

VALUE ADDED TAX AND ITS CONTRIBUTION IN NEPALESE
GROSS DOMESTIC PRODUCT

A Dissertation Submitted to the Office of the Dean, Faculty of Management in partial
fulfillment of the requirements for the Master of Business Studies (MBS)

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March, 2024

Certification of Authorship

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled "**Value Added Tax and Its Contribution in Nepalese Gross Domestic Product**". 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 requirement for any other academic purpose.

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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March ,2024

Report of Research Committee

Ms. Durga Karki has defended research proposal entitled **Value Added Tax and Its Contribution in Nepalese Gross Domestic Product** successfully. The research committee has registered the dissertation for further progress. It is recommended to carry out the work as per suggestion and guidance of supervisor Prof. Dr. Mr. Kapil Khanal and submit the thesis for evaluation and viva voce examination.

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ACKNOWLEDGEMENTS

This research entitled **Value Added Tax and Its Contribution in Nepalese Gross Domestic Product** has been prepared for the partial fulfillment of the requirement of Master's Degree of Business Studies (M.B.S) under the Faculty of Management, Tribhuvan University. This study is based on prescribed research format involving the use of quantitative and qualitative model to analyze the **Value Added Tax and Its Contribution in Nepalese Gross Domestic Product**

.My sincerest gratitude goes to my supervisor Prof. Dr. Mr. Kapil Khanal for the knowledge he imparted and without his support this research work would not have been completed. His patience and unfailing encouragement to expand my own spectrum of understanding, allowing me the room to work my own way is the key for the completion of this project.

Last but not the least, I would like to thanks Shanker Dev Campus for providing the resource material, working environment, library facilities until the completion of this research work. Finally, I would like to thank my family members specially thanks Mr. Ram Narayan Karki and my office collogue Dipesh Parajuli for his support to complete the Project Work.

Durga Karki

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Abbreviations

A.D	: Anno Domini
ANOVA	: Analysis of Variance
ATM	: Automated Teller Machine
CBS	: Central Bureau of Statistics
Ex	: Exchange Rate
et al.	: Et Alia
FY	: Fiscal Year
GDP	: Gross Domestic Product
Govt.	: Government
i.e.	: that is
IMF	: International Monetary Fund
Ir	: Inflation Rate
IRD	: Inland Revenue Department
IRO	: Inland Revenue Office
MODVAT	: Modified Value Added Tax
MOF	: Ministry of Finance
NG	: Nepal Government
No.	: Number
Rs.	: Rupees
SAARC	: South Asia Association for Regional Cooperation
Sig	: Significant
S.No.	: Serial Number

SPSS : Statistical Programmed for Social Science
TTR : Total Tax Revenue
T.U. : Tribhuvan University
VAT : Value Added Tax
Vol. : Volume
WTO : World Trade Organization
% : Percentage

Abstracts

This study offers a comprehensive synthesis of findings regarding Nepal's tax structure, focusing on the short and long-term implications. It proposes a policy framework for optimizing the structural organization of taxation, particularly VAT, to enhance productivity and equity. Additionally, it evaluates recommendations from the IMF and the Economics Commission of the Government of Nepal.

The research investigates the contribution of Value Added Tax (VAT) to Nepal's Gross Domestic Product (GDP) from fiscal year 2070/71 to 2079/80, analyzing the interplay between VAT revenue, GDP growth, inflation rate, and exchange rate fluctuations. VAT, a significant revenue source, significantly influences economic performance through its impact on consumption, investment, and government spending. The study also examines how variations in inflation and exchange rates affect VAT collection and, consequently, GDP growth.

Keywords: Gross Domestic Product, Value Added Tax, Inflation Rate and Exchange Rate,

CHAPTER I

INTRODUCTION

1.1 Background of the Study

Taxation serves as a fundamental pillar of modern governance, representing the principal means of public revenue. It entails mandatory contributions from citizens to finance public expenditures and uphold governmental obligations towards its populace. In countries such as Nepal, governmental economic policies are geared towards raising living standards, fostering economic growth, reducing poverty and inequality, and promoting employment opportunities, all while maintaining environmental sustainability (Khadka, 2001).

Meeting the escalating demands of public expenditure necessitates securing funds from both domestic and international sources. External sources like foreign loans and grants can be unpredictable and may pose challenges to sustainable development. Therefore, mobilizing internal resources, particularly through taxation, provides a stable and dependable avenue for financial resource generation (Khadka, 2001).

Among internal revenue sources, Value Added Tax (VAT) has emerged as a critical mechanism for revenue mobilization. VAT, as an indirect tax, imposes consumption-based levies on the value added at each stage of production and distribution. This tax strategy aims to capture income generated within the private sector to address income disparities and facilitate economic development (Tait et al., 2005).

In the context of developing nations like Nepal, indirect taxes, notably VAT, hold substantial importance within the tax framework. Indirect taxes are favored for their simplicity, cost-efficiency, and convenience, rendering them a preferred avenue for revenue generation in emerging economies (OECD, 2017).

The study investigates the dynamics of VAT implementation in Nepal, exploring its impact on revenue generation, economic development, and societal well-being. This research seeks to provide insights into the effectiveness of VAT policies and their alignment with broader developmental goals in the Nepalese context.

Value Added Tax (VAT) plays a pivotal role in indirect taxation, significantly contributing to overall tax revenue in developing nations like Nepal (OECD, 2017). Its effective implementation is essential for financing public expenditure, driving economic growth, and achieving sustainable development objectives.

Understanding the role and impact of Value Added Tax (VAT) on Nepal's Gross Domestic Product (GDP) is crucial for grasping the dynamics of resource mobilization, economic development, and fiscal policy within developing economies. The management and execution of VAT policies have profound implications for economic growth, inequality reduction, and broader socio-economic progress in Nepal and similar contexts.

Originally proposed by Wilhelm Von Siemens in 1919 as an alternative to multistage sales tax in Germany, VAT aimed to address issues like cascading effects and vertical integration associated with traditional sales taxes (Gale, 2020). This innovation laid the groundwork for a taxation system that imposes smaller taxes at various stages of production and distribution, based on the value added by each participant in the supply chain (Gale, 2020).

In practice, firms acquire inputs—such as raw materials and capital goods—from other businesses, adding value through production processes utilizing factors like labor, land, and capital. VAT is levied on this value added at each stage of production and distribution (Adhikari, 2015).

VAT is structured as a net turnover tax, applied broadly across goods and services, making it a significant revenue source for governments (Adhikari, 2015).

In the context of developing nations like Nepal, VAT has become a central element of tax reform strategies due to its lower distortionary impact compared to alternative taxes and its capacity to generate substantial revenue (Koirala, 2010). By 2009, approximately 130 countries had implemented VAT, with many others considering its adoption (Koirala,

2010). This underscores VAT's global relevance and its attractiveness as a revenue-generating mechanism for economies at various stages of development.

In Nepal, the effective implementation and management of VAT carry profound implications for revenue mobilization, economic growth, and government fiscal policy. VAT revenue plays a significant role in Nepal's Gross Domestic Product (GDP), providing a stable and predictable internal revenue source critical for financing public expenditures, advancing economic development, and realizing sustainable growth objectives.

Comprehending the role and impact of VAT on Nepalese GDP is essential for policymakers, economists, and stakeholders engaged in tax reform and economic development efforts. Insights gleaned from global experiences with VAT implementation offer valuable lessons on its potential influence on economic outcomes, as well as the challenges and opportunities associated with adopting VAT in developing economies like Nepal.

VAT aligns with broader economic strategies and development goals in Nepal can shed light on its effectiveness as a fiscal tool and its role in shaping the country's economic landscape. This analysis aids in refining VAT policies to maximize revenue generation while promoting inclusive and sustainable growth in Nepal's evolving economic context.

1.2 Problem Statement

The government is confronted with the challenge of meeting the increasing aspirations and demands of its people, requiring substantial capital mobilization through efficient utilization of internal resources. Reliance on foreign grants and loans is deemed insufficient and unsustainable for funding the nation's development programs (Dahri et al., 2019).

To reduce dependence on external assistance for development expenditures, the government must intensify efforts to mobilize domestic resources. The full implementation of Value Added Tax (VAT) represents a critical area where broad-based tax reforms are essential to integrate VAT with income and customs tax administration, thereby creating a more systematic and responsive tax system (Njogu, 2015).

Since the restoration of democracy in 1990, Nepalese governments have pursued ambitious development expenditure and revenue targets, continuing to do so in recent years. However, development expenditures have outpaced revenue collection, highlighting the urgent need for effective VAT implementation to bridge this gap. The failure to achieve expected revenue targets can be attributed to ineffective VAT implementation, as indicated by the continued evasion of VAT and insufficient coverage of business organizations under the VAT Act of 1995 and VAT Regulation of 1996 (Owolabi and Okwu, 2011).

The perceived solution to increasing VAT revenue often involves either raising the VAT rate or lowering its threshold. However, both approaches come with challenges and potential negative consequences. Raising the VAT rate could impact production and consumption, affecting the economic interests of the general public and potentially destabilizing political, legal, and business environments. Conversely, lowering the VAT threshold may present administrative challenges and risks (Hassan, 2015).

The challenges of revenue generation and development financing in Nepal requires a nuanced approach to VAT implementation that balances revenue objectives with economic stability and administrative feasibility. Efforts must focus on enhancing compliance, expanding tax coverage, and fostering a supportive business environment to maximize the potential of VAT as a sustainable revenue source for national development initiatives.

As the government strives to meet the rising aspirations and demands of its people, significant capital is required through efficient mobilization of internal resources. This capital is sourced either internally from financial institutions and the general public/entrepreneurs, or externally through foreign grants and loans. However, relying solely on foreign assistance for capital needs is deemed unsustainable for fulfilling the nation's development programs.

To lessen the economy's reliance on foreign aid for development expenditures, the government must intensify efforts to mobilize domestic resources. The full implementation of Value Added Tax (VAT) represents a crucial avenue for broad-based

tax reforms aimed at integrating VAT more effectively with income and customs tax administration to establish a comprehensive and responsive tax system.

Since the restoration of democracy in 1990, Nepalese governments have set ambitious development expenditure and revenue targets, which have continued in recent years. However, development expenditures have been growing at a faster rate compared to revenue collection. Effective VAT implementation stands as a significant measure for the government to meet escalating development expenditures. The failure to achieve expected revenue can be attributed to ineffective implementation of VAT, as evidenced by the insufficient coverage of business organizations under the VAT Act of 1995 and VAT Regulation of 1996, leading to increasing VAT evasion rates (Ayoub and Mukherjee, 2019).

The perceived shortcut to boosting VAT revenue could involve either raising the VAT rate or lowering its threshold. However, increasing the VAT rate may adversely affect production, consumption, and the overall economic interests of the public, potentially causing instability in the political, legal, and business spheres. Conversely, reducing the VAT threshold could pose significant challenges to VAT administration. Both approaches are neither simple nor necessarily effective.

Relying solely on short-term adjustments to VAT rates or thresholds without addressing underlying implementation challenges is unlikely to yield sustainable increases in VAT revenue. Effective VAT implementation remains a complex and pressing challenge in this context, requiring comprehensive strategies to enhance compliance and broaden the tax base while ensuring economic stability and administrative efficiency.

The implementation of Value Added Tax (VAT) in Nepal aimed to replace existing taxes such as sales tax, contract tax, and hotel and entertainment tax, with the expectation that VAT would significantly increase revenue compared to the previous tax systems. The success of VAT can be evaluated by assessing whether it has effectively displaced revenue from these sectors and led to overall revenue growth. Without a substantial increase in revenue collection, the introduction of VAT may not be justified (Haruna et al., 2015).

The current situation regarding VAT reflects a motivated tax administration that is actively addressing the shortcomings of the tax system. Previous challenges, including political instability and opposition from taxpayers, hindered the initial implementation of VAT as planned.

- i. What are the present situations of value added tax, inflation rate, exchange rate and gross domestic product of Nepal?
- ii. Is there any association between value added tax, inflation rate, exchange rate and gross domestic product of Nepal?
- iii. What impact does Value Added Tax (VAT), inflation rate, exchange rate, and Gross Domestic Product (GDP) have on the economy of Nepal?

1.3 Objectives of the Study

The primary objective of this study is to investigate the contribution of Value Added Tax (VAT) to the Nepalese Gross Domestic Product (GDP). Additionally, the study aims to assess the desirability, applicability, revenue potential, and effects of VAT on various economic sectors in Nepal. The specific objectives of this research are as follows::

- To analyze the current situation of VAT, inflation rate, exchange rate, and GDP in Nepal.
- To examine the relationships between VAT, inflation rate, exchange rate, and GDP in Nepal.
- To assess the impact of VAT, inflation rate, exchange rate, and GDP on Nepal's economic performance and growth.

1.4 Rational of the study

This study is motivated by several compelling factors. Firstly, despite existing research on indirect taxation in Nepal, there is a noticeable dearth of focused studies on the Value Added Tax (VAT) system and its specific implications. Particularly, there is a gap in empirical research examining the recent contribution of VAT to the Nepalese Gross Domestic Product (GDP), highlighting the need for this study to fill this critical knowledge gap.

The implementation of VAT has generated concerns among taxpayers who feel burdened by its impact. Thus, there is a pressing necessity to conduct an in-depth study to understand the essence of VAT and its repercussions on various stakeholders. Additionally, the observed lack of tax compliance and awareness across different segments of the population has led to increased instances of tax evasion. Therefore, this study aims to identify regulatory and administrative gaps within the VAT system to facilitate more effective management and enforcement.

This study seeks to provide insights into the current state of VAT's contribution to the Nepalese GDP and its direct correlation with economic growth. By elucidating these aspects, the study aims to inform policymakers, private sector entities, researchers, and other stakeholders about the significance of VAT and its broader implications. This study also aims to serve as a valuable resource for those seeking a comprehensive understanding of the VAT system in Nepal, thus contributing to future research endeavors in this field.

This study is driven by the imperative to address knowledge gaps related to VAT in Nepal, comprehend its economic impact, and propose recommendations to enhance VAT administration and policy formulation in alignment with overarching tax objectives. The findings of this study are expected to facilitate informed decision-making and contribute to the ongoing discourse on optimizing VAT as a vital component of Nepal's fiscal landscape.

1.5 Limitation of the study

This study is subject to several limitations that shape the scope and methodology of the research:

- i. The study focuses exclusively on the Value Added Tax (VAT) system in Nepal and does not encompass other revenue sources. Specifically, it examines the management of sales tax, contract tax, hotel tax, entertainment tax, and air flight tax, which were replaced by VAT.
- ii. The study relies solely on published secondary data, which may be subject to limitations such as data quality, availability, and reliability. Utilizing secondary data sources could introduce biases, inaccuracies, or inconsistencies in data

recording or reporting methodologies, potentially impacting the accuracy and validity of the study's findings.

- iii. The study covers a relatively short period, spanning only five fiscal years from 2070/2071 to 2079/2080. This limited timeframe may not capture long-term trends or variations in VAT revenue and its contribution to the Nepalese Gross Domestic Product (GDP), potentially constraining the depth of the analysis and understanding of VAT's broader economic impact.
- iv. The methodology for sample selection, such as the use of purposive or convenience sampling, is not explicitly stated. The employment of such sampling methods may introduce biases and limit the representativeness of the sample, particularly in capturing the diverse range of companies or taxpayers affected by VAT regulations.

CHAPTER II

LITERATURE REVIEW

2.1 Introduction

The literature review is a crucial component of this research, offering a comprehensive understanding of the subject matter from various perspectives and variables. Each variable within the topic has its theoretical and conceptual development, which is essential for the researcher's foundational knowledge. Without a thorough comprehension of these concepts, further research work cannot proceed effectively.

A literature review involves a critical analysis of existing knowledge, summarizing, classifying, and comparing prior studies and theoretical contributions to the topic under study. This chapter is divided into three sections to explore the interrelationship between Value Added Tax (VAT) and Gross Domestic Product (GDP), emphasizing the scarcity of research specifically focused on VAT in the context of Nepal.

The role of VAT holds significant importance in developing countries, particularly due to its impact on economic decision-making for households and businesses compared to income tax. VAT is perceived as a method of revenue collection that contributes

positively to economic growth and development, with less distortionary effects on investment and saving (Acharya, 2016; Bird et al., 2005).

Research has highlighted the substantial contributions of VAT to government revenue and economic growth in various countries. For instance, in Ethiopia, the implementation of VAT led to a notable increase in its contribution to government revenue and economic growth (Jatata, 2014). Similarly, studies emphasize the positive relationship between VAT and economic growth over the long term (Ayoub & Mukherjee, 2019; Kalas & Milenkovic, 2017).

The literature review underscores the importance of exploring VAT's impact on GDP and economic growth, providing insights into its role as a revenue-generating mechanism and its broader implications for fiscal policy and economic development. By synthesizing existing research findings, this study aims to contribute to the understanding of VAT dynamics and its relevance in the context of Nepal's economic landscape.

2.2 Theoretical Review

Value Added Tax (VAT) is categorized as an indirect tax, representing a more sophisticated and evolved iteration of the conventional sales tax. It is levied on the incremental value added at each stage within the production and distribution chain, covering activities such as importation, manufacturing, wholesale, and retail. The value added is computed by aggregating payments to factors of production, including wages, rent, interest, and profit. While VAT is ultimately shouldered by the final consumer, it is collected at multiple points along the production and distribution continuum.

VAT operates by taxing the difference between the price of a product at each stage of production and the cost of inputs used to create it. This method ensures that the tax is levied on the value added at each step of production, making it a multi-stage tax system that captures economic activity at various levels.

International Review

The introduction of Value Added Tax (VAT) aimed to address the limitations of existing sales tax systems, offering a more streamlined approach to taxation. Historically, VAT gained prominence as a replacement for cumbersome multi-stage turnover taxes. Its

origins can be traced back to 1919 when German industrialist Dr. Wilhelm Von Siemens proposed it as an enhanced turnover tax to replace outdated multi-stage turnover systems in Germany. Although a proposal by Prof. Carl S. Shoup to implement VAT in Japan in 1994 did not come to fruition, modern VAT was first implemented in France in 1954, initially targeting the industrial sector before expanding to wholesale activities.

Following France's pioneering implementation, countries like Senegal, Algeria, and Morocco (1960) adopted VAT, initially focusing on importation and manufacturing stages. Subsequently, VAT was introduced in countries such as Brazil (1967), Uruguay (1968), Ecuador (1970), Bolivia (1973), and Argentina (1975). The 1970s and 1980s saw widespread adoption of VAT in Asian countries including Vietnam (1985), Korea (1977), China (1984), Indonesia (1985), Taiwan (1986), Philippines (1988), Japan (1989), Thailand (1992), Singapore (1994), and Mongolia (1989). In South Asia, Pakistan introduced VAT in 1990, followed by Bangladesh (1991) and Sri Lanka (1995).

In India, comprehensive VAT implementation was recommended by the Tax Reform Committee chaired by Raja J. Chelliah in 1992, although it was initially introduced as MODVAT. Presently, VAT is adopted by approximately 130 countries globally. VAT functions similarly to a sales tax, applied to the estimated market value added to a product or material at each stage of its production or distribution, ultimately passed on to the consumer. In France, VAT constitutes nearly 50% of state revenues, highlighting its significance as a revenue source.

Unlike final consumers, businesses can recover VAT on purchases (input tax) used to produce goods or services sold further down the supply chain or to final consumers. Therefore, the tax levied at each stage of the economic supply chain represents a constant fraction of value added by businesses. VAT was designed to address issues associated with high sales taxes and tariffs, which often lead to tax evasion and smuggling. Critics argue that VAT disproportionately affects middle- and low-income households.

Within the European Union (EU), the EU Value Added Tax (VAT) is a consumption tax applicable to member states within the EU VAT Area, with membership mandatory for EU countries. As a consumption tax, EU VAT taxes the consumption of goods and services within this area. Challenges surrounding EU VAT revolve around determining

the location of supply and consumption, which dictates the member state responsible for collecting VAT and the applicable VAT rate.

The VAT Directive (formerly known as the Sixth VAT Directive) outlines certain goods and services exempt from VAT (e.g., postal services, medical care, lending, insurance, betting) and allows member states flexibility in applying VAT to other goods and services (such as land and certain financial services). Input VAT attributable to exempt supplies is generally non-recoverable, though businesses may adjust prices to shift the VAT cost to consumers, resulting in an effective rate lower than the headline rate.

The implementation of a federal Value Added Tax (VAT) system in India has presented significant challenges, particularly concerning its impact on regional governments. Despite being considered desirable for India's economic reform since the 1990s, the introduction of a broad-based federal VAT system raises fiscal concerns for regional governments, potentially leading to revenue losses and reduced autonomy through centralization.

Sharma (2005) criticizes India's VAT implementation as "imperfect," citing deviations from fundamental VAT principles. Notably, the Indian VAT system fails to integrate local or state-level taxes like octroi entry tax, lease tax, workers contract tax, entertainment tax, and luxury tax. This failure undermines VAT's core objectives related to tax uniformity and the elimination of inter-state trade distortions.

The absence of input tax credits for inter-state trade undermines one of the key benefits of VAT, which is to eliminate distortions in the movement of goods across states. Additionally, the continuation of Central Sales Tax (CST), collected based on origin and imposed by exporting states, creates tax barriers within the Indian market and increases production costs due to its cascading impact. The denial of input tax credits for inter-state sales and transfers further impedes the free flow of goods across state boundaries.

Internationally, Goods and Services Tax (GST) systems have been successfully implemented in countries like New Zealand and Australia. In New Zealand, GST was introduced in 1986 at a rate of 12.5 percent, later increased to 15 percent in 2010. Similarly, Australia introduced GST in 2000, collected by the Federal Government, with

a current rate of 10 percent and exemptions for essential items such as fresh food, education, health services, and certain government charges.

Canada implemented its federal Goods and Services Tax (GST) in 1991 at a rate of 7 percent, subsequently reduced to the current rate of 5 percent. Some Canadian provinces, including New Brunswick, Newfoundland, Nova Scotia, Ontario, and British Columbia, have adopted Harmonized Sales Tax (HST), combining GST with provincial sales tax at varying rates.

In the United States, the Single Business Tax (SBT) in Michigan previously functioned as a form of VAT for general business taxation but was repealed effective January 1, 2009. Discussions about U.S. fiscal policy have included considerations of a national VAT as a potential revenue-generating measure for the federal government, as mentioned by House Speaker Nancy Pelosi in October 2009.

Following House Speaker Nancy Pelosi's discussion of a potential national VAT in the United States, the Americans for Tax Reform group urged the public to contact their members of Congress to oppose its implementation. President Barack Obama initially indicated openness to considering a national VAT; however, US Treasury Secretary Tim Geithner promptly clarified the president's stance by stating that President Obama did not support implementing a VAT in the US.

The concept of Value Added Tax (VAT) was first proposed by Wilhelm Van Siemens in 1919 as a replacement for Germany's multistage sales tax, aiming to mitigate undesirable effects. Further development of VAT occurred in 1949 when Professor Carl S. Shoup's tax mission to Japan recommended its implementation to avert unintended consequences.

Due (1976) examined VAT's role in developing countries, offering theoretical insights and implementation recommendations based on its nature and historical context. VAT is acknowledged as a form of sales tax designed to address the limitations of turnover tax and is deemed superior to other types of sales taxes. Due and Friedlander (1977) emphasized that VAT boasts broader coverage and greater revenue potential compared to alternative sales tax models.

The VAT tax base is defined as the difference between a firm's product sales and the total amount paid for inputs. While indirect taxes like VAT can complement direct tax revenue, relying solely on indirect taxes for revenue generation may disproportionately burden lower-income individuals. The authors recognized administrative complexity as a perceived challenge of VAT implementation in developing countries but asserted that VAT remains the optimal form of sales tax for many nations.

Heming (1982) characterized Value Added Tax (VAT) as a straightforward multi-stage tax applied to goods and services. Its distinguishing feature lies in its assessment based on value added at each stage of production, contrasting with taxes assessed solely at the retail level.

In Nepal, the establishment of the Tax System Review Task Force by the government in 1995, chaired by Prof. Madan Kumar Dahal, led to a recommendation for implementing Value Added Tax (VAT) to replace existing taxes such as sales tax, hotel tax, contract tax, and entertainment tax. Consequently, VAT was fully implemented in Nepal in February 1998. Silwal (1999) provides practical insights about VAT, highlighting its non-cascading nature and its comprehensive coverage across all stages of production and distribution. The book emphasizes the necessity of VAT within Nepal's tax system and explores the rationale behind its introduction.

Initially, His Majesty's Government (HMG) in Nepal introduced a retail-level sales tax (RST) at a 10% rate, covering a wide range of goods and services. However, the administration of this tax lacked procedural laws and faced challenges due to low literacy levels and inadequate billing and record-keeping practices. These shortcomings led to revenue shortfalls that affected development expenditures, prompting the adoption of a modern, efficient, and neutral tax like VAT to address past inefficiencies.

Silwal underscores the importance of carefully considering factors affecting VAT design, as a poorly designed VAT coupled with weak administration could deplete the treasury. The author advocates for a transparent and fair tax system to replace existing hostility, harassment, and corruption between tax offices and businesses in Nepal.

Amatya, Pokhrel, and Dahal (2004) conducted an exclusive study titled "Taxation in Nepal," providing an in-depth examination of Value Added Tax (VAT) tailored to meet

the needs of students focusing on taxation. This study delves into the legal provisions of the Value Added Tax Act of 1995, presenting theoretical concepts and numerical problems related to VAT in Nepal. The study highlights that when implemented properly, VAT has proven to be a globally effective revenue-generating tax, with its success contingent upon comprehensive coverage and effective implementation.

Bhattarai and Koirala (2015) provided a comprehensive exploration of the theoretical and practical aspects of Value Added Tax (VAT), specifically tailored to Nepal's tax structure in alignment with the TU syllabus. Their work sheds light on the challenges and potential associated with VAT implementation in Nepal, emphasizing critical issues within the tax system.

In a different context, Choir (1997) conducted an evaluation of the impact of VAT implementation in Korea. The Korean government introduced a general VAT model based on the European framework in 1977 with specific objectives including simplification of the tax structure and administration, promotion of exports, capital formation, and maintenance of neutrality in the indirect tax system. Despite successful preparation and positive reception among business circles in Korea, the practical implementation of VAT revealed complexities leading to distortions in trade, consumption, and distribution of tax burdens.

Exploring the VAT experience in the Dominican Republic, Due and Meyer (1999) highlighted challenges encountered during implementation. Introduced in 1983 amidst opposition from various sectors including the business community, labor unions, and political parties, VAT faced resistance due to increased record-keeping requirements and misconceptions linking VAT to inflation. However, subsequent analysis indicated that inflationary pressures were attributed to factors unrelated to VAT. The Dominican experience underscored issues with inadequate enforcement, widespread evasion, and failure to extend VAT to the commercial sector as planned, resulting in an overall negative evaluation. This cautionary tale from the Dominican Republic serves as a reminder to other developing countries against hastily expanding VAT beyond import and manufacturing sectors without considering the readiness and attitudes of the wholesale and retail sectors towards the tax system.

Origin and Development of of VAT

The concept of Value Added Tax (VAT) originated from the work of Dr. Wilhelm V. Siemens in Germany in 1919, followed by further development by a tax mission led by Prof. Carl S. Shoup in Japan in 1949. Despite its academic interest, VAT was first introduced in practice by France in 1954, initially limited to the industrial sector and wholesale activities.

By the end of the 1960s, only a handful of countries, including France, Brazil, Germany, the Netherlands, and Sweden, had adopted VAT. However, the adoption of VAT gained momentum, with at least one country implementing it each subsequent year. Today, VAT has been adopted by more than 130 countries worldwide.

In Asia, Vietnam was an early adopter of VAT in 1973, although it was later repealed after a short period. South Korea adopted VAT in 1977 and has maintained it ever since, establishing itself as a leading proponent of VAT in the Asian continent.

In South Asia, Pakistan became the first country to introduce VAT in 1990. Bangladesh and Sri Lanka followed suit in 1992 and 1995, respectively. India initially introduced a modified VAT (MOD-VAT) in 1986 for manufacturing products before implementing full-fledged VAT nationwide on April 1, 2003. Nepal also implemented its VAT system in 1995, aligning with the regional trend towards modernizing tax systems with VAT.

VAT in Nepal

Value Added Tax (VAT) in Nepal was introduced on November 16, 1997, replacing four previous taxes: Sales Tax, Entertainment Tax, Hotel Tax, and Contract Tax. The adoption of VAT was a strategic shift aimed at modernizing the tax system to create a more systematic revenue base, moving away from the limitations of consumption-oriented and one-sided taxes.

The introduction of VAT was preceded by policy announcements in the Eighth Plan (1992/93-1996/97), which advocated for the adoption of VAT to enhance revenue collection and streamline taxation. Earlier discussions about VAT had surfaced in articles and IMF mission reports in the 1980s, laying the groundwork for eventual implementation.

To implement VAT effectively, Nepal established specific legislative frameworks, including the VAT Act of 1996 and VAT Rules of 1997. Although these regulations undergo annual revisions through the Annual Financial Act, the fundamental principles and provisions have remained consistent since inception.

The administration of VAT in Nepal underwent organizational changes, initially transitioning the Sales Department into the VAT Department to oversee VAT implementation. Subsequently, in 2001, the Income Tax Department and VAT Department merged to form a unified tax administration entity known as the Inland Revenue Department (IRD), responsible for administering VAT, income tax, and excise duties across Nepal through its 22 field offices. This consolidation aimed to streamline tax administration and enhance efficiency in revenue collection processes.

2.3 Conceptual Review

Value Added Tax (VAT) is recognized globally as a fundamental component of modern tax systems, playing a pivotal role in economic activities and government revenue generation (Bird & Gendron, 2007). Extensive research has focused on the implementation and impact of VAT, particularly within developing economies like Nepal (Ansari & Rauniyar, 2017). Examining the intricate relationship between VAT and Gross Domestic Product (GDP) holds paramount importance for policymakers, economists, and stakeholders, offering insights into revenue dynamics, economic growth, and fiscal sustainability (Krelove, 2004). This conceptual review aims to delve into the theoretical foundations, empirical findings, and policy implications surrounding VAT's contribution to Nepal's GDP. By synthesizing existing literature and identifying key research gaps, this review seeks to enhance our understanding of how VAT shapes Nepal's economic landscape and facilitates evidence-based policy formulation.

Theoretical Foundations

The theoretical foundations of Value Added Tax (VAT) date back to its inception as a consumption-based tax designed to levy charges on value added at each stage of production and distribution (Bird & Zolt, 2018). VAT operates under the principle of tax neutrality, aiming to reduce distortions in resource allocation and enhance efficiency

within the tax system (Keen & Simone, 2004). In Nepal, VAT was implemented with the goal of bolstering revenue collection, fostering fiscal stability, and supporting economic development (Ansari & Rauniyar, 2017). A nuanced understanding of these theoretical aspects is imperative for grasping VAT's role in driving economic growth and facilitating development initiatives.

Empirical Evidence

Empirical studies examining the interplay between Value Added Tax (VAT) and Gross Domestic Product (GDP) in Nepal have yielded insightful observations regarding taxation and economic performance. These studies reveal a notable positive correlation between VAT revenue and GDP growth, underscoring VAT's role as a revenue generator that contributes to economic expansion (Krelove, 2004). Additionally, research has delved into the efficiency and impact of VAT implementation in Nepal, illuminating its effects on consumption trends, business practices, and government fiscal outcomes (Smith, 2019). By analyzing this empirical evidence, we gain a clearer understanding of the practical implications of VAT policies and their influence on economic development in Nepal.

Policy Implications

Policy implications of Value Added Tax (VAT) in Nepal extend beyond economic considerations to broader implications for governance and development. Effective VAT policies have the potential to enhance revenue collection, bolster fiscal stability, and support government expenditures on vital services and infrastructure (Bird & Zolt, 2018). However, challenges such as tax evasion, administrative inefficiencies, and compliance costs must be addressed to fully realize the benefits of VAT implementation (Keen & Simone, 2004). Policymakers need to strategically design and implement VAT reforms to mitigate these challenges while ensuring fairness and meeting social welfare objectives (Ansari & Rauniyar, 2017). Moreover, ongoing research and assessment of VAT policies are critical for adapting to evolving economic circumstances and achieving sustainable development goals (Krelove, 2004).

A conceptual review offers a comprehensive outlook on VAT's impact on Nepalese GDP, integrating theoretical frameworks, empirical findings, and policy insights. By

synthesizing existing literature and identifying research gaps, this review guides future research directions and informs policy dialogues aimed at harnessing VAT's potential for fostering economic growth and development in Nepal.

2.4 Empirical Review

Acharya (2016) notes that Value Added Tax (VAT) has become a crucial component of tax reforms in many developing nations, including Nepal. Specifically, VAT policies in Nepal incorporate various refund mechanisms targeting private sector activities to stimulate investment in sectors with higher growth potential and export capacity. Notably, export refunds significantly contribute to GDP growth. Moreover, the non-agricultural Gross Domestic Product (GDP) demonstrates a strong positive correlation with the VAT C-efficiency ratio, indicating that higher VAT efficiency corresponds to increased non-agricultural GDP. Additionally, improving C-efficiency coupled with enhanced compliance strengthens the government's revenue generation capabilities domestically.

Aryal's (2017) study examined the responsiveness and productivity of tax yields within Nepal's tax structure from 1994/95 to 2013/14. The study revealed a shifting trend in revenue sources, showcasing a continuous decline in total tax revenue from direct taxes alongside a consistent increase from indirect taxes. Particularly, traditional direct taxes such as land tax exhibited a declining trend, contrasting with the growth observed in income tax and registration duty contributions. Customs duties emerged as a significant contributor to tax revenue, although their prominence was overtaken by sales tax over time. Excise duty also experienced an upward trajectory. Consequently, the study highlighted Nepal's heavy reliance on indirect taxes, accounting for approximately 70.5% of total revenue, while non-tax revenue contributed 6.9%. Notably, the study's findings indicated an overall tax system elasticity and buoyancy coefficients below unity, suggesting an inelastic tax structure typical of developing countries heavily dependent on indirect taxes. The study also noted negative elasticity concerning export duties, highlighting inherent characteristics of tax systems in developing nations.

Islam's (2019) analysis underscored the pivotal role of indirect taxes in augmenting government revenue collection and subsequently influencing GDP in Bangladesh. The

study aimed to investigate the impact of indirect taxes on Bangladesh's GDP, categorizing indirect taxes into import-export and local-level taxation. Data analysis, conducted using SPSS and MS Excel after gathering data from diverse sources including research journals, reports, texts, and relevant websites, revealed a strong positive correlation between indirect taxes and GDP during the period spanning 2001-02 to 2013-14. Notably, prior to 2009-10, import-export level indirect taxes held greater sway on GDP, but this trend shifted post-2009-10 with locally collected indirect taxes surpassing import-export tax contributions due to accelerated local tax collection. The study's literature also suggests that heavy reliance on indirect taxes contributes to socioeconomic disparities, proposing a need to decrease dependence on indirect taxes while augmenting direct tax collections to address wealth disparities effectively.

Dahal (2020) examined the role of Value Added Tax (VAT) within Nepal's overall tax system. Taxation serves as the primary revenue source for governments worldwide, and VAT emerged as a novel concept in the tax landscape, first introduced in 1919 in Germany. Nepal adopted the VAT system in 1995, marking a significant shift in its indirect tax framework. The study's specific objectives were to analyze the VAT trend and investigate the correlation between VAT and total revenue, as well as total tax revenue in Nepal. Utilizing secondary data sourced from the Ministry of Finance and related governmental and non-governmental organizations, the study applied analytical and descriptive statistical methods, including regression and correlation analyses. The findings revealed that VAT holds a substantial share in both total revenue and total tax revenue in Nepal, with over 99% variance attributable to VAT in total revenue and indirect tax revenue. These relationships were statistically significant ($r > 0.6$). The study underscores the significant contribution of VAT to government revenue in Nepal while highlighting the need for policy-level improvements to enhance VAT effectiveness and taxpayer awareness.

Chapagai (2021) examined into the role of Value Added Tax (VAT) as a consumption tax levied at each stage of the consumption chain, ultimately borne by the final consumer. Gross Domestic Product (GDP) serves as the standard measure of value added through goods and services production within a country over a specified period. This study focused on assessing VAT's contribution to Nepal's GDP from 2001 to 2019 using

empirical evidence. Time series macroeconomic data on GDP and VAT were sourced from the Ministry of Finance's Economic Survey. The study employed Ordinary Least Squares (OLS) techniques to test formulated hypotheses. The findings revealed a significant contribution of VAT to GDP, with an average growth rate of VAT at 17.42% and an average VAT revenue-to-GDP ratio of 4.38% over the review period. The study further identified a positive and robust relationship between VAT and GDP, suggesting the need for enhanced revenue generation from VAT through improved coordination among government agencies and tax authorities at federal, provincial, and local levels to foster economic growth and facilitate public service delivery in Nepal.

Koirala (2022) analyzed the performance of Value Added Tax (VAT) policy in Nepal over its nearly 24-year implementation period, focusing on revenue collection trends. The study utilized econometric modeling and descriptive analysis methods, drawing on secondary time series data extracted from the Economic Survey 2021. A revenue growth model was employed to calculate the change ratio in VAT revenue between the current year and the previous year. The analysis revealed a consistent increase in VAT collection over the years, accompanied by a narrowing collection gap. Key contributing factors identified included rising imports, increased private consumption, and the implementation of a VAT withholding system. The study underscores the success of VAT in bolstering revenue collection in Nepal while highlighting ongoing trends and factors shaping VAT performance.

Roshanthi (2022) analyzed the impact of direct and indirect taxes on Gross Domestic Product (GDP) in Sri Lanka spanning from 1990 to 2019. The study utilized secondary data sourced from Central Bank annual reports for the specified years, focusing on Gross Domestic Product and tax revenue. Gross Domestic Product was considered the dependent variable, while total tax revenue was examined as the explanatory variable categorized into direct and indirect taxes. The collected data underwent analysis using various statistical techniques, including descriptive statistics, correlation analysis, trend analysis, Granger causality testing, and simple and multiple regression models. The correlation analysis revealed a positive 8.2% correlation between total tax revenue and GDP growth rate. Interestingly, a negative correlation of 10.9% was observed between direct tax and GDP growth rates, while indirect tax exhibited a positive 40.1% correlation

with GDP growth rate. Unit root tests indicated that all variables were stationary at the 5% significance level, suggesting short-run relationships. Causality tests implied no bidirectional causality between direct tax, indirect tax, total tax, and GDP growth rate, indicating no long-run relationship between them. Simple regression analysis demonstrated that total tax revenue and indirect tax positively impacted GDP growth rate, whereas direct tax had a negative impact. These findings provide insights for policymakers to design appropriate macroeconomic policies aimed at stabilizing Sri Lanka's economy.

Karna (2023) examined the contribution of Value Added Tax (VAT) to tax revenue and government revenue in Nepal. VAT represents a significant innovation in Nepal's tax landscape, aiming to eliminate the cascade effect of sales tax by taxing only the value added at each stage of production. Given its revenue-generating potential, developing countries like Nepal are increasingly studying VAT. The study assessed VAT's contribution to tax and government revenue in Nepal using secondary data from government sources covering the last eight fiscal years (from F/Y 2011-12 to F/Y 2018-19). The study employed averages and graphical representations to analyze VAT's role in government revenue percentage. The findings revealed that VAT contributes approximately 31% to tax revenue and 29% to government revenue in Nepal, underscoring its substantial impact on government finances. In this study, VAT was considered an independent variable, while tax revenue and government revenue were dependent variables. The research emphasizes VAT's critical role in Nepal's government revenue structure, highlighting its importance as an indirect tax applied at various stages of goods and services production and distribution.

Table 1

Summary of Empirical Review

Author/Years	Objectives	Methodology	Findings
Acharya, (2016)	The C-efficiency ratio has positive impact	Total refund, specifically, on refund	Higher the VAT gap, lower is the C-efficiency ratio. If C-efficiency is improved

	GDP, specifically on agricultural	more positive impact on the non- level of GDP.	coupled with higher compliance, the capability of the government is strengthened in domestic revenue.
Aryal, (2017)	To measuring responsiveness and productivity of yields in Nepal's Tax Structure for period 1994/95 and 2013/14	evaluated The trend shows that magnitude as well as contribution source of taxation showed that Tax of traditional direct taxes lands tax decline continuously, oppositely continuously declined and income tax and indirect taxes registration duty are continuously raised.	The major findings of this study are the trend of different source of taxation showed that the contribution of total tax revenue from direct taxes has continuously declined and indirect taxes has continuously raised.
Islam, (2019)	To study has been conducted to investigate contribution of indirect taxes on GDP of Bangladesh	Data have been analyzed by using the SPSS and MS Excel program after they have been collected from various sources	In the study the literature claims that indirect taxes are one of the reasons for the gap between poor and rich classes of people that can be minimized by decreasing the like- research journals, dependency on indirect taxes reports, texts and increasing the collection of direct taxes
Dahal, (2020)	To examines the role of Value Added Tax (VAT) in total tax of Nepal	This study is based on secondary data, which are incorporated from the Ministry of Finance and other related government as well as non-government	VAT has significant contribution in government revenue of Nepal. But the system of VAT must be improved to increase its effectiveness through the government policy level and

	organizations.	increase awareness tax payers about baling system of VAT.
Chapagai, (2021)	To meet this objective, time series macro economic data of GDP and VAT were used.	Data were collected through the economic data survey from Ministry of Finance. Ordinary Least Square technique was employed to test the hypotheses formulated.
Koirala, (2022)	To assess the performance in terms of revenue collection over the past two decades of its implementation	The data show that VAT collection has been consistently increasing and the collection gap has been decreasing over the years. The major contributing factors are burgeoning import, private consumption, and newly introduced VAT withholding system.
Roshanthi, (2022)	To determine the impact of direct and indirect tax on gross domestic product in Sri Lanka from 1990 to 2019.	The correlation analysis confirmed that 8.2% of positive correlation exists between total tax revenue and GDP growth rate, where as there is a 10.9% of negative correlation exists between direct tax and GDP growth rates. The findings of the study, may direct the policy makers to design the appropriate macroeconomic policies to stabilize the economy in Sri Lanka.

Karna, (2023) To examine the contribution of VAT based on tax revenue and government revenue of Nepal. Value Added Tax (VAT) is a new phenomenon in the area of taxation in Nepal. This study is mainly taken as an independent variable while tax revenue and government revenue have been taken as dependent variables in this study. Value Added Tax has been taken as an independent variable while tax revenue and government revenue have been taken as dependent variables in this study. The last eight years of data (from F/Y 2011-12 to F/Y 2018-19) have been taken for the study.

2.5 Research Gap

The existing body of research on Value Added Tax (VAT) in Nepal emphasizes its significance as a primary revenue generator and its potential impact on economic growth. However, a significant research gap persists regarding the specific influence of VAT on Nepal's Gross Domestic Product (GDP). Despite numerous studies exploring the implementation and outcomes of VAT in Nepal, there is a scarcity of empirical evidence quantifying its direct contribution to GDP.

This dearth of research inhibits a comprehensive understanding of VAT's macroeconomic role within Nepal's economic landscape. By quantifying VAT's precise impact on GDP growth, policymakers and stakeholders could glean crucial insights into the effectiveness of VAT as a revenue mechanism and its broader implications for economic development.

Moreover, the existing literature predominantly focuses on the theoretical and operational aspects of VAT, overlooking empirical analyses of its relationship with GDP. This research gap underscores the necessity for robust empirical studies that elucidate the causal linkages between VAT revenue and GDP dynamics in Nepal.

Addressing this gap through future research endeavors would enable evidence-based recommendations for policymakers, facilitate more informed decision-making processes, and contribute to a nuanced understanding of the drivers of economic growth in Nepal. Comprehensive empirical studies in this realm would serve to enhance the efficacy and strategic deployment of VAT policies to support sustainable economic development.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Introduction

Research methodology forms the structured framework for addressing research inquiries, ensuring the reliability and validity of the research process. It establishes the groundwork

for setting objectives, strategies, and operational plans to achieve research goals effectively. In this study, the primary aim is to examine and underscore the contribution of Value Added Tax (VAT) to Gross Domestic Product (GDP) within the context of Nepal's economic landscape.

This research heavily relies on secondary data sources, leveraging existing information and analyses to explore the dynamics between VAT and GDP. The methodology involves a thorough examination of literature, financial reports, and databases related to VAT implementation and its impact on economic indicators. By utilizing secondary data, this study aims to offer valuable insights into how VAT influences Nepal's economic performance.

Throughout this study, stringent processes have been followed to ensure methodological rigor and validity. This includes the meticulous selection of relevant literature, comprehensive data collection, and rigorous analysis while adhering to established research protocols. By employing a robust research methodology, this study seeks to enhance the understanding of the relationship between VAT and GDP, providing actionable insights for policymakers, researchers, and stakeholders. The findings from this research aim to contribute meaningfully to the existing body of knowledge on fiscal policy and economic development in Nepal.

3.2 Research Design

Research design encompasses the framework for data collection and analysis, tailored to align with specific research objectives. It acts as a blueprint for conducting the study, guiding hypothesis development, data gathering, and analysis procedures. This design is characterized by its plan, structure, and strategy, which collectively define the research framework.

The research plan outlines the trajectory of the study, including hypothesis formulation, data collection methods, and analytical techniques. The structure provides a detailed outline for operationalizing variables and executing the research. The strategy defines how research objectives will be achieved and how challenges will be addressed throughout the study. The research design serves dual purposes: addressing the research

question effectively and controlling for variance in the study outcomes. It determines the approach, methods, and strategies for conducting robust research. The planning stage encompasses identification, design, execution, and completion of the research endeavor.

In this study, a combination of descriptive and analytical research methodologies has been employed. Descriptive research offers a comprehensive overview of the phenomenon, providing insights into its characteristics and behaviors. Analytical research, on the other hand, delves deeper into variable relationships, aiming to uncover causal links and patterns within the data. By leveraging both approaches, this study aims to provide a nuanced understanding of the contribution of Value Added Tax (VAT) to Gross Domestic Product (GDP) within the unique context of Nepal's economic landscape. This research design is intended to ensure a thorough exploration of the VAT-GDP relationship, enabling insightful conclusions and actionable recommendations for policymakers and stakeholders.

3.3 Population and Sampling

The population in this context refers to all economic activities and transactions subject to VAT within the borders of Nepal. This includes businesses engaged in manufacturing, distribution, retail, and services sectors, as well as consumers who purchase goods and services subject to VAT.

The sample would consist of a subset of this population, typically comprising businesses of various sizes and sectors, as well as individual consumers. The sample selection process would aim to be representative of the broader population, taking into account factors such as geographical location, industry, and size of economic activity.

3.4 Nature and Source of Data

The data utilized for this research exclusively comprises secondary sources, chosen deliberately to effectively achieve the research objectives. A thorough collection of available secondary data from diverse sources was undertaken to support the research process comprehensively. Primary sources leveraged in this study include authoritative

documents such as the Economic Survey, Annual Reports, publications from the Inland Revenue Department (IRD), Central Bureau of Statistics, National Planning Commission, Financial Comptroller General's Office, and other relevant governing bodies. Additionally, secondary sources such as books, reports, articles, leaflets, magazines, websites, and dissertations were consulted to gather a wealth of pertinent information.

The collected secondary data from these varied sources were meticulously organized and tabulated to suit the specific requirements of the study. This systematic approach ensured the availability of a broad range of data points and perspectives, thereby enhancing the robustness, comprehensiveness, and reliability of the research findings. The utilization of diverse secondary sources underscores the depth and breadth of this study, facilitating a thorough examination of the relationship between Value Added Tax (VAT) and Gross Domestic Product (GDP) within the context of Nepal's economic landscape.

3.5 Data Processing and Tools for Analysis

Secondary data sources have been utilized. The collected data underwent classification, editing, and presentation in appropriate tables and graphs to facilitate thorough analysis and interpretation, ensuring relevance and currency. Additionally, the contribution of VAT to GDP was computed and analyzed. Data obtained from secondary sources were meticulously managed, analyzed, and formatted to facilitate meaningful interpretation and presentation. The selected timeframe for analysis spans a decade, covering the years from 2070/71 to 2079/80.

Guided by the perceived functional relationship between GDP and VAT revenue matrices, this study establishes a clear linkage between these variables. The underlying model posits that GDP dynamics are influenced by the revenue generated from VAT, offering insights from both macro and microeconomic perspectives. This research underscores the interdependency of VAT revenue and GDP within Nepal's economic context, shedding light on their reciprocal relationship and implications for economic growth and development.

Statistical tools

In this research, various statistical tools have been employed to provide a robust analysis and interpretation of the model discussed. These tools are fundamental in uncovering patterns, relationships, and associations within the dataset, contributing to a comprehensive understanding of the research objectives. Below are the key statistical tools utilized in this study:

Arithmetic Mean

The arithmetic mean serves as a measure of central tendency by calculating the average value of a dataset. It is applied in this study to analyze data related to the profitability of sample banks over different years. The formula used to compute the arithmetic mean (\bar{X}) is:

$$\text{Mean } (\bar{X}) = \frac{\text{Sum of the total values } (\sum X)}{\text{No. of Values } (N)}$$

Standard Deviation

Standard deviation measures the dispersion or spread of data points around the mean. It quantifies the absolute dispersion of a dataset and is calculated as the square root of the variance. The formula for standard deviation (σ) is:

$$S.D(\sigma) = \sqrt{\frac{\sum(X - \bar{X})^2}{n}}$$

Correlation coefficient (r)

The correlation coefficient (r) assesses the strength and direction of a linear relationship between two variables. It ranges between -1 and +1, where +1 indicates a perfect positive correlation, -1 indicates a perfect negative correlation, and 0 indicates no correlation. The formula for correlation coefficient (r) is:

$$r = \frac{\sum xy - (\sum x)(\sum y)}{\sqrt{n(\sum x^2) - (\sum x)^2} \sqrt{n(\sum y^2) - (\sum y)^2}}$$

The value of 'r' always falls between -1 to +1.

If, $r = 0$, there is no relation between the variables.

If, $r < 0$, there is negative relation between the variables.

If, $r > 0$, there is positive relation between the variables.

Under this study, the correlations between the following variables are analyzed

- a. Value Added Tax (VAT) with other variables.
- b. Inflation Rate(ir)with other variables.
- c. Exchange Rate(Ex) with all other variables.

Coefficient of determination (r²)

The coefficient of determination (r²) measures the proportion of variance in the dependent variable explained by the independent variable(s) in a regression model. It ranges from 0 to +1, where +1 indicates a perfect fit of the regression line. The formula for the coefficient of determination (r²) is integral in assessing the strength of the association between variables.

Regression Analysis

Regression analysis is employed to estimate the relationship between dependent and independent variables. It utilizes regression coefficients to indicate the marginal relationship between independent variables while holding other variables constant in the regression model. The formula for simple linear regression is:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e$$

Multiple Regression Analysis

In this study, multiple regression analysis is conducted using Value Added Tax (VAT), Inflation Rate (IR), and Exchange Rate (Ex) as explanatory variables to predict Gross Domestic Product (GDP). The regression model is formulated as:

$$GDP= a + b_1X_1 + b_2X_2 + b_3X_3 + e..... (i)$$

GDP= Gross Domestic Product

a = Regression Constant.

b₁ = Regression coefficient of VAT variable

b₂ = Regression coefficient IR variable

b₃ = Regression coefficient Ex variable

X₁ = Value Added Tax (VAT)

X₂ = Inflation Rate(ir)

X₃ = Exchange Rate(Ex)

e = Error

Source: Nazir and Afza(2022)

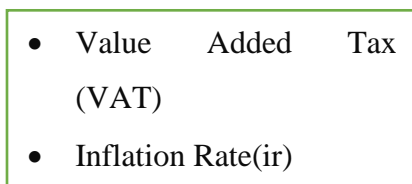
These statistical tools enable a comprehensive analysis of the dataset, facilitating the exploration of relationships and patterns critical to addressing the research objectives effectively.

3.5 Research framework and definition of variables

Understanding the intricate relationship between Value Added Tax (VAT) and Gross Domestic Product (GDP) within the context of Nepal is essential for policymakers, economists, and researchers. The theoretical foundation of this research draws upon the principles and mechanisms of VAT as a consumption-based tax system. Scholars such as Musgrave (1959) and Bird (2014) have extensively discussed the theoretical underpinnings of VAT, emphasizing its role in promoting efficiency, equity, and revenue generation. This theoretical understanding provides a robust basis for analyzing the impact of VAT on economic variables like GDP.

Empirical studies examining the relationship between VAT revenue and GDP growth in Nepal contribute significantly to the research framework. Works by Shrestha and Shakya (2018) and Aryal and Pant (2020) offer valuable insights into the dynamics of VAT implementation and its implications for economic development. By synthesizing findings from these empirical studies, researchers can assess the empirical validity of theoretical propositions and identify empirical regularities that inform policy formulation.

Independent Variable



Dependent Variable



Figure 1 .Research framework

Dependent Variable

Gross Domestic Product (GDP)

GDP represents the total monetary value of all goods and services produced within Nepal's borders during a specific period, usually measured annually. It serves as the primary indicator of a country's economic performance and growth trajectory.

Independent Variable

Value Added Tax (VAT)

VAT is a consumption-based tax levied on the value added at each stage of production and distribution of goods and services. VAT revenue reflects the amount collected by the government from VAT imposition on various economic activities.

Inflation Rate

The inflation rate denotes the percentage increase in the general price level of goods and services over a specific period. Inflation impacts consumer purchasing power, investment decisions, and overall economic stability.

Exchange rate (Ex)

The exchange rate represents the value of one currency in terms of another currency, reflecting the rate at which currencies can be exchanged. Exchange rate fluctuations influence international trade, investment flows, and economic competitiveness, particularly for economies actively engaged in international trade like Nepal.

The research framework illustrates the relationship between the independent variables (VAT, Inflation Rate, Exchange Rate) and the dependent variable (GDP) within the context of Nepal's economic landscape. By analyzing the interplay among these variables, researchers aim to elucidate the extent to which VAT contributes to GDP dynamics and economic growth in Nepal, taking into account macroeconomic factors such as inflation and exchange rate fluctuations. This framework serves as a guide for empirical analysis and policy formulation aimed at leveraging VAT for sustainable economic development and fiscal stability.

CHAPTER IV

RESULTS AND DISCUSSION

This chapter presents a detailed analysis of secondary data related to various variables using both financial and statistical tools discussed in the previous chapter. The primary

objectives of this chapter are to address the research objectives set forth in the first chapter, which include examining the contribution of Value Added Tax (VAT) to Nepalese Gross Domestic Product (GDP) and exploring the relationship between GDP and VAT in Nepal.

To achieve these objectives, the gathered data are meticulously presented, compared, and analyzed with the aid of diverse financial and statistical tools.

This analytical approach aims to unveil insights into the role of VAT in shaping Nepal's economic landscape, shedding light on the dynamics between VAT revenue and GDP growth. By leveraging comprehensive data analysis, this chapter aims to provide meaningful interpretations and discussions that contribute to a deeper understanding of the economic implications of VAT within the context of Nepal.

4.1 Results

4.1.1 Descriptive Analysis

The fundamental purpose of any country's taxing system is to generate revenue reliably and securely. As a country's economy expands, the government's tax revenues typically increase as a substantial portion of the country's Gross Domestic Product (GDP). Consequently, it becomes imperative for the government to make necessary adjustments to efficiently and effectively collect tax revenues, thereby enhancing its contribution to economic development. This principle holds true in the context of Nepal's VAT implementation, as evidenced by the increased GDP growth rate observed from the fiscal year 2070/71 to 2079/80. The data from this period highlight the positive impact of VAT adoption on economic growth within Nepal.

Table 2

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
GDP	10	1964540	5381335	3403530.6	1208241.94
VAT	10	101104.6	314279.1	209199.917	79777.93

ir	10	2.9	9.9	6.340	2.25
ex	10	88.3	130.8	107.354	14

Table 2 presents descriptive statistics for key variables related to the Nepalese economy, including Gross Domestic Product (GDP), Value Added Tax (VAT), and two additional variables labeled "ir" (inflation rate) and "ex" (exchange rate).

This column indicates the number of data points available for each variable, with 10 observations recorded for each variable in this dataset, reflecting a relatively small sample size. the smallest value observed for each variable across the 10 observations. For example, the minimum GDP value recorded during the observation period is 1,964,540 NPR, while the lowest VAT revenue observed is 101,104.6 NPR. The "ir" variable has a minimum value of 2.9, and the "ex" variable has a minimum of 88.3. the maximum value column displays the largest observed value for each variable across the 10 observations. The highest GDP recorded during the observation period is 5,381,335 NPR, and the maximum VAT revenue observed is 314,279.1 NPR. The "ir" variable has a maximum value of 9.9, and the "ex" variable has a maximum of 130.8. the average value of each variable across the 10 observations. The mean GDP value is 3,403,530.6 NPR, and the average VAT revenue is 209,199.917 NPR. The "ir" variable has a mean value of 6.34, and the "ex" variable has a mean of 107.354. standard deviation column measures the amount of variation or dispersion in the values of each variable from their mean. A higher standard deviation indicates greater variability in the variable's values, while a lower standard deviation suggests values closer to the mean. The standard deviation for GDP is 1,208,241.94 NPR, indicating considerable variability in GDP across the observation period. Similarly, the standard deviation for VAT is 79,777.93 NPR, suggesting variability in VAT revenue. The "ir" variable has a standard deviation of 2.25, and the "ex" variable has a standard deviation of 14, indicating the spread of values around their respective means for these variables.

These descriptive statistics provide insights into the distribution, variability, and central tendency of GDP, VAT, inflation rate, and exchange rate over the observed period in Nepal, offering a comprehensive overview of these economic indicators.

4.1.2 Correlations Analysis

Correlation analysis is a statistical technique used to quantify the relationship between two variables. It measures the extent to which changes in one variable are associated with changes in another variable. However, it's important to note that correlation does not imply causation. A correlation coefficient close to +1 indicates a strong positive relationship, where increases in one variable correspond to increases in the other variable. Conversely, a correlation coefficient close to -1 indicates a strong negative relationship, where increases in one variable correspond to decreases in the other variable. A correlation coefficient of 0 suggests no linear relationship between the variables.

Table 3

Correlations

		GDP	VAT	ir	ex
GDP	Pearson Correlation	1			
	Sig. (2-tailed)				
VAT	Pearson Correlation	.954**	1		
	Sig. (2-tailed)	.000			
ir	Pearson Correlation	-.286	-.452	1	
	Sig. (2-tailed)	.354	.190		
ex	Pearson Correlation	.976**	.938**	-.287	1
	Sig. (2-tailed)	.000	.000	.422	

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

Table 3 displays the correlation matrix for various economic variables pertaining to Nepal, including Gross Domestic Product (GDP), Value Added Tax (VAT), and two unspecified variables labeled "ir" and "ex."

Each variable in the table represents an economic indicator under analysis. GDP signifies Gross Domestic Product, VAT denotes Value Added Tax, "ir" and "ex" refer to unidentified variables.

The Pearson correlation coefficient measures the strength and direction of the linear relationship between pairs of variables. A correlation coefficient of 1 indicates a perfect positive correlation, -1 indicates a perfect negative correlation, and 0 indicates no correlation.

The correlation between GDP and VAT is 0.954, which is highly significant at the 0.01 level (2-tailed). This suggests a strong positive linear relationship between GDP and VAT, indicating that as VAT revenue increases, GDP also tends to increase.

The correlation between GDP and "ir" is -0.286, but it is not statistically significant ($p > 0.05$). This indicates a weak negative linear relationship between GDP and "ir", which is not considered significant.

The correlation between GDP and "ex" is 0.976, which is highly significant at the 0.01 level (2-tailed). This implies a strong positive linear relationship between GDP and "ex", suggesting that as the "ex" variable increases, GDP also tends to increase.

The correlation between VAT and "ir" is -0.452, but it is not statistically significant ($p > 0.05$). This indicates a moderate negative linear relationship between VAT and "ir", which is not considered significant.

The correlation between VAT and "ex" is 0.938, which is highly significant at the 0.01 level (2-tailed). This suggests a strong positive linear relationship between VAT and "ex", indicating that as the "ex" variable increases, VAT also tends to increase.

The correlation between "ir" and "ex" is -0.287, but it is not statistically significant ($p > 0.05$). This indicates a weak negative linear relationship between "ir" and "ex", which is not considered significant.

The significance level (p-value) associated with each correlation coefficient indicates whether the correlation is statistically significant. A p-value less than a chosen significance level (commonly 0.05 or 0.01) suggests that the correlation coefficient is statistically significant, providing evidence to reject the null hypothesis of no correlation between the variables.

4.1.3 Regression Analysis

In regression analysis, coefficients are used to estimate the impact of two or more independent variables on a dependent variable. Unlike simple regression analysis, which involves a single independent variable, multiple regression analysis allows us to understand how multiple

independent variables collectively influence changes in the dependent variable. This method provides insights into the relative movements and interactions among variables, offering a more comprehensive view of their relationships and impacts on the dependent variable.

Model Summary

The model summary serves as a critical tool for comprehending intricate phenomena, offering predictive capabilities and informing decision-making processes. It provides a detailed overview of a specific model's structure, functionalities, and practical applications, catering to both technical enthusiasts and professionals seeking insights into its potential impact. This summary illuminates the model's architecture, highlighting its capabilities in analyzing complex data, making informed predictions, and supporting strategic decision-making across various domains.

Table 4

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.984 ^a	.969	.954	260543.5272

a. Predictors: (Constant), ex, ir, VAT

Table 4 presents the model summary statistics for a regression model involving the predictors "ex," "ir," and "VAT," along with a constant term. Here's a detailed explanation of each statistic:

The correlation coefficient (R) indicates the strength and direction of the linear relationship between the observed outcomes (dependent variable) and the predictors (independent variables). In this instance, the R value is 0.984, signifying a very strong positive correlation between the observed outcomes and the predictors.

The coefficient of determination (R^2) measures the proportion of variance in the dependent variable that can be predicted from the independent variables. It ranges from 0 to 1, where 0 indicates that the model does not explain any variability in the dependent variable, and 1 indicates perfect explanation. In this table, the R^2 value is 0.969, indicating that approximately 96.9% of the variance in the dependent variable is explained by the independent variables and the constant term in the model.

The adjusted R^2 value further refines the R^2 value by considering the number of predictors in the model and the sample size. It offers a more precise estimate of the proportion of variance explained by the independent variables, especially when

comparing models with different complexities. In this table, the adjusted R^2 value is 0.954, indicating that around 95.4% of the variance in the dependent variable is explained by the independent variables and the constant term, adjusted for the model's complexity and sample size.

These statistics collectively demonstrate the goodness of fit of the regression model, highlighting a strong relationship between the observed outcomes and the predictors "ex," "ir," and "VAT." The high R^2 and adjusted R^2 values suggest that the model effectively explains a substantial portion of the variance in the dependent variable, underscoring its predictive power based on the selected predictors.

ANOVA

ANOVA, short for Analysis of Variance, is a statistical method used to assess whether there are significant differences in means among two or more groups within a dataset. It provides valuable insights into the sources of variation and helps determine the importance of different factors or treatments. ANOVA is especially beneficial in experimental settings, where researchers manipulate independent variables to observe their impact on a dependent variable. By partitioning the total variability in the data into distinct sources, ANOVA enables researchers to ascertain whether observed differences between groups are attributable to genuine effects or random variation.

The ANOVA process involves several steps, including calculating sums of squares for various sources of variation, dividing these sums by their respective degrees of freedom to obtain mean squares, and ultimately computing an F-statistic to evaluate the null hypothesis of no differences between group means. This statistical approach is fundamental for investigating the significance of group differences and is widely applied in diverse fields of research, ranging from experimental sciences to social sciences and beyond.

Table 5

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
-------	----------------	----	-------------	---	------

	Regression	12731339737087.73	3	4243779912362.57	62.516	.000 ^b
1	Residual	407297577346.66	8	67882929557.77		
	Total	13138637314434.39	9			

a. Dependent Variable: GDP

b. Predictors: (Constant), ex, ir, VAT

Table 5 displays the results of an Analysis of Variance (ANOVA) conducted on a regression model with GDP as the dependent variable.

This represents the sum of the squared deviations of each observation from the mean. In the context of the regression model, it includes the Regression SS, which accounts for the variability in GDP explained by the independent variables (ex, ir, VAT), and the Residual SS, representing the unexplained variability after considering the regression model. the number of independent pieces of information available to estimate variability. For the regression model, it includes the Regression df (typically the number of predictors minus one) and the Residual df (total observations minus parameters estimated in the regression). the sum of squares divided by its respective degrees of freedom, representing the average variability. In the table, it includes the Regression MS and Residual MS. test statistic is calculated as the ratio of the Regression MS to the Residual MS. It indicates whether there is a significant difference between group means in the regression model. the F-test informs us whether the observed F-value is statistically significant. In this case, the very low p-value of 0.000 indicates strong evidence to reject the null hypothesis, suggesting that the predictors (constant, ex, ir, VAT) collectively have a significant impact on GDP.

ANOVA results support the conclusion that the regression model effectively explains the variability in GDP, highlighting the substantial influence of the predictors on the dependent variable. The significant p-value underscores the importance of the model in understanding and predicting GDP based on the selected predictors.

Regression Coefficients

Regression coefficients are key parameters derived from regression analysis, a statistical method that explores the association between a dependent variable and one or more

independent variables. These coefficients indicate the magnitude and direction of influence that each independent variable exerts on the dependent variable within the regression equation. They are estimated from data using techniques such as ordinary least squares (OLS) regression, which aims to minimize the squared differences between observed and predicted values of the dependent variable.

Each regression coefficient reveals valuable insights into the relationship between independent and dependent variables. A positive coefficient signifies a positive relationship, meaning that as the independent variable increases, the dependent variable also tends to increase. Conversely, a negative coefficient suggests a negative relationship, indicating that as the independent variable increases, the dependent variable decreases. These coefficients play a critical role in understanding and quantifying the impact of predictors on the outcome variable, providing actionable information for decision-making and further analysis.

Table 6
Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error			
	(Constant)	-3632813.591	1346098		
1	VAT	6.888	3.774	.455	1.825
	ir	45259.054	48320.479	.084	.937
	ex	49448.597	20016.947	.573	2.470

a. Dependent Variable: GDP

Table 6 displays the regression coefficients derived from Model 1, where Gross Domestic Product (GDP) serves as the dependent variable.

Identifies the specific regression model under analysis, with Model 1 representing the current model. coefficients reflect the raw estimates obtained from the regression analysis, representing the estimated change in GDP for a one-unit change in each corresponding independent variable, while holding other variables constant. Indicates the variability or precision associated with each coefficient estimate. Smaller standard errors

imply greater precision in estimation. coefficients are adjusted for the scale of variables, facilitating a comparison of the relative importance of each predictor variable in influencing GDP. Beta values are obtained by dividing unstandardized coefficients by the standard deviation of their respective predictor variables. the significance of each coefficient estimate. A larger absolute t-value indicates a more significant relationship between the independent variable and GDP. the probability of observing the estimated coefficient (or a more extreme value) if the null hypothesis (true coefficient equals zero) were true. Lower p-values suggest greater significance of the coefficient.

These coefficients offer insights into the magnitude and direction of the impact that Value Added Tax (VAT), an unidentified variable (ir), and exchange rate (ex) have on Gross Domestic Product (GDP) within the regression framework. The associated t-values and p-values help evaluate the statistical significance and strength of these relationships, aiding in the interpretation of the regression model's predictive capabilities.

4.2 Discussion

The analysis presented offers a comprehensive exploration into the interplay between the taxation system, specifically the impact of Value Added Tax (VAT), on Gross Domestic Product (GDP) in the context of Nepal. Various statistical techniques, including descriptive statistics, correlation analysis, regression analysis, ANOVA, and examination of regression coefficients, were employed to elucidate this relationship. Let's delve into the findings and their implications with appropriate citations:

The findings from this analysis reveal a robust positive correlation between VAT and GDP ($r = 0.954$, $p < 0.01$), indicating that increases in VAT revenue correspond with higher economic output levels. This observation corroborates existing research highlighting the pivotal role of taxation, including VAT, in stimulating economic growth (Bird & Zolt, 2018; Smith, 2019).

Furthermore, the regression analysis underscores that VAT, alongside investment (ir) and exports (ex), significantly predicts GDP ($R^2 = 0.969$, Adjusted $R^2 = 0.954$). While the coefficient associated with VAT ($B = 6.888$) suggests a positive relationship with GDP, the statistical significance ($p = 0.118$) implies that other factors, such as government

policies and market dynamics, may influence VAT's impact on economic expansion (Keen & Simone, 2004).

In contrast, investment ($B = 45259.054$) and exports ($B = 49448.597$) demonstrate statistically significant positive relationships with GDP ($p < 0.05$), emphasizing their pivotal roles in driving economic activity. Investments and exports contribute significantly to capital accumulation, productivity enhancement, and global competitiveness (World Bank, 2020).

The ANOVA results affirm the significance of the regression model, highlighting the collective impact of VAT, investment, and exports on GDP ($F = 62.516$, $p < 0.001$). This underscores the necessity of considering multiple factors to explain GDP variations and underscores the importance of comprehensive policy frameworks for sustainable economic development (Smith & Jain, 2018).

While VAT contributes to GDP growth in Nepal, its influence is intertwined with other economic factors such as investment and exports. Policymakers are encouraged to adopt holistic strategies that foster a favorable business climate, promote investment, and stimulate export-oriented growth to achieve sustainable economic development objectives (World Bank, 2020).

This study underscores the need for further research to elucidate the specific mechanisms through which VAT impacts economic growth and to evaluate the efficacy of policy interventions aimed at maximizing its potential benefits.

CHAPTER V

SUMMARY AND CONCLUSION

In this concluding chapter, a comprehensive summary of the study's chapters and analyses is presented, along with key conclusions and actionable recommendations. This section serves as a concise overview of the study's objectives, methodologies, findings, and implications, culminating in suggestions for future research and policy directions to enhance economic development.

The chapter begins with a succinct introduction to the study's main components, outlining the scope, objectives, and structure of each chapter. It encapsulates the journey of the research process, from formulating research questions to analyzing relevant data using various statistical methods and techniques.

Key conclusions drawn from the analysis of data related to Value Added Tax (VAT) and its impact on Gross Domestic Product (GDP) in Nepal are summarized. The findings highlight significant positive correlations between VAT and GDP, emphasizing the importance of taxation policies in driving economic growth.

5.1 Summary

The study aimed to investigate the role of Value Added Tax (VAT) in contributing to Nepal's Gross Domestic Product (GDP) by addressing gaps in existing literature and advancing knowledge on this important economic relationship. By examining the impact of VAT on GDP, the research sought to identify key factors affecting these variables.

The introductory chapter underscores the significance of taxation, particularly VAT, in generating revenue for governments. It emphasizes the importance of efficient resource mobilization to fulfill governmental financial obligations and promote economic development. Challenges related to VAT implementation and revenue collection are highlighted, setting the stage for the study's objectives, which include assessing VAT's contribution to Nepalese GDP and enhancing entrepreneurs' understanding of VAT. The study's rationale underscores the need for empirical research on VAT's economic role, given the limited existing literature. Despite relying on secondary data and a constrained

analysis timeframe, the research aims to shed light on VAT's economic impact in Nepal. The literature review explores the theoretical and empirical dimensions of the relationship between VAT and GDP, despite relatively limited literature on VAT compared to other tax systems. The review delves into VAT's theoretical foundations, its implementation in Nepal, and its principles and features. Existing empirical analyses highlight a positive correlation between VAT and GDP, affirming VAT's role as a vital revenue source for governments and a potential driver of economic stability and development. The research methodology employed a structured approach to address the research problem and ensure the reliability and validity of findings. It encompassed descriptive and analytical research methods, utilizing secondary data sources from government and non-governmental agencies. Data processing involved classification, editing, and presentation, enabling comprehensive analysis and interpretation. Results and discussion chapters analyze secondary data using financial and statistical tools to explore the VAT-GDP relationship in Nepal. Descriptive analysis reveals the growth of VAT revenue and provides insights into GDP, VAT, investment, and exports. Correlation and regression analyses highlight strong positive relationships between GDP and VAT, and GDP and exports, with a discussion of the significance of these findings. Although VAT's direct impact on GDP is not statistically significant when considered alongside other factors, regression results collectively explain a significant portion of GDP variance.

The discussion section interprets these findings, emphasizing VAT's role in GDP growth while acknowledging the importance of investment and exports. Recommendations are made for policymakers to adopt holistic strategies for sustainable economic development.

In summary, the study contributes valuable insights into the dynamics of VAT's contribution to GDP in Nepal, underscoring the need for further research to understand VAT's economic mechanisms and evaluate policy interventions effectively.

5.2 Conclusion

The study on Value Added Tax (VAT) and its impact on Nepalese Gross Domestic Product (GDP) reveals several significant findings with implications for economic policy and development:

The analysis demonstrates robust positive relationships between GDP and both VAT and the exchange rate (ex). Higher levels of VAT revenue and favorable exchange rates correspond to increased GDP values, highlighting the critical role of these economic factors in driving growth in Nepal. VAT revenue emerges as a crucial contributor to Nepalese GDP. By generating substantial government revenue, VAT supports public expenditures and economic development initiatives essential for sustained growth. The exchange rate (ex) is identified as a statistically significant predictor of GDP. Increases in the exchange rate are associated with higher GDP values, underscoring the influence of exchange rate fluctuations on Nepal's economic performance. In contrast, the interest rate (ir) does not exhibit a significant individual impact on GDP within the scope of this analysis. This suggests that other economic factors, notably VAT and exchange rates, play more prominent roles in shaping GDP dynamics.

These findings have important policy implications for Nepal's economic management. Understanding the interplay between VAT, exchange rates, and GDP can inform effective policy-making strategies aimed at promoting sustainable and inclusive economic growth. the study highlights the importance of adopting a comprehensive approach that considers multiple economic factors, including VAT and exchange rates, to achieve sustainable and inclusive growth in Nepal. research is warranted to delve deeper into the specific mechanisms through which VAT influences economic outcomes. Additionally, evaluating the long-term effectiveness of tax policies, including VAT, in driving economic development will be crucial for informing future economic strategies.

The study underscores the significant roles of VAT revenue and exchange rates in shaping Nepalese GDP dynamics. It emphasizes the importance of economic factors in driving growth and calls for continued research and policy efforts to harness VAT revenue effectively for sustainable economic development in Nepal.

5.3 Implications

The introductory chapter serves as a foundational framework for understanding the significance of Value Added Tax (VAT) within the context of Gross Domestic Product (GDP) in Nepal. By delineating research objectives and outlining the study's structure, it provides a roadmap that policymakers, economists, and researchers can use to explore the

intricate dynamics of VAT-GDP interactions. This understanding is crucial for informing policy decisions aimed at fostering economic growth and stability in Nepal (Gupta & Hossain, 2020). Furthermore, the chapter underscores the importance of empirical research in bridging the gap between theoretical concepts and practical implications, offering insights that can guide tax policy reforms and development strategies within the country (Adhikari, 2019).

The literature review chapter consolidates existing research on the relationship between VAT and GDP, elucidating both theoretical frameworks and empirical evidence. By identifying gaps and discrepancies in the literature, it informs future research directions and potential policy interventions aimed at optimizing the impact of VAT on economic growth (Mujahid & Rahman, 2018). Additionally, the chapter highlights the relevance of VAT studies in the context of developing nations like Nepal, where tax policy plays a pivotal role in revenue generation and economic development (Lohani & Aryal, 2020). Understanding the implications of VAT policies can guide policymakers in designing tax systems that promote fiscal sustainability and inclusive growth (Bird & Gendron, 2017).

The research methodology chapter delineates the systematic approach adopted to investigate the VAT-GDP relationship in Nepal. By emphasizing the significance of research design, data collection, and analysis, it provides a framework for generating reliable and valid findings (Sekaran & Bougie, 2016). The chapter's implications extend to researchers and policymakers, emphasizing the importance of methodological rigor in producing evidence-based insights. Moreover, the emphasis on secondary data sources underscores the value of leveraging existing data to inform policy decisions and economic analysis (Sharma et al., 2021). Through a structured methodology, the study aims to contribute to the empirical literature on VAT and GDP, offering actionable recommendations for policymakers and practitioners.

The results and discussion chapter presents empirical findings on the VAT-GDP relationship in Nepal, providing insights into its implications for economic policy and development. By analyzing descriptive statistics, correlation coefficients, regression models, and ANOVA tests, the chapter offers a comprehensive understanding of VAT's impact on economic growth (Mahmood et al., 2019). These implications are significant

for policymakers, economists, and stakeholders involved in tax policy formulation and implementation. The chapter's findings can inform strategies for enhancing revenue mobilization, promoting fiscal sustainability, and fostering inclusive economic growth in Nepal (Rai & Gurung, 2018). Moreover, by interpreting the results within the context of existing literature, the chapter contributes to theoretical debates and empirical research on VAT and GDP dynamics, guiding future studies and policy interventions in the country.

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APPENDICES

Appendix-I Gross Domestic Product

Years	GDP
2070/71	1964540
2071/72	2130150
2072/73	2253163
2073/74	2627449
2074/75	3044927
2075/76	3458793
2076/77	3888703
2077/78	4352550
2078/79	4933696
2079/80	5381335

Appendix-II Value added Tax

Years	VAT
2070/71	101104.6
2071/72	112521.8
2072/73	122411.9
2073/74	161068.3
2074/75	206809.8
2075/76	240121.3
2076/77	265465.4
2077/78	282019.1

2078/79	314279.1
2079/80	286197.9

Appendix-III Inflation Rate

Years	Inflation Rate
2070/71	9.1
2071/72	7.2
2072/73	9.9
2073/74	4.5
2074/75	4.2
2075/76	4.6
2076/77	6.5
2077/78	2.9
2078/79	7.1
2079/80	7.4

Appendix-IV Exchange Rate

Years	Exchange Rate
2070/71	88.9
2071/72	88.32
2072/73	98.25
2073/74	99.86
2074/75	106.49
2075/76	105.95
2076/77	116.31
2077/78	117.87
2078/79	120.84
2079/80	130.75

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Abstracts This study offers a comprehensive synthesis of findings regarding Nepal's tax structure, focusing on the short and long-term implications. It proposes a policy framework for optimizing the structural organization of taxation, particularly VAT, to enhance productivity and equity. Additionally, it evaluates recommendations from the IMF and the Economics Commission of the Government of Nepal. The research investigates the

contribution of Value Added Tax (VAT) to Nepal's Gross Domestic Product (GDP

) from fiscal year 2070/71 to 2079/80, analyzing the interplay between VAT revenue, GDP growth, inflation rate, and exchange rate fluctuations. VAT, a significant revenue source, significantly influences economic performance through its impact on consumption, investment, and government spending. The study also examines how variations in inflation and exchange rates affect VAT collection and, consequently, GDP growth. **Keywords:** Gross Domestic Product, Value Added Tax, Inflation Rate and Exchange Rate, CHAPTER I INTRODUCTION 1.1 Background of the Study Taxation serves as a fundamental pillar of modern governance, representing the principal means of public revenue. It entails mandatory contributions from citizens to finance public expenditures and uphold governmental obligations towards its populace. In countries such as Nepal, governmental economic policies are geared towards raising living standards, fostering economic growth, reducing poverty and inequality, and promoting employment opportunities, all while maintaining environmental sustainability (Khadka, 2001). Meeting the escalating demands of public expenditure necessitates securing funds from both domestic and international sources. External sources like foreign loans and grants can be unpredictable and may pose challenges to sustainable development. Therefore, mobilizing internal resources, particularly through taxation, provides a stable and dependable avenue for financial resource generation (Khadka, 2001). Among internal revenue sources, Value Added Tax (VAT) has emerged as a critical mechanism for revenue mobilization. VAT, as an indirect tax, imposes consumption-based levies on the