The Impact of Fiscal Federalism on Economic Growth of Nepal

A Research Paper

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Table of Contents

Abbreviations and Acronyms

CBS = Central Bureau of Statistics

DOLI = Department of Local Infrastructure

FCGO = Financial Comptroller General Office

FisDec = Fiscal Decentralization

GDP = Gross Domestic Product

HDI = Human Development Index

IFA = Intergovernmental Fiscal Arrangement

IGFT = Intergovernmental Fiscal Transfer

LDC = Least Developed Countries

LGO = Local Government Operation

LocCon = Local Connectivity

NNRFC = National Natural Resources and Fiscal Commission

NPC = National Planning Commission

NSO = National Statistics Office

OAG = Office of Auditor General

OECD = Organization for Economic Cooperation and Development

WB = World Bank

Abstract

Federalism is a form of government where the federal government and local/state governments share authority. In order to promote long-lasting peace, effective governance, and prosperity, Nepal adopted federalism in 2015. There are 753 local levels of Nepal's three-tiered government, which is divided into 7 provinces. Provisions for fiscal decentralization, such as spending allocations, revenue-raising authority, and intergovernmental fiscal transfers, have been established by the constitution and related laws. This makes it possible for resources and public services to be distributed effectively and fairly among the many tiers of government. This study explores the effects of fiscal decentralization on Nepal's economic expansion after a federal governance structure was put in place. It discovers no association between fiscal decentralization and economic growth in case of Nepal. The study takes into account elements like human capital and local connectedness and comes to the conclusion that fiscal decentralization along with local connectivity and human capital, in long run, can contribute to GDP per capita growth rate of provinces in Nepal. For a more thorough understanding, however, additional research including more variables and a longer time range is required. In order to promote balanced and sustainable growth in Nepal, the report emphasizes the significance of creating strong institutional frameworks, assessing expenditure and revenue assignments, making investments in infrastructure and human capacity, and dealing with intergovernmental fiscal difficulties.

Key words: GDP per capita growth rate, Fiscal Federalism, Economic Growth, Intergovernmental fiscal transfer, Government Expenditure, Internal Revenue, etc.

Impact of Fiscal Federalism on Economic Growth of Nepal

Chapter I-Introduction

1.1 Background

Federalism is a system in which the central government shares executive authority with regional or state governments, resulting in what is frequently referred to as a federation (Elazar, 1987). Recently, many countries have adopted this governance system realizing the benefits of the optimal form of decentralization. In federalism, state powers such as political, administrative, and fiscal authorities are divided among federal units. Nepal has adopted the federal system of governance with three tires of government along with the promulgation of new constitution in 2015, in order to fulfill the goals of lasting peace, good governance, and prosperity by means of federal, democratic, and republican system of governance (Constitution of Nepal, 2015).

Nepal is a landlocked country located in South Asia, bordered by India to the south, west and east, and China to the north. The country covers an area of approximately 147,516 square kilometers and has a population of around 30 million people (Central Bureau of Statistics, 2022). Nepal is known for its stunning natural beauty, with the Himalayan mountain range, including Mount Everest, serving as a major attraction for tourists from around the world. Despite its natural beauty and plenty of natural of resources, Nepal remains one of the poorest countries in the world, with a GDP of approximately $36 billion and a per capita income of around $1,300 (The World Bank, 2021). The Nepalese economy is primarily agrarian, with agriculture accounting for around 25% of the GDP and employing the majority of the population. The country is also known for its hydropower potential which has the potential to generate up to 83,000 MW of electricity, according to government estimates. The service sector, including tourism, is growing rapidly and has become an important contributor to the economy, accounting for approximately 6% of the GDP. Nepal faces many challenges, including poverty, lack of infrastructure, and political instability.

In its history, Nepal has had a number of political transitions. In the past 70 years or more, the nation has experimented with a variety of political structures, enacting a relatively large number of constitutions (seven). The most recent of those, the first of its type, was issued by the constituent assembly and officially declared Nepal to be a federal democratic republic. Although a nation that had long been a unitary state now has a new political structure, prior decentralization initiatives had yielded some useful lessons. The initiatives began with administrative institutions including development areas, zones, districts, municipalities, and village development committees about forty years ago. Since the Maoist insurgency lasted for more than ten years and the subsequent protracted political transition era, the Local Self Governance Act and Rules of 1999 would have been significant strides done in this direction. Another stage of political, economic, and administrative transformation is currently underway on, even though a new constitution was approved in 2015.

Three levels of government—the federation, the province, and the local levels—are established by Article 56 of the constitution. As a result, Nepal has been divided into seven provinces and 753 local levels, of which 293 are urban municipalities and the rest are rural municipalities. State power, including exclusive and concurrent power, is allocated among three level of governments by the schedule 5,6,7,8, and 9 of the constitution. These powers act as expenditure jurisdictions of the governments. In the five years since the constitution was adopted, numerous legislations have been passed, and the process is still ongoing. Acts like the National Natural Resources and Fiscal Commission (NNRFC) Act of 2017 and the Intergovernmental Fiscal Arrangements (IFA) Act of 2017 have already been put in place to execute the model of fiscal federalism entrenched in the constitution. The IFA act includes provisions that are mostly concerned with intergovernmental transfers and revenue sharing between the levels of government. The LGO Act has also improved how local level government organizations operate. In contrast, the NNRFC Act has given the constitutional body, the National Natural Resources and Fiscal Commission, a comprehensive legal framework within which to carry out the functions and obligations set forth in the constitution and other pertinent laws.

The allocation of fiscal authority and responsibility among the several tiers of government in a federal structure is the subject of fiscal federalism. In order to accomplish an effective and equal distribution of resources and the provision of public services across the many tiers of government, it comprises the methods and concepts driving revenue collection, expenditure allocation, and intergovernmental fiscal transfers (Oates, 2004). Nepal has set all the provisions to implement the fiscal decentralization such as expenditure assignments, revenue raising powers, and various types of fiscal transfers among governments according to the constitution and above-mentioned laws/acts.

1.2 Statement of the Problem

Economic activity had increased as a result of the post-1990s' open political environment and economic reform initiatives. The decade-long fight that ensued, however, meant that the outcome was not as anticipated. The People's Movement of 2006 established the historical constituent assembly that wrote the current constitution of Nepal, which institutionalized a federal democratic republic government system and made it possible for the country to develop economically. Nepal has to meet the Sustainable Development Goals (SDGs) by 2030 in order to uphold its international commitment. As part of the commitment to ensure that no one is left behind in all facets of development, SDGs are being incorporated and localized in federal, provincial, and local development projects. Making enormous breakthroughs in the pace of socioeconomic development is essential because Nepal has historically lagged behind other countries of comparable ranks in this area. By 2030, has set goal to become a middle-income nation, and by 2026, to graduate from the category of a Least Developed Country (LDC) and become a developing nation. In addition, fifteenth plan of Nepal sets long-term vision to upgrade Nepal as an advanced level nation by 2043 (National Planning Commission, 2020).

It is a difficult endeavor that demands a lot of resources, including up-to-date infrastructure and top-notch human capital, to achieve economic development and improve the lives of individuals. Planned urbanization, rural infrastructure growth, and renewable energy usage are further significant drivers. Utilizing demographic benefits also entails expanding possibilities for gainful work, preserving macroeconomic stability, and minimizing income disparity. There are other potentials to create a just society through offering social security, safety, and fostering investment through the activation of economic sectors that support society.

The main issues are the initial stage of the federal system, the absence of concrete execution plan, the lack of a defined relationship between the federal, provincial, and local governments, the failure to achieve the anticipated coordination between the government bodies, and the lack of a plan to enhance the administrative capacity at the provincial and local levels. In addition, there is confusion over the interpretation of the concurrent powers granted by the constitution, for example the complexity and duplication of tax jurisdiction of the three governments, challenges to a balanced development due to remoteness, and challenges in enhancing physical infrastructure and human capitals at the provincial and local levels. Hence, it is necessary to analyze the initial impact of new system on economy of Nepal.

1.3 Significance of the Study

The shift from a unitary to a federal structure was intended to enhance governance, encourage economic expansion and achieve balanced development. This study tries to find the initial effect of the new federal system of governance. Given, that Nepal has long struggled to experience continuous economic growth and development, it is crucial to comprehend the economic effects of federalism in the nation. In order to analyze the economic performance of Nepal after federalism, this research study will look at important regional economic variables such as per capita GDP growth rate, internal revenue and expenditure of provinces. The study's conclusions may help Nepal's stakeholders and policymakers make rational decisions about the nation's future economic development as well as fiscal decentralization. In addition, this study will be one of the pioneer studies to examine the performance of fiscal federalism in Nepal as there are few studies conducted so far.

1.4 Objectives of the Study

The main objective of this study is to examine the impact of the fiscal federalism in the economic growth of Nepal. Hence, this study aims to identify the effect of the fiscal decentralization on the growth rate of GDP per capita of provinces in Nepal after the implementation of new federal governance system.

1.5 Limitations of the Study

Recognizing the limits of a short-term analysis in a nation at an early stage of federalism implementation, this study looks at the initial impact of fiscal decentralization on Nepal's economy throughout the period from 2017 to 2022. The study underscores the need for caution when generalizing the findings and highlights the difficulties in evaluating the effects of federalism on the economy within such a constrained timeframe. Additionally, it acknowledges the exclusion of crucial control factors like remittance and the possibility that different modeling strategies may produce different results. Future research should include a larger range of variables over a longer time horizon while also waiting for the full implementation of fiscal federalism in order to produce more reliable and conclusive result.

Chapter II-Literature Review

The effect of fiscal decentralization on economic growth has been the subject of numerous research. While the majority of the literature points to an important and favorable correlation between the decentralization of fiscal authorities and economic growth, other studies have produced results that are in opposition to this. According to certain studies, fiscal decentralization with a medium level rather than a high or low level produces the best results for economic growth. This review of the literature gives an overview of several research that look at the connection between fiscal decentralization and economic growth while highlighting the important conclusions and takeaways from each study.

Brueckner (2006) examined the relationship between fiscal federalism and economic growth using an endogenous-growth model with overlapping generations. According to the analysis, federalism boosts the incentive to save because it enables public-good levels to be tuned to meet the diverse needs of young and old customers who reside in various jurisdictions. A consequence of this increased incentive is more investment in human capital, which in turn accelerates economic growth.

Baskaran, Feld & Schnellenbach (2016) conduct an assessment of research on fiscal decentralization and economic growth, combined with meta-analyses of the predicted effects, offers intriguing new insights into the empirical literature and partial justifications for conflicting findings. While cross-country studies struggle to separate the effect from other institutional drivers, single-country studies frequently demonstrate a beneficial impact of decentralization on growth. The meta-regressions show that findings are considerably influenced by the peculiarities of empirical models and samples. To find the right models, future research must enhance empirical specifications and transmission channel identification. Results are also influenced by the selection of the control variables and empirical decentralization measure. Their finding suggests that, final agreement on the effect of decentralization on economic growth requires agreement on how to assess decentralization.

Bodman & Ford (2006) investigates how fiscal decentralization affects economic growth in OECD nations. The analysis reveals that a medium degree of fiscal decentralization is positively connected to growth in the capital stock and human capital, even if there is little direct evidence of a relationship between fiscal decentralization and output growth. Furthermore, the data shows that unitary governments and nations with fewer elected subnational layers of administration typically have superior economic outcomes.

In the context of a specific federal reform, Mitra & Chymis (2022) evaluates the impact of Belgium's constitutional federalism transition in 1993 on GDP per capita. The findings show that the modification had a negative impact on economic expansion. After 2001, when a new reform minimized the vertical budgetary imbalance that defined the federal reform of 1993, this negative effect stops. Some claim that a strong federalism with fiscal autonomy to the federal entities and, on the other hand, a centralized tax system, greater wasteful expenditures, and a aggregate issue, hinder economic advancement.

Lin & Liu (2000) examines how fiscal decentralization has affected China's economic expansion. It clarifies that fiscal decentralization entails the transfer of fiscal authority to lower levels of government, which can improve economic efficiency and accountability. The article describes how China's fiscal system changed in the 1980s and uses empirical analysis to look at how fiscal decentralization affects economic growth. According to the research, China's spectacular economic growth has benefited from fiscal decentralization.

Ogawa & Yakita (2009) explores fiscal decentralization and equalization transfers in a two-region endogenous growth model. The study concludes that local governments' preferred tax rates are positively influenced by the degree of fiscal autonomy. The central government's fiscal equalization policies, however, have no effect on how quickly interregional growth rates converge. The analysis finds that there is an ideal level of fiscal decentralization for maximizing growth, but the central government picked an excessive amount that does not produce the greatest level of regional welfare.

Adil & Anwar (2015) investigates the effect of fiscal decentralization on economic growth in Pakistan. Although fiscal decentralization is thought to increase effectiveness and promote economic growth, there are worries about potential adverse effects and macroeconomic instability in the absence of better local government capability and political responsibility. In order to calculate the effects of fiscal decentralization on economic development from 1972 to 2010, this study builds a model utilizing an endogenous growth framework and Johansen's co-integration method. The empirical results show that fiscal decentralization has a positive, albeit statistically insignificant, effect on short-term economic growth for Pakistan while exhibiting a significant positive impact over the long-term using expenditures and revenues as indicators along with control variables.

Rodríguez-Pose & Krøijer (2009) looks at 16 nations in Central and Eastern Europe between 1990 and 2004 to see how fiscal decentralization affects economic growth rates. The general consensus holds that through targeted policies and creative public services, decentralized governments have the capacity to promote higher economic efficiency and prosperity. There isn't much empirical data to back up this assertion, though. The findings contradict the prevalent opinion using panel data with dynamic effects. Indicators of fiscal decentralization used in the analysis, two out of the three, exhibit a strong inverse association with economic growth. In spite of this, taking into account various time lags yields nuanced results, showing that the long-term effects vary depending on the kind of decentralization that is adopted in each nation. Taxes levied at the sub-national level have a significantly positive link with national growth rates, whereas sub-national government transfers and expenditures are inversely correlated with economic growth. This lends credence to the idea that local governments with their own funding sources are more receptive to local needs and encourage higher economic efficiency.

In conclusion, the literature study highlights the nuanced nature of the connection between fiscal decentralization and economic expansion. There are differences in the size and type of this link, even though the bulk of studies show a positive correlation between fiscal decentralization and economic growth. The unique environment of each study, institutional setups, control variables, and methodological approaches used all contribute to the variety of findings. The ideal level of fiscal autonomy for fostering economic growth is still up for dispute. Future study should focus on improving empirical specifications, identifying transmission routes more accurately, and reaching agreement on how to evaluate decentralization. Such initiatives will advance our knowledge of the complex relationships between fiscal decentralization and economic growth, empowering policymakers to make well-informed choices on decentralization policies.

Chapter III-Data and Methodology

3.1 Data

This paper is based on the utilization of secondary data spanning the period from 2017-2022. Data from various sources of the governmental organizations of Nepal as well as International Financial Institutions (IFIs) has been used. Per Capita GDP growth rate (nominal) of the provinces is taken from Central Bureau of Statistics (CBS) of Nepal, currently known as National Statistics Office (NSO). Government Consumption/Expenditure and Internal Revenue of Province Governments data is taken from Financial Comptroller General Office (FCGO). Likewise, Local Road Network data is taken from Department of Local Infrastructure (DoLI). Furthermore, Human Development Index data is taken from United Nations Development Program (UNDP) and National Planning Commission (NPC) of Nepal.

3.2 Model and Methodology

A simple linear regression model has been used for analysis purposes. The province governments' yearly per capita GDP growth rate (nominal), which serves as a measure of economic performance, is the dependent variable in this model. The Fiscal Decentralization Index (FisDec), which is defined as the ratio of internal revenue to the total expenditure of the provincial governments, is the main explanatory variable of interest. This index gives an indication of the degree of fiscal decentralization and devolution of decision-making to the provincial level.

A number of control variables have been included to the model in addition to the primary explanatory variable to account for additional variables that could affect economic growth. The total length (in km) of the local road network (LocCon) that the provinces built is one of these control variables. This variable represents local infrastructure growth and its potential influence on economic development. The yearly human development index (HDI), which measures the socioeconomic development and general well-being of the population within the provinces, is another control variable used in the model.

This selected regression model, with the dependent variable of annual per capita GDP growth rate of the Provincial governments and the inclusion of the Fiscal decentralization index as the primary explanatory variable along with the control variables, allows for a thorough investigation of the relationship between fiscal federalism and economic growth in the context of Nepal. The regression model for this paper is specified here as:

$$Y_{i,t} = \beta_0 + \beta_1 FisDec_{i,t} + X_{i,t} + \varepsilon_{i,t}$$

Where,

- $Y_{i,t}$ is GDP per capita growth rate in province i and period t;
- $FisDec_{i,t}$ is fiscal decentralization as ratio of internal revenue to the total expenditure of provinces i and period t;
- $X_{i,t}$ is the control veriable that represents the local connectivity (LocCon) and human capital (HDI) for province i and period t;
- $\varepsilon_{i,t}$ is the error term

Chapter IV-Result and Analysis

Here three models have been estimated as shown in three columns of the result table. Model 1 used pooled ordinary least squares (OLS) without control variables, while Models 2 and 3 used time fixed effects estimation with one and both the control variables respectively.

The column (1) of the regression result table is the simple regression analysis without control variables and shows that there is no association between fiscal decentralization and GDP per capita growth rate. The result is statistically insignificant.

The column (2) indicates the regression with the time fixed effect and one control variable (local connectivity) used, shows that both the fiscal decentralization and local connectivity continues to have no effect on economic growth. Similarly, column (3) three takes into account both the control variables local connectivity and human capital along with fiscal decentralization. The result is same as in second regression that there is no effect of all the variables on GDP per capita growth rate, and the result is statistically insignificant. Using temporal fixed effects estimation, Models 2 and 3 show that, generally speaking, a 10% rise in the fiscal decentralization is related with a 6% increase in GDP per capita growth rate of provinces. The coefficients found after examining all models shows that, fiscal federalism has no impact on economic growth of Nepal.

It is crucial to note, nevertheless, that the outcomes depend on the particular model and variables used. It is important to use caution when generalizing these findings because other factors that were not taken into account in this investigation may potentially contribute to economic growth. The intricate interactions between fiscal decentralization, local connection, human capital, and economic growth might be better understood with more study examining more factors and using various models as well as longer time frame.

Table: Main Result

	(1)	(2)	(3)
	gdp_pcg	gdp_pcg	gdp_pcg
FisDec	0.0222	0.645	0.622
	(0.209)	(0.756)	(0.781)
LocCon		0.000602	0.000619
		(0.000491)	(0.000509)
HDI			777.2
			(3819.0)
_cons	1.958	-21.50	-392.7
	(9.538)	(34.29)	(1824.3)
N	35	35	35
R^2	0.000	0.240	0.242

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Chapter V-Conclusion and Implications

5.1 Conclusion

According to this analysis, there is no link between fiscal federalism and Nepal's economic expansion. In other words, there is no impact of the fiscal federalism on economic growth of Nepal. As a result of the ability to use local resources in accordance with local goals, the findings imply that government spending supported by its own revenue sources may be particularly beneficial in fostering economic growth. This statement can be supported given Nepal's developing federalism. The nation is currently coping with the difficulties of funding the ongoing expenses of the various levels of government and developing its infrastructure. The observed impact seems reasonable in light of these factors. The impact may vary over a longer time series, thus it's crucial to remember to use caution when extrapolating the results. The duration of the time series employed in this research is a significant constraint, which must be acknowledged. A more thorough understanding of the relationship between fiscal decentralization and economic growth in Nepal would be possible with additional research spanning a longer time period.

5.2 Policy Implications

Decentralizing fiscal authority and resources is considered helpful for long-term economic growth based on the research findings of this study and the current literature. The adoption of a new constitution in 2015 marked the shift into full fiscal decentralization for Nepal, which had previously undergone a gradual process of limited decentralization. Given the continuous nature of fiscal decentralization in Nepal, strong institutional and legal frameworks must be established in order to successfully implement the constitutional provisions relating to fiscal decentralization. In order to eliminate duplication of authority and ensure equal allocation of revenue sources depending on spending demands, Nepal should also think about reviewing the assignment of expenditures and revenue amongst various levels of government. In order to promote balanced, superior, and sustainable growth throughout all areas, consideration should also be given to infrastructural development and human capital upgrading at the subnational levels.

Last but not least, the central government should support the implementation of regulations and deal with the challenges posed by fiscal decentralization, including intergovernmental fiscal transfers, revenue sharing, use of recurrent powers, revenue collection from shared sources, and management of shared natural resources. Fiscal decentralization can help Nepal achieve greater economic growth and national prosperity if it is implemented fully and successfully.

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