment for migrant workers to remit more funds and transfer knowledge, while financial institutions should ease the conditions for sending and receiving remittances.

Shakya and Gonpu (2021) reviewed the impact of remittances on economic growth in Nepal, a country where remittances accounted for 31% of GDP in 2016. The study employed cointegration and regression analysis using data from the World Bank and other sources, with remittances as the independent variable and economic growth as the dependent variable. The results showed that remittances had no significant impact on economic growth and could negatively affect it in the long run. However, democratic governance, capital formation, and exports positively influenced growth. The study suggested that channeling remittances into productive sectors, improving governance, and enhancing financial literacy could maximize their contribution to sustainable economic development in Nepal.

Adjei et al. (2020) Inspected the cointegration and Granger causal relationship between remittances and economic growth in West Africa, focusing on Burkina Faso, Ghana, Guinea, Guinea-Bissau, Mali, Nigeria, and Togo. The study employed advanced panel econometric techniques, including dynamic panel data methods, to examine the impact of remittances on economic growth in the region. The results revealed a positive and significant impact of remittances on economic growth, along with a positive relationship between remittances, real effective exchange rate, trade openness, and investment. The findings also identified a short-term relationship between remittances and economic growth in West Africa. The study concluded that to maximize the benefits of remittances, West African countries must manage migrant funds carefully, promote productive investments, and create an appealing investment climate for the African diaspora. Additionally, it was recommended that these economies focus more on domestic investment rather than relying on foreign capital inflows for sustainable economic growth.

Sutradhar (2020) compared the impact of workers' remittances on economic growth in four South Asian emerging countries like Bangladesh, India, Pakistan, and Sri Lanka using balanced panel data from 1977 to 2016. The study employed pooled OLS, fixed

effects, random effects, and dummy variable interaction models to estimate the impact of remittances. The empirical analysis revealed a negative effect of remittances on economic growth in Bangladesh, Pakistan, and Sri Lanka, while remittances had a positive impact on economic growth in India. Additionally, the study found a joint significant and negative relationship between remittances and economic growth across all four countries. The findings suggested that the effects of remittances on economic growth may vary by country, highlighting the need for targeted policies to optimize the benefits of remittances in the region.

Lacheheb and Ismail (2020) checked the relationship between remittances and economic growth in 93 low- and middle-income countries, using annual data from 2009 to 2017. They employed the system Generalized Method of Moments (SYS-GMM) estimation technique to analyze the impact of remittances on economic growth. The results showed a significant negative impact on growth after removing outliers, whereas, before removing outliers, the relationship was negative but not statistically significant. Their findings suggest a "remittance curse," where high remittance inflows are linked to slower economic growth, potentially due to over-reliance on remittances for consumption rather than productive investment. The study highlights the importance of balancing remittance inflows with policies that promote long-term sustainable growth and investment.

Azizi (2020) analyzed the impact of international remittances on financial development in developing countries using a panel of 124 countries over the period from 1990 to 2015. The study employed an instrumental variable-fixed effect model to assess the relationship between remittances (independent variable) and financial development indicators, including domestic credit to the private sector, bank credit, bank deposits, and liquid liabilities (dependent variables). The results indicated that a 10 percent increase in the remittance-to-GDP ratio led to a 1.7 percent increase in domestic credit to the private sector, a 1.9 percent increase in bank credit, a 1.2 percent increase in bank deposits, and a 0.8 percent increase in liquid liabilities. The study concluded that remittances positively impact financial development in developing countries, which is crucial for fostering long-term economic growth and poverty reduction.

Ari and Turkish Economy (2020) observed the relationship between remittances and economic growth in Turkey from 1994 to 2018. They employed Johansen Cointegration Analysis to determine long-term relationships between the variables, followed by Granger Causality Analysis to explore causality. The study found a unidirectional relationship from economic growth to remittances, suggesting that remittances do not directly cause economic growth in Turkey. The results implied that other sources of foreign exchange, such as Foreign Direct Investment (FDI), exports, and sectors like tourism and transportation, play a more significant role in driving Turkey's GDP growth. The study also highlighted that migration barriers, migration duration, and the type of migration are key factors influencing remittance flows. Additionally, the study indicated that economic growth could influence remittances by converting these flows into productive investments that generate employment.

Banjara et al. (2020) studied the role of remittances in Nepal's economy, examining their impact on economic growth. The study used data from 2017/18, with Gross Domestic Product (GDP) as the dependent variable and remittances, human capital formation, financial development, productivity, and international trade as independent variables. They applied a comprehensive analysis to explore the relationship between remittances and economic variables. The findings indicated that remittances enhanced human capital and financial development but negatively affected productivity and trade by increasing consumption-driven imports. The study recommended policies to direct remittances into productive sectors for sustainable growth.

Poudyal and Bhaskar (2020) checked the impact of remittances on Nepal's economic growth, focusing on both micro and macro levels, with particular attention to poverty reduction and unemployment. Using descriptive statistics, correlation, and multiple regression analysis through SPSS and Excel, the study analyzed various variables such as remittance, economic growth rate, and per capita annual growth, with GDP as the dependent variable. The analysis revealed a positive relationship between remittances and GDP, although the COVID-19 pandemic negatively impacted remittance inflows and GDP growth. The findings highlighted the significant contribution of remittances to Nepal's development, despite a declining ratio of remittance to GDP, from 7.1% to 2.8%, during the pandemic. The study emphasized the importance of remittances in reducing poverty and promoting economic growth.

Table 1

Summary of Empirical Review

Author(s)	Variables	Methodology	Major Findings
Amir and Amir (2024)	Dependent: Economic Growth, Independent: Remittances	Fixed effect model, GMM estimation	The finding of this study was that remittances significantly boosted economic growth in Africa. The results of this study were that remittances enhanced household incomes, reduced poverty, improved living standards, and fostered development.
Azizi et al. (2024)	Dependent: Economic Growth, Independent: Remittance Inflows	Bilateral remittances, weighted indicators, Instrumental variables	The finding of this study was that remittances positively influenced growth in high human capital countries. The results of this study were that remittances had no impact in countries with low human capital, highlighting the need for education.
Khan (2024)	Dependent: Economic Growth, Independent: Remittance Inflows	NARDL model	The finding of this study was that positive remittance shocks boosted economic growth in India. The results of this study were that negative shocks had no impact on growth, suggesting remittance-friendly policies are necessary.
Ali et al. (2024)	Dependent: Economic Growth, Independent: Remittance Inflows	ARDL bound test	The finding of this study was that remittances had a positive impact on Pakistan's growth via investment. The results of this study indicate that formalizing remittance channels could significantly boost economic growth, improve financial inclusion, and foster long-term development.

Chowdhury et al. (2023)	Dependent: Economic Growth, Independent: Remittances	Pooled OLS, fixed/random effects, VECM, Granger causality	The finding of this study was that remittances negatively impacted economic growth in Bangladesh, Sri Lanka, and Vietnam. The results of this study were that directing remittances into productive sectors is key for growth.
Abdulai (2023)	Dependent: GDP Growth, Independent: Remittance Inflows	ARDL estimation	The finding of this study was that remittances positively impacted GDP growth in Ghana. The results of this study were that reducing transfer costs and enhancing transfer reliability could support sustained GDP growth.
Singh and Pradhan (2023)	Dependent: Real GDP, Independent: Remittances	ARDL model	The finding of this study was that remittances positively affected GDP growth in Nepal. The results of this study were that spending on consumption rather than investment weakened their positive impact.
Bucevska (2022)	Dependent: Economic Growth, Independent: Remittances	Fixed-effects panel regression	The finding of this study was that remittances had a significant positive impact on economic growth in SEE countries. The results of this study were that remittances could help accelerate economic convergence with the EU.
Qutb (2022)	Dependent: Economic Growth, Independent: Remittances	ADF test, Johansen's Co-integration, VECM, Granger	The finding of this study was that remittances had a negative long-term impact on Egypt's growth. The results of this study were that remittances had a countercyclical relationship with

		causality	economic growth.
Islam (2022)	Dependent: Economic Growth, Independent: Remittances	GLS, FMOLS, D-H panel causality tests	The finding of this study was that remittances positively impacted economic growth in South Asia. The results of this study were that remittances fostered growth and should be supported by migration-friendly policies.
Adhikari (2022)	Dependent: GDP Independent: Remittances, GDP, Consumption, Capital Formation	ARDL model, time series data (43 years)	The finding of this study was that remittances positively impacted short-term growth but had a negative long-term effect on GDP. The study showed an 11% GDP decrease with a 10% rise in remittances, emphasizing the need for productive investment.
Shrestha (2022)	Dependent: Economic Growth, Independent: Remittances, Investment, Financial Development, Human Capital	VECM, Granger Causality, Variance Decomposition analysis	The finding of this study was that remittances promoted financial development in the short run and indirectly influenced growth through investment and human capital. The study found that remittance shocks impact education, stressing the need for better policies and formal channels.
Chaudhary (2022)	Dependent: GDP, Private Gross Fixed Capital Formation, Independent: Remittances, Financial Growth, Institutional	ARDL bound test, Unit root test (Perron's model)	The finding of this study was that remittances positively impacted GDP but negatively impacted private gross fixed capital formation. The results of this study suggested remittances function more as compensatory transfers and recommended policies encouraging productive investments from remittance recipients.

	Quality		
Acharya and Paudel (2021)	Dependent: Economic Growth (GDP), Independent: Remittances, Investment, Consumption, Government Expenditure	OLS regression, ADF unit test (1989/90-2017/18 data)	The finding of this study was that investment and consumption significantly impacted GDP growth, while remittances had a positive but insignificant effect. The results of this study showed that while government expenditure and remittances had some effect, their contributions to growth were less significant compared to investment and consumption.
Sghaier (2021)	Dependent: Economic Growth, Independent: Remittance Inflows, Financial Development	GMM, Panel Data (2000-2018)	The finding of this study was that remittances positively influenced economic growth, with financial development amplifying their effects. The results of this study emphasized that a well-developed financial system can maximize the benefits of remittances, recommending stronger financial institutions to attract more remittances, foster investment opportunities, and improve overall economic stability.
Collaku and Merovci (2021)	Dependent: Economic Growth (GDP), Independent: Remittance Inflows	OLS, Pooled Regression (Western Balkan countries)	The finding of this study was that remittances had a significant positive effect on GDP growth. The results of this study showed a 1% increase in remittances led to a 0.12% increase in GDP, highlighting the importance of policies that promote the productive use of remittances in economic growth, job creation, and long-term sustainability.

Kevin and Fabien (2021)	Dependent: GDP, Independent: Remittances Paid, Remittances Received	Multiple Regression, STATA-14 (1980-2017 data)	The finding of this study was that remittances paid had a significant positive effect on economic growth, while remittances received had an insignificant impact. The results of this study suggested that reducing transaction costs and creating a conducive environment for remittance transfers could enhance their contribution to economic growth.
Shakya and Gonpu (2021)	Dependent: Economic Growth, Independent: Remittances	Cointegration, Regression Analysis (World Bank data)	The finding of this study was that remittances had no significant impact on economic growth and could even negatively affect it in the long run. The results of this study suggested that remittances should be directed towards productive sectors, along with improving governance, financial literacy, education, and investment in infrastructure to ensure long-term economic development.
Adjei et al. (2020)	Dependent: Economic Growth, Independent: Remittances, Real Effective Exchange Rate, Trade Openness, Investment	Dynamic Panel Data Methods	The finding of this study was that remittances positively impacted economic growth in West Africa. The results of this study were that remittances had a positive relationship with exchange rate, trade openness, investment, financial market development, long-term poverty alleviation strategies, and improved infrastructure development.

Sutradhar (2020)	Dependent: Economic Growth, Independent: Remittances	Pooled OLS, Fixed Effects, Random Effects, Dummy Variable Interaction Models	The finding of this study was a negative effect of remittances on economic growth in Bangladesh, Pakistan, and Sri Lanka, and a positive effect in India. The results of this study were that the effects of remittances on growth varied by country.
Lacheheb and Ismail (2020)	Dependent: Economic Growth, Independent: Remittances	System Generalized Method of Moments (SYS-GMM)	The finding of this study was that remittances had a significant negative impact on growth after removing outliers. The results of this study were that high remittance inflows may lead to slower growth due to over-reliance on consumption.
Azizi (2020)	Dependent: Financial Development (Domestic Credit, Bank Credit, Bank Deposits, Liquid Liabilities), Independent: Remittances	Instrumental Variable-Fixed Effect Model	The finding of this study was that remittances positively impacted financial development in developing countries. The results of this study were that a 10% increase in remittances led to significant increases in financial development indicators.
Ari and Turkish Economy (2020)	Dependent: Economic Growth, Independent: Remittances	Johansen Cointegration Analysis, Granger Causality Analysis	The finding of this study was a unidirectional relationship from economic growth to remittances in Turkey. The results of this study were that remittances did not directly cause economic growth but were influenced

			by other foreign exchange sources.
Banjara et al. (2020)	Dependent: Economic Growth (GDP), Independent: Remittances, Human Capital, Financial Development, Productivity, International Trade	Comprehensive Analysis	The finding of this study was that remittances enhanced human capital and financial development but negatively impacted productivity and trade. The results of this study were that remittances increased consumption-driven imports, hindering sustainable growth.
Poudyal and Bhaskar (2020)	Dependent: Economic Growth (GDP), Independent: Remittances, Poverty Reduction, Unemployment	Descriptive Statistics, Correlation, Multiple Regression Analysis	The finding of this study was a positive relationship between remittances and GDP, despite the COVID-19 pandemic's negative impact. The results of this study were that remittances contributed significantly to poverty reduction and economic growth.

2.3 Research Gap

Previous studies on the impact of remittance on economic development employed various research designs including descriptive, causal-comparative and dynamic panel data methods, often relying on samples from specific regions or countries, with some focusing on a few years of data (Amir & Amir, 2024; Azizi et al., 2024; Khan, 2024). Many studies used secondary data obtained from financial reports, government publications, and international databases such as the World Bank (Acharya & Paudel, 2021; Singh & Pradhan, 2023), while others analyzed the data using simple statistical methods like regression analysis and correlation analysis (Chaudhary, 2022; Sghaier, 2021). Moreover, the independent variables in past research varied, including factors like remittance inflows, foreign direct investment, and trade openness, while the dependent variable was primarily economic growth, GDP, or poverty reduction (Abdulai, 2023; Collaku & Merovci, 2021). In comparison, the current study has

utilized a descriptive and causal-comparative research design, with a sample covering a broader 30 years' period (1994/95 to 2023/24) and using purposive sampling to select relevant data. The main independent variable in this study is remittance while the control variables include foreign direct investment, inflation, trade openness, and unemployment rate. The dependent variable is GDP. This research specifically focuses on the impact of remittances on GDP in Nepal, using secondary data from national and international financial reports and databases such as Nepal Rastra Bank and the World Bank. The current study employs both descriptive and inferential statistics, including regression and correlation analysis. By considering a comprehensive set of variables, the study has successfully addressed the gap by expanding the temporal scope, focusing on Nepal and exploring the relationships between remittance and Gross Domestic Product.

CHAPTER III
RESEARCH METHODOLOGY

The research methodology section of a research report explains the methods, tools and techniques used to analyze data and create the report. It involves careful investigation, especially in searching for new facts in any area of knowledge, to determine the appropriate research approach. This study has used the following methodology to achieve the study's objectives of examining the Impact of Remittance on Economic Development in Nepal.

3.1 Research Design

This study has employed both descriptive and causal comparative research designs to explore the topic on impact of remittance on economic development in Nepal. The descriptive design has used to analyze the trends and patterns of remittance inflows, focusing on the main independent variable, remittance as well as control variables such as foreign direct investment, inflation, trade openness and unemployment rate, with gross domestic product (GDP) as the dependent variable. The causal comparative design has examined the relationships between these independent variable and control variables with the dependent variable GDP growth in Nepal. This methodology has facilitated a comprehensive evaluation of how these independent and control variables have influenced GDP. By integrating both descriptive and causal comparative methods, this study has provided valuable insights into the role of remittances and other macroeconomic factors in shaping economic development in Nepal.

3.2 Population, Sampling, and Sampling Design

The population for this study has included the complete economic data of Nepal. The sample has been drawn from the fiscal years 1994/95 to 2023/24, covering a thirty years' period. A purposive sampling design has been employed to select relevant data for analysis. The main independent variable in this study is remittance while the control variables are foreign direct investment, inflation, trade openness and unemployment rate. The dependent variable is Gross Domestic Product. The purposive sampling technique has ensured that the sample accurately represents the

factors influencing economic development in Nepal, allowing for a thorough examination of the relationships between these variables and their impact on GDP growth.

3.3 Nature and Sources of Data, and Instrument of Data Collection

This study has utilized secondary data, sourced from various entities including annual reports, financial statements, and official documents. The data has been collected from the Nepal Rastra Bank (NRB), the Central Bureau of Statistics (CBS), the Ministry of Finance (MOF), and international organizations such as the World Bank and the IMF. In addition to these sources, information from newspapers, magazines, and economic journals has also been reviewed. These sources have provided the necessary data to assess the impact of remittance, foreign direct investment, inflation, trade openness, and unemployment rate on Gross Domestic Product (GDP) growth in Nepal. The instrument of data collection has primarily involved the review and analysis of these secondary data sources.

3.4 Method of Analysis

The method of analysis refers to the techniques used to interpret data such as descriptive statistics and inferential statistics. This study has assessed the impact of remittance on economic development in Nepal, focusing on remittance as the main independent variable while foreign direct investment, inflation, trade openness and unemployment rate as control variables with Gross Domestic Product as the dependent variable. SPSS Version 29 has been used for both descriptive and inferential statistics. Descriptive statistics has summarized to minimum, maximum, mean and standard deviation of collected data. Inferential statistics has involved correlation and regression analysis where correlation analysis has explored relationships between the independent and control variables with GDP. Regression analysis has assessed the impact of these independent and control variables on GDP to determine their significance and predictive power. The tools for analysis include:

A. Descriptive Statistics

Descriptive statistics have been used to analyze the key variables in this study on the impact of remittance on economic development in Nepal. The main independent variable is remittance while the control variables include foreign direct investment,

inflation, trade openness and unemployment rate. Gross Domestic Product is the dependent variable. The analysis has provided insights into the minimum, maximum, mean and standard deviation of these variables, helping to understand their distribution and variability. This has laid the foundation for examining how these variables influence GDP growth in Nepal. The following are the findings from the descriptive statistics:

Arithmetic Mean

The arithmetic mean is the central value of a dataset, calculated by dividing the sum of values by the number of values. It helps identify trends but can be influenced by outliers. Despite this, it remains a reliable measure, especially in large datasets where outliers have less impact.

The formula for the arithmetic mean is as follows:

$$\text{Arithmetic mean } (\bar{x}) = \frac{\sum X}{N}$$

Where,

N = Total number of values in the dataset

$\sum X$= Sum of all values in the dataset

Standard Deviation

Standard deviation measures the spread of data points around the mean, showing how much values differ. A smaller standard deviation means less variability, while a larger one indicates more variation. It is commonly used in finance, research, and quality control to assess consistency. A low standard deviation suggests data points are close to the mean, while a high standard deviation points to greater fluctuation. Understanding it aids in risk assessment, trend analysis, and informed decision-making.

The formula for the Standard deviation is as follows:

$$\text{Standard deviation } (\sigma) = \sqrt{\frac{\sum(X-\bar{X})^2}{N-1}}$$

Where,

X Represents each individual data point in the dataset

$\bar{X}$ Represents the mean (average) of the dataset

N is the total number of data points in the dataset

B. Inferential Statistics

Inferential statistics have included correlation analysis and regression analysis. Correlation analysis has examined the relationships between remittance, foreign direct investment, inflation, trade openness, unemployment rate with GDP growth. Regression analysis has analyzed the impact of these variables on GDP growth. The key findings are as follows:

Correlation Analysis

Correlation analysis measures the strength and direction of relationships between variables. A positive correlation means both variables increase together, while a negative correlation indicates that as one increases, the other decreases. The correlation coefficient (r) ranges from +1 to -1, with 0 indicating no relationship. It helps identify patterns and trends in data, but does not establish causation. In this study, correlation analysis evaluates how remittance, foreign direct investment, inflation, trade openness, and unemployment rate relate to GDP growth, providing a foundation for further regression analysis.

The Pearson correlation coefficient (r) is calculated using the formula:

$$r = \frac{n\,(\sum XY) - (\sum X)\,(\sum Y)}{\sqrt{[n\,(\sum X^2) - (\sum X)^2]}\,\sqrt{[n\,(\sum Y^2) - (\sum Y)^2]}}$$

Where;

n = the number of data pairs

$\sum XY$ = the sum of the product of each pair of scores

$\sum X$ And $\sum Y$ = the sums of X and Y scores respectively

Regression Analysis

Regression analysis quantifies the impact of independent variables on a dependent variable, measuring the strength and significance of these effects. By using regression coefficients (β), it shows how much the dependent variable changes for each unit increase in an independent variable, while holding other factors constant. A positive coefficient indicates a direct relationship, and a negative coefficient suggests an inverse relationship. This technique is widely used in economics, finance, and social sciences for impact assessment, trend analysis, and policy evaluation.

Model Specification

In this model, the dependent variable is GDP, influenced by the main independent variable remittance and control variables like foreign direct investment, inflation, trade openness and unemployment rate. The model is represented as:

$GDP = \beta_0 + \beta_1 REM + \beta_2 FDI + \beta_3 INF + \beta_4 TO + \beta_5 UR + \varepsilon it$

Where;

β_0 = Intercept/ Constant Term

GDP = Gross Domestic Product

RMT = Remittance

FDI = Foreign Direct Investment

INF = Inflation

TO = Trade Openness

UR = Unemployment Rate

εit = Error term of the stochastic model

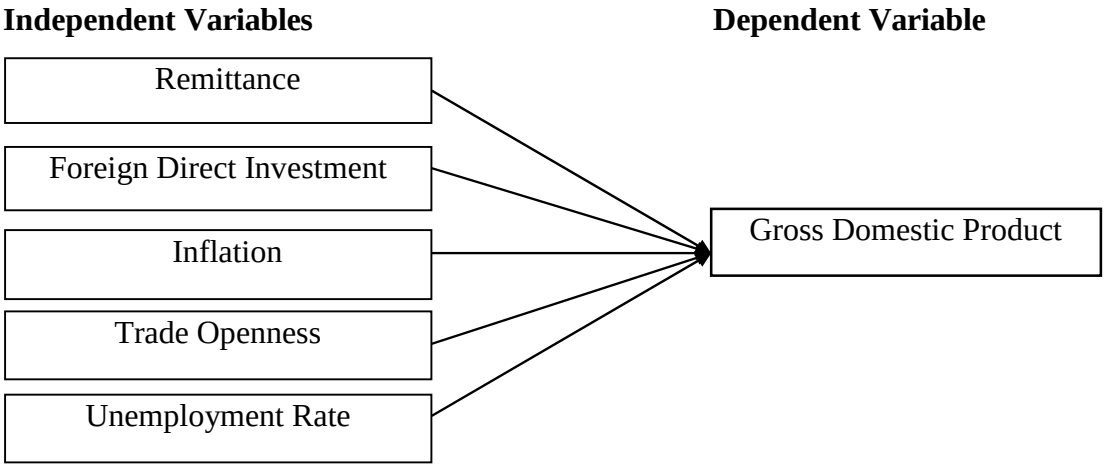
Betas including β_1, β_2, β_3, β_4 and β_5 are the parameters of the model

3.5 Research Framework and Definition of Variables

This section defines the variables, with remittance as the main independent variable and foreign direct investment, inflation, trade openness, and unemployment rate as control variables. The dependent variable is GDP growth. The study focuses on the impact of remittance on economic development in Nepal" and guides policy decisions. The research framework is shown in the following figure:

Figure 1

Research Framework



(Source: Adjei et al., 2020; Amir & Amir, 2024)

Table 2

Description of the Study Variables

Variables	Notation	Description
Dependent Variable:		
Gross Domestic Product	GDP	Gross domestic product over the 30 years
Main Independent Variable:		
Remittance	REM	Remittance received over the 30 years
Control Variables:		
Foreign Direct Investment	FDI	Foreign direct investment inflows in Nepal
Inflation	INF	Inflation rate in Nepal from 1994/95 to 2023/24
Trade Openness	TO	Trade (% of GDP) from 1994 to 2023 in Nepal
Unemployment Rate	UR	Unemployment rate in Nepal

(Source: Amir & Amir, 2024; Adjei et al., 2020)

Dependent Variable

Gross Domestic Product (GDP)

The dependent variable in this study is GDP, which represents the total value of goods and services produced within Nepal over a specific period. GDP is a key indicator of economic performance and reflects the overall economic development of a country. It is widely used to measure the economic progress of a nation and to assess policy effectiveness. Studies suggest that GDP is influenced by multiple factors, including remittance inflows, foreign direct investment, inflation, trade openness, and unemployment rate (Amir & Amir, 2024). Examining these relationships helps in understanding how remittance contributes to Nepal's economic development. A deeper understanding of these dynamics can assist policymakers in formulating strategies to sustain economic advancement.

Independent Variables

Remittance (Main Independent Variable)

Remittance refers to money sent by migrant workers to their home country, which plays a vital role in economic growth by increasing household income, boosting

consumption, and supporting investments. It is often used for daily necessities, healthcare, education, and even entrepreneurial activities, influencing overall economic stability. Research has shown that remittances can enhance financial development and reduce poverty, though their impact depends on how they are utilized within the economy (Ojha, 2019). In Nepal, remittances are a significant contributor to GDP and are expected to influence economic growth through increased capital inflows. Given the high dependence on remittances, understanding their effects on economic growth can help shape policies to maximize their developmental benefits.

Control Variables

Foreign Direct Investment (FDI)

Foreign direct investment (FDI) represents investments made by foreign entities in Nepal's businesses, industries, and assets. FDI contributes to economic growth by bringing in capital, technology, and managerial expertise, which enhances productivity and competitiveness. It also creates job opportunities and improves infrastructure, leading to long-term economic benefits. A stable economy with favorable investment policies tends to attract higher FDI, while political instability, inflation, and trade restrictions may discourage foreign investors (Comes et al., 2018). This study examines how FDI affects GDP growth in Nepal. Identifying the factors that attract or deter FDI is essential for improving Nepal's investment climate and economic performance.

Inflation (INF)

Inflation refers to the rate at which the prices of goods and services rise over time, reducing the purchasing power of money. Moderate inflation is generally considered beneficial as it encourages spending and investment, but high inflation creates economic uncertainty, increasing business costs and reducing investment incentives. Inflation can impact economic growth by affecting consumer demand, production costs, and exchange rates (Schneider & Frey, 1985). Moderate inflation, however, may indicate economic activity and demand. This study assesses how inflation levels in Nepal impact GDP growth and whether price stability supports sustainable economic expansion. Understanding the relationship between inflation and economic growth is crucial for designing effective monetary policies.

Trade Openness (TO)

Trade openness measures the extent to which a country participates in global trade, calculated as the sum of exports and imports as a percentage of GDP. Economies with fewer trade restrictions and higher integration into global markets tend to experience greater economic growth due to increased competition and access to resources. Trade liberalization encourages foreign investment, enhances innovation, and allows countries to benefit from comparative advantages (Balasubramanyam et al., 1996). This study evaluates the role of trade openness in influencing Nepal's GDP growth. Assessing Nepal's trade policies and their impact on economic performance can help formulate strategies for improving trade competitiveness and economic integration.

Unemployment Rate (UR)

The unemployment rate reflects the percentage of the labor force that is unemployed and actively seeking work. A high unemployment rate indicates economic distress, leading to reduced household incomes, lower consumption, and slower economic growth. Conversely, lower unemployment suggests a stronger labor market, higher productivity, and improved living standards (Gupta et al., 2009). This study examines the relationship between unemployment and GDP growth in Nepal, assessing whether high employment levels contribute to economic stability and development. Understanding labor market dynamics is crucial for formulating policies that promote job creation, income stability, and economic resilience.

CHAPTER IV
RESULTS AND DISSCUSSION

As discussed in the previous chapters, the major objective of this study is to analyze the impact of remittance on economic development in Nepal. This chapter has presented the results and discussion of the study. Inferential statistics and descriptive statistics have been applied to analyze the data. Descriptive statistics has included mainly min, max, mean and standard deviation. Inferential statistics has covered correlation analysis and multiple regression analysis using SPSS Software. The study has considered remittance as the main independent variable, while foreign direct investment, inflation, trade openness and unemployment rate have been considered as control variables and gross domestic product of Nepal has been considered as the dependent variable. The remaining contents of this chapter are explained below:

4.1 Results

In this section of results, the study has examined the impact of remittance on the economic development of Nepal through the use of statistical tools in the form of descriptive statistics and inferential statistics. Descriptive statistics have comprised computations like min, max, arithmetic mean and standard deviation that offers an overview of the data set. Inferential statistics have encompassed analyses like Karl Pearson's correlation analysis and multiple regression analysis for examining relationships among variables and determining the impact of remittance, foreign direct investment, inflation, trade openness and unemployment rate on the gross domestic product in Nepal. The results of this study have been presented below:

A. Results of Descriptive Statistics

Descriptive statistics has been used to summarize the key characteristics of the data, including the minimum, maximum, mean and standard deviation for the independent variable remittance along with control variables such as foreign direct investment, inflation, trade openness and unemployment rate and the dependent variable GDP growth in Nepal. The analysis has covered data from 1994/94 to 2023/24, aiming to illustrate the range and variability of these variables. The findings have been presented in Table 3, showing trends and comparisons across these key metrics.

Table 3

Summary of Descriptive Statistics for Study Variables

Variables	N	Min	Max	Mean	S.D.
RMT	30	0.04	11.00	3.6767	0.48452
FDI	30	-5.95	196.33	54.1667	59.68437
INF	30	2.27	11.24	6.6990	2.71462
TO	30	36.30	64.00	47.6667	6.51568
UR	30	10.55	13.16	10.7863	0.54605
GDP	30	4.07	41.18	17.1200	12.39947

(Source: SPSS Version 29)

Table 3 displays summary of descriptive statistics for study variables such as RMT, FDI, INF, TO, UR and GDP. Remittance inflows have ranged from $0.04 billion to $11.00 billion, with a mean of $3.68 billion and a standard deviation of $0.48 billion, indicating moderate variation in remittance patterns. FDI has ranged from -$5.95 million to $196.33 million, with a mean of $54.17 million and a standard deviation of $59.68 million, indicating the volatility in foreign investment. Inflation has oscillated between 2.27% and 11.24%, averaging 6.70%, reflecting occasional inflationary pressures in Nepal's economy. Trade openness has oscillated between 36.30% and 64.00%, averaging 47.67% and having a standard deviation of 6.52%, reflecting moderate oscillations in Nepal's trade policies. The unemployment rate oscillated between 10.55% and 13.16%, averaging 10.79% and having a low standard deviation of 0.55%, reflecting relatively stable employment patterns. Lastly, GDP ranged from $4.07 billion to $41.18 billion, with a mean of $17.12 billion and standard deviation of $12.40 billion, which shows huge fluctuations in Nepal's economic performance over the past 30 years (1994/95–2023/24).

B. Results of Inferential Statistics

Inferential statistics like correlation and regression analysis have been used to find out relationships and impact among variables. Correlation is a measure of association between RMT, FDI, INF, TO and UR with GDP, depicting how change in one variable corresponds to change in another. Regression analysis analyzes the way these variables effect on GDP quantifying their predictability. The results of the inferential statistics are depicted below.

Correlation Analysis

The correlation matrix illustrates the connection between RMT, FDI, INF, TO and UR with GDP in Nepal. It indicates the strength, direction and level of significance among these connections and gives valuable information. The results are presented below in detail.

Table 4

Karl Pearson's Correlation Analysis of Study Variables

Variables	RMT	FDI	INF	TO	UR	GDP
RMT	1					
FDI	0.743**	1				
INF	0.043	-0.047	1			
TO	-0.540**	-0.400*	-0.127	1		
UR	0.393*	0.454*	-0.199	-0.283	1	
GDP	0.991**	0.771**	0.003	-0.518**	0.434*	1

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

*. Correlation is significant at the 0.05 level (2-tailed).

(Source: SPSS Version 29)

Table 4 shows the Karl Pearson's correlation analysis of the research variables, i.e., the correlation between Remittance (RMT), Foreign Direct Investment (FDI), Inflation (INF), Trade Openness (TO) and Unemployment Rate (UR) with Gross Domestic Product (GDP) in the study on the "Impact of Remittance on Economic Development in Nepal." Remittance (RMT) shows a very strong positive correlation with GDP ($r = 0.991$, $p < 0.01$) which is significant at the 1% level, indicating a very high and positive impact on economic growth. Foreign Direct Investment (FDI) has a strong positive correlation with GDP ($r = 0.771$, $p < 0.01$) significant at the 1% level suggesting a strong positive influence on economic development. Inflation (INF) shows a very weak and negligible positive correlation with GDP ($r = 0.003$, $p > 0.01$) indicating no meaningful relationship between inflation and GDP in this study. Trade Openness (TO) exhibits a moderate negative correlation with GDP ($r = -0.518$, $p < 0.01$) which is statistically significant at the 1% level suggesting that higher trade openness is associated with lower GDP growth in this context. Unemployment Rate (UR) demonstrates a moderate positive correlation with GDP ($r = 0.434$, $p < 0.05$),

significant at the 5% level, indicating a moderate positive relationship with economic growth.

Regression Analysis

Regression analysis examines the impact of Remittance (RMT), Foreign Direct Investment (FDI), Inflation (INF), Trade Openness (TO) and Unemployment Rate (UR) on Gross Domestic Product (GDP). The analysis includes the model summary, analysis of variance and coefficients to assess how these variables influence GDP. The results of the regression analysis have been presented below.

Table 5

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.993	0.986	0.984	1.58351

a. Predictors: (Constant), RMT, FDI, INF, TO, UR

(Source: SPSS Version 29)

Table 5 reveals the model summary, where R Square is 0.986 indicating that 98.6% of the variance of gross domestic product (GDP) is explained by independent and control variables such as RMT, FDI, INF, TO and UR. The remaining 1.4% variance is explained by other variables beyond this model.

Table 6

Analysis of Variance (ANOVA)

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4395.974	4	1098.994	438.283	0.000
	Residual	62.687	25	2.507		
	Total	4458.661	29			

a. Dependent variable: GDP

b. Predictors: (Constant), RMT, FDI, INF, TO, UR

(Source: SPSS Version 29)

Table 6 offers the results of the Analysis of Variance (ANOVA) for the regression model. The p-value of the significance value is 0.000, which is less than 0.05,

showing that the model is statistically significant. This verifies that variables such as RMT, FDI, INF, TO and UR as a group significantly effect on GDP.

Table 7

Coefficients of Regression Model for Dependent Variable GDP

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Sd. error	Beta		
1	(Constant)	-8.982	7.243		-1.240	0.226
	RMT	3.355	0.137	0.943	24.414	0.000
	FDI	0.160	0.025	0.771	6.405	0.000
	INF	0.014	0.863	0.003	0.016	0.987
	TO	-0.985	0.308	-0.518	-3.200	0.003
	UR	9.850	3.867	0.434	2.547	0.017

a. Dependent variable: GDP

(Source: SPSS Version 29)

$GDP = -8.982 + 3.355RMT + 0.160FDI + 0.014INF - 0.985TO + 9.850UR + \varepsilon it$

Table 7 demonstrates the regression results for the dependent variable Gross Domestic Product (GDP) with the impact of Remittance (RMT), Foreign Direct Investment (FDI), Inflation (INF), Trade Openness (TO) and Unemployment Rate (UR). Remittance (RMT) has a significant positive impact on GDP (B = 3.355, p = 0.000) statistically significant at the 5% level indicating that higher remittance inflows substantially increase GDP. Foreign Direct Investment (FDI) also has a significant positive effect on GDP (B = 0.160, p = 0.000) significant at the 5% level implying that increased FDI contributes positively to economic growth. Inflation (INF) shows a positive but insignificant impact on GDP (B = 0.014, p = 0.987) not significant at the 5% level indicating that inflation has a negligible and statistically unsupported effect on GDP in this model. Trade Openness (TO) has a significant negative effect on GDP (B = -0.985, p = 0.003) significant at the 5% level suggesting that higher trade openness is associated with a decrease in GDP which could indicate challenges in the trade environment affecting growth negatively. The Unemployment Rate (UR) has a significant positive relationship with GDP (B = 9.850, p = 0.017) significant at the 5% level, indicating that increases in unemployment rate are unexpectedly associated with

increases in GDP which may reflect structural aspects or measurement nuances in the data. Among these variables, Unemployment Rate has the highest positive impact on GDP, Trade Openness has the highest negative impact, while Inflation has the lowest and insignificant effect on GDP.

4.2 Discussion

The research has analyzed the impact of remittance in economic development in Nepal considering Remittance (RMT) as the key independent variable while Foreign Direct Investment (FDI), Inflation (INF), Trade Openness (TO) and Unemployment Rate (UR) have been considered as control variables and Gross Domestic Product (GDP) as the dependent variable. In the research, data of the variables have been collected for the period 1994/95 to 2023/24. Data have been gathered from NRB reports, economic databases and World Bank reports. Researcher has analyzed collected data through SPPSS Version 29. Descriptive statistics and inferential statistics have been utilized in this research to analyze data and fulfill specific purposes. Descriptive statistics has included min. max, mean and standard deviation while inferential statistics has included correlation analysis and regression analysis. Descriptive statistics has provided data about the trend and magnitude of RMT, FDI, INF, TO, UR and GDP, whereas inferential statistics like correlation analysis has been used to validate the relationship between these independent variable and control variables with GDP as well as regression has been used to analyze the impact of independent variable and control variables on GDP.

Descriptive statistics have revealed that remittance inflows have ranged from $0.04 billion to $11.00 billion, averaging $3.68 billion with moderate variation (SD = $0.48 billion). Foreign Direct Investment has shown significant volatility, from -$5.95 million to $196.33 million, averaging $54.17 million with a high standard deviation of $59.68 million. Inflation rates have fluctuated between 2.27% and 11.24%, averaging 6.70%, while trade openness has oscillated moderately between 36.30% and 64.00%, averaging 47.67%. The unemployment rate has remained relatively stable, ranging from 10.55% to 13.16% with low variability (SD = 0.55%). GDP has varied substantially from $4.07 billion to $41.18 billion, averaging $17.12 billion with a high standard deviation of $12.40 billion, reflecting notable economic fluctuations over the years.

Correlation analysis has shown that remittance inflows have a very strong positive correlation with GDP ($r = 0.991$, $p < 0.01$), indicating a critical role in economic growth. Foreign Direct Investment has also exhibited a strong positive correlation with GDP ($r = 0.771$, $p < 0.01$), confirming its importance in economic development. Inflation has demonstrated a negligible and insignificant correlation with GDP ($r = 0.003$, $p > 0.01$), suggesting minimal impact. Trade openness has revealed a moderate negative correlation with GDP ($r = -0.518$, $p < 0.01$), implying that increased openness may have challenged growth. The unemployment rate has shown a moderate positive correlation with GDP ($r = 0.434$, $p < 0.05$), indicating a complex relationship worthy of further exploration.

Regression analysis has shown that remittance inflows have had a significant positive impact on GDP ($B = 3.355$, $p = 0.000$), substantially contributing to economic growth. Foreign Direct Investment has also positively influenced GDP ($B = 0.160$, $p = 0.000$), affirming its developmental role. Inflation has shown a positive but insignificant effect on GDP ($B = 0.014$, $p = 0.987$), reflecting a negligible impact in the model. Trade openness has had a significant negative effect on GDP ($B = -0.985$, $p = 0.003$), suggesting challenges in the trade environment that may hinder growth. The unemployment rate has shown a significant positive relationship with GDP ($B = 9.850$, $p = 0.017$), which may reflect structural factors or data nuances. Among these variables, unemployment has had the strongest positive effect, while trade openness has exerted the greatest negative influence.

In the current study, the relationship between remittance (RMT) and GDP has been strongly positive and aligns with the findings of Singh and Pradhan (2023), Abdulai (2023), and Bucevska (2022), supporting the Migration and Development Theory and Keynesian Economic Theory, which argue that remittance inflows raise household income and stimulate consumption-led growth. This result contrasts with the findings of Chowdhury et al. (2023) and Qutb (2022), who reported weaker or insignificant impacts. Foreign Direct Investment (FDI) has shown a strong positive correlation with GDP, consistent with Shakya and Gonpu (2021), and aligned with the Neoclassical Growth Theory, which emphasizes capital accumulation as a driver of output. However, this finding differs from Adjei et al. (2020) and Sghaier (2021), who found

weaker or no significant relationships. Inflation (INF) has exhibited a negligible positive correlation with GDP, diverging from the strong negative relationships found in Adhikari (2022) and Lacheheb and Ismail (2020), but supporting the minimal inflation effect noted by Poudyal and Bhaskar (2020), which is conceptually supported by Keynesian views on short-run inflation dynamics. Trade Openness (TO) has revealed a moderate negative correlation with GDP, differing from the weak positive associations observed by Banjara et al. (2020) and contradicting Azizi et al. (2024) and Sghaier (2021), which raises questions about the applicability of Endogenous Growth Theory in Nepal's open market context. The unemployment rate (UR) has shown a moderate positive correlation with GDP, partially aligning with Banjara et al. (2020), but contrasting with Adjei et al. (2020) and Azizi et al. (2024), who reported negative or no significant relationships highlighting the structural employment issues explained by the Dual Economy Model.

Furthermore, regression analysis has shown that remittances (RMT) have had a significant positive impact on GDP, corroborating the results of Ali et al. (2024), Collaku and Merovci (2021), and Islam (2022). This aligns strongly with the Human Capital Theory, where remittances enhance development by funding education, health, and skills formation. It contrasts with Adhikari (2022) and Sutradhar (2020), who found insignificant effects. Foreign Direct Investment (FDI) has also demonstrated a significant positive effect on GDP, diverging from Acharya and Paudel (2021) who reported no significant impact, but consistent with Adjei et al. (2020) and Sghaier (2021) again supporting Neoclassical Growth Theory. Inflation (INF) has exhibited a positive but statistically insignificant effect on GDP, consistent with Kevin and Fabien (2021), yet opposing the significant negative effects reported by Adhikari (2022) and Lacheheb and Ismail (2020). Trade Openness (TO) has shown a significant negative effect on GDP, contrasting with Banjara et al. (2020), and diverging from Azizi et al. (2024) and Sghaier (2021), which questions the broad applicability of Trade-Led Growth Hypothesis in the Nepali context. The unemployment rate (UR) has shown a significant positive relationship with GDP, inconsistent with findings of Banjara et al. (2020), and contrary to Adjei et al. (2020) and Azizi (2020), possibly reflecting underemployment and informal sector dynamics as outlined in the Dual Economy Model.

CHAPTER V
SUMMARY AND CONCLUSION

This chapter is intended to provide a brief overview of the study in the summary form along with major findings and the conclusion of the study. Accordingly, it has organized into three sections:

5.1 Summary

The main objective of this study is to investigate the impact of remittance on economic development in Nepal. To achieve this, the study has set three specific objectives: to assess the current status of remittance inflows and gross domestic product in Nepal; to examine the relationship between RMT, FDI, INF, TO and UR rate with GDP; and to analyze the effect of these variables on GDP. To address these objectives, the study has employed a descriptive and causal comparative research design. The population has comprised the complete economic data of Nepal, with the sample covering fiscal years from 1994/95 to 2023/24 a 30-year period selected using a purposive sampling technique. The study has utilized secondary data collected from credible sources such as the Nepal Rastra Bank (NRB), Central Bureau of Statistics (CBS), Ministry of Finance (MOF) and international organizations like the World Bank and IMF. Remittance has been considered the main independent variable, while FDI, inflation, trade openness and unemployment rate have served as control variables, with GDP as the dependent variable. The researcher has employed both descriptive statistics (including minimum, maximum, mean, and standard deviation) and inferential statistics (correlation and regression analysis) and all analyses have been conducted using SPSS Version 29. Descriptive statistics have assessed the current status of remittance inflows and GDP, correlation analysis has examined the relationships among RMT, FDI, INF, TO and UR rate with GDP and regression analysis has evaluated the impact of these variables on GDP in Nepal.

Descriptive statistics have shown that all variables experienced varying degrees of fluctuation over the study period. Remittance inflows exhibited a consistent upward trend, underscoring their growing importance in Nepal's economy. Foreign direct investment was highly volatile, reflecting unstable external capital inflows. Inflation

and trade openness varied moderately, indicating shifting economic conditions and policies. The unemployment rate remained relatively stable, while GDP showed substantial variation, mirroring Nepal's changing economic performance.

Correlation analysis revealed a very strong positive relationship between remittance inflows and GDP, highlighting remittance's critical role in economic growth. Foreign direct investment also showed a strong positive correlation with GDP, though less pronounced than remittance. Inflation had a negligible and statistically insignificant correlation, suggesting minimal impact. Trade openness exhibited a moderate negative relationship with GDP, indicating potential adverse effects from external trade exposure. The unemployment rate showed a moderate positive correlation with GDP, suggesting complex structural labor market factors.

Regression analysis confirmed the significant positive impact of remittance and foreign direct investment on GDP. Inflation showed a positive but statistically insignificant effect, indicating a limited role. Trade openness had a significant negative impact, suggesting challenges related to Nepal's trade practices. The unemployment rate had a significant positive impact on GDP, possibly reflecting structural or data-driven complexities. Overall, remittance emerged as the most influential positive contributor, while trade openness had the strongest negative effect.

5.2 Conclusion

The first specific objective of this study has been to assess the current status of remittance inflows and gross domestic product in Nepal. This has been addressed using descriptive statistics, which reveal a significant increase in both remittance and GDP over the past three decades. The rise in remittance reflects the growing number of Nepalese working abroad, while GDP growth indicates broader economic progress. From the researcher's perspective, remittance continues to play a vital role in sustaining the economy by supporting household consumption and mitigating economic shocks. However, fluctuations in foreign direct investment, trade openness, and inflation point to ongoing structural and external challenges in Nepal's economic environment.

The second objective has been to examine the relationship between remittance, foreign direct investment, inflation, trade openness, and unemployment rate with gross domestic product. Correlation analysis has shown a very strong positive relationship between remittance and GDP, suggesting Nepal's economy is heavily reliant on migrant earnings. Foreign direct investment has demonstrated a strong positive correlation as well, emphasizing its contribution to growth. In contrast, inflation has shown a negligible correlation, while trade openness has shown a moderate negative relationship with GDP. The unemployment rate has exhibited a moderate positive correlation, indicating complex labor market dynamics. From the researcher's perspective, these findings highlight the importance of maximizing the benefits of remittance and FDI, while reevaluating trade and labor policies to address underlying inefficiencies.

The third objective has been to analyze the effect of remittance, foreign direct investment, inflation, trade openness, and unemployment rate on GDP. Regression analysis has revealed that remittance has a significant positive impact on GDP, reinforcing its central role in economic development. Foreign direct investment also shows a positive and significant effect. Inflation, however, has an insignificant influence, suggesting minimal impact in this model. Trade openness has had a significant negative effect on GDP, indicating possible inefficiencies in Nepal's trade practices. The unemployment rate has had a significant positive effect, possibly due to informal sector dynamics or structural labor issues. From the researcher's viewpoint, while remittance remains a key driver of GDP, there is a pressing need for policies that diversify the economy, enhance trade competitiveness, attract quality investment, and create sustainable employment to support long-term growth.

5.3 Implications

Based on the findings of this study, several important implications arise for policymakers, practitioners, and the academic community. These implications serve as recommendations for enhancing Nepal's economic development and identify areas for future research.

Policy Implications

Given the strong positive impact of remittance on GDP, policymakers should focus on channeling remittance inflows into productive sectors to support sustainable growth. The positive role of foreign direct investment calls for policies that create a stable, investor-friendly environment by simplifying regulations and offering incentives. The negative effect of trade openness suggests a need to reassess trade policies to improve competitiveness and protect vulnerable industries. Additionally, the positive link between unemployment and GDP highlights the importance of formalizing informal employment and creating sustainable job opportunities.

Implications for Practitioners

Practitioners, especially financial institutions, should develop products encouraging remittance recipients to invest locally, enhancing economic benefits. Investment agencies must facilitate stronger connections between foreign investors and domestic industries to promote technology transfer and employment. Trade associations should advocate for policies that protect local businesses while improving export competitiveness to balance the challenges of trade openness.

Implications for Academic Community

Further research is needed to explore why trade openness negatively affects GDP, including sector-specific analyses. The complex relationship between unemployment and GDP calls for studies on Nepal's informal labor market and structural employment issues. Research should also investigate how remittance inflows contribute to long-term development through education, health, and entrepreneurship.

Areas for Future Research

Future studies could examine the impact of different types of foreign direct investment on economic growth for more targeted insights. Comparative analyses of Nepal's trade policies with regional peers could identify ways to reduce negative trade effects. Additionally, research on remittance volatility's impact on household welfare and macroeconomic stability would inform policies for economic resilience.

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APPENDIX

Summary of Data for Study Variables such as RMT, FDI, INF, TO, UR and GDP

Years	Remittance inflow (In Bill $)	FDI (In Mill $)	Inflation Rate (In %)	Trade Openness (In %)	Unemployment Rate (In %)	Gross Domestic Product (In Bill $)
1994/95	0.05	9.39	8.35	50.4	10.55	4.07
1995/96	0.05	25.6	7.62	59.5	10.57	4.40
1996/97	0.04	19.16	9.22	58.5	10.56	4.52
1997/98	0.04	23.06	4.01	64.0	10.60	4.92
1998/99	0.06	12.02	11.24	56.7	10.61	4.86
1999/00	0.08	4.35	7.45	52.6	10.62	5.03
2000/01	0.11	-0.48	2.48	55.7	10.62	5.49
2001/02	0.14	20.85	2.69	55.8	10.62	6.01
2002/03	0.67	-5.95	3.03	46.2	10.66	6.05
2003/04	0.77	14.78	5.71	44.2	10.68	6.33
2004/05	0.82	-0.42	2.84	46.1	10.68	7.27
2005/06	1.21	2.45	6.84	44.1	10.65	8.13
2006/07	1.45	6.65	6.92	44.8	10.66	9.04
2007/08	1.73	5.74	2.27	44.6	10.67	10.33
2008/09	2.73	0.99	9.91	46.0	10.65	12.55
2009/10	2.98	38.27	11.09	47.1	10.64	12.85
2010/11	3.46	87.74	9.33	46.0	10.63	16.00
2011/12	4.22	94.02	9.23	36.3	10.65	21.57
2012/13	4.79	91.95	9.46	37.9	10.65	21.70
2013/14	5.58	74.18	9.04	41.9	10.67	22.16
2014/15	5.89	30.40	8.36	46.0	10.65	22.73
2015/16	6.73	51.90	7.87	46.7	10.66	24.36
2016/17	6.61	106.01	8.79	42.1	10.68	24.52
2017/18	6.93	196.27	3.63	44.6	10.66	28.97
2018/19	8.29	68.26	4.06	48.4	10.63	33.11
2019/20	8.24	185.56	5.57	49.2	10.58	34.19
2020/21	8.11	126.63	5.05	40.9	13.16	33.43
2021/22	8.23	196.33	4.15	43.1	12.32	36.92
2022/23	9.29	65.46	7.65	49.0	10.92	41.18
2023/24	11.00	73.83	7.11	41.6	10.69	40.91

(Source: Macro trends of Nepal, World Bank sites from 1994/95 to 2023/24)

Remittance from here:

https://data.worldbank.org/indicator/BX.TRF.PWKR.CD.DT?locations=NP

FDI from here: *Nepal Foreign Direct Investment 1972-2025 | MacroTrends*

GDP and INF from here: *https://www.macrotrends.net/global-metrics/countries/npl/nepal/inflation-rate-cpi*

Trade Openness from here: *https://databank.worldbank.org/trade-openness-long-serie/id/a16d7265*

Unemployment Rate from here: *https://www.macrotrends.net/global-metrics/countries/npl/nepal/unemployment-rate*

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