Financial status of municipalities in Gandaki province of Nepal

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Abstract

Analysis of the financial status of local governments will assist in shortening the financial problems. Similar studies are found mostly in autonomous local government entities in American and European context. This research seeks to measure the financial status of municipalities in the Gandaki province of Nepal. After promulgation of the new constitution of Nepal in 2015, it makes provision of autonomous three tiers government in order to provide efficient service to the people with balanced development. Using financial data from audited statements from the office of the auditor general, the government of Nepal of 27 sample municipalities this research tries to assess and compare the financial status of municipalities in Gandaki province of Nepal. A comprehensive index of six dimensions viz. short-term solvency, budgetary solvency, service-level solvency, financial flexibility, and financial independence were developed using the empirical literature available in the field on local government's financial status as well as taken into consideration of data availability. The index found is applied to explain the financial status of urban and rural municipalities for the fiscal year 2019/20 and 2020/21. Results from the analysis revealed that there are differences in overall financial status as well as their measuring dimensions. The measured index also entails about operational efficiency of municipalities with areas of improvement in their performance for further sustainability. This paper will contribute to make municipals effective through devising policies by focusing effective service to the citizen and federal and provincial governments will get insight to formulate their policies for equitable distribution of financial resources among the municipalities.

Keywords: Financial status, short-term solvency, budgetary solvency, service-level solvency, long-term solvency, financial flexibility, financial independence

Introduction

Since the last few decades, research's on local government finance have gained significant momentum in the ground of financial as well as

governing problems faced by local governments units due to rising expectations of people from those units, migration of people, and raising the cost of providing services (Hendrick, 2004; Zefra-Gomez, Lopez-Harnandez & Harnandez-Bastida, 2009a). existing budgeting narrowly focused and not sufficiently provide insight into emerging issues (Goday & Shulman, 1981), this research has tried to assess and compare all 27 municipalities financial status and raise the significant literature in the area of local government's finance (Hendrick, 2004; Rivenbark & Roenigh, 2011; Rivenbark, Roenigk and Allison, 2010; Zafra-Gomez et al., 2009a; 2009b). These types of researches will develop likely indices and frameworks (Rating, Clark & Wickremasinghe, 1012; Rivenbark et.al., 2010; Zafra-Gomez et. al., 2009a) and different ways of its implication in evaluating financial performance (Hendrick, 2004; Rivenbark & Roenigk, 2011; Wang, Dennis & Tu, 2007) to explain and evaluate the municipal's performance (Zefra-Gomez et. al.2009a; 2009b). Such types of studies found divergent in association with locally accountable governance in developed economies (Hendrick, 2004; Wang et al. 2007; Zafra-Gomez et al., 2009a) however, they concentrated mainly on bigger, resourceful and renowned cities' financial affairs like Miami, Pittsburgh, Philadelphia, Cleveland and New York (Kloha, Weissert and Kleine, 2005; Zafra-Gomez et.al. 2009b). Considerably, those researches are not able to find problems in growing and developing economies like Nepal with exception of studies conducted in East Asian countries (Ritonga et al., 2012; Krueathep, 2010). The study attempts to fill the gap in the literature of the concerned area by assessing and comparing the financial status of municipalities in Gandaki province of Nepal during 2019/20 to 2020/21. In Nepal there are two types of local government namely urban municipality and rural municipality except the metropolitan city and sub-metropolitan city (LGOA, 2017). Withstanding issues of promoting local economic development geographical territory of the nation concentrated toward rapid urbanization in Nepal and municipalities are considered to be the center of the growth agenda. Annexures eight and nine of the constitution of Nepal listed the major rights of

local government, Inter-governmental fiscal arrangement act is formulated and the National Natural Resource and Finance Commission (NNRFC) is instituted however, municipalities are not assigned with full financial independence (Fox & Menon, 2013) and simultaneously financed revenue from own sources and fiscal transfer from another tier of government (Bhattacharya, Monem & Rezbana, 2013; Fox and Menon, 2008). Municipalities in developing countries largely depend on fiscal transfer from federal and provincial transfer (Fox & Menon, 2008), which is based mainly on their population, geographical area, Human Development Index (HDI) and back warded area, as per their financial strength, into rural and urban municipalities (Pandey & Pandey, 2008). Categorization of municipalities based on own revenue generation capacity around the globe such as municipalities that able to generate at least eight million BDT are categorized as Class I, similarly municipalities generating revenue four to eight million in category II and two to four million in category III based on their own revenue sources in Bangladesh (McDonald, 2011). After analyzing financial status of urban as well as rural municipalities, this study significantly contributes to the literature of this area. First way of contribution by examining the applicability of composite index developed theoretically to assess the financial status of municipalities in Nepal. On the other hand, the study tries to robustness of methodological developments as it employed weighted average along with statistical mean value to explore proportional relevancy of such index. At last, the study is expected to fill the gap of empirical evidence on the measuring the financial status of municipalities in developing countries in which very little information found publicly (Bhattacharya, et al., 2013). In the subsequent its sections of this paper, the next section tries to conceptualizing financial status as well as its measuring instruments through global literature available in the field, next section will be detailing about methodological issue than it tries to express the detail analysis of empirical results and finally the article concluded the entire work as well as its implications and suggestions for further research in the area.

Concept of Financial Status and Its Assessment from Previous Studies

Several research scholars have been attempting to conceptualize the financial status in various perspectives however not able to generalize definition and conceptualize (Zafra-Gomez, et. al., 2009a) though the concept of financial status is affected by several factors like government's policies, strategies, plan, resources, federal government's policies, laws and regulations and other financial, environmental, socioeconomic factors that varying jurisdiction to jurisdiction. So, the constructs of the financial status cannot be defined in a universally accepted manner and it is found to vary (Jackob & Hendrick, 2013). From the available literature definition of short-term solvency varies narrowly with concentrating on liquidity position with compared to long-term solvency (Groves et al., 1981; Jackob & Hendrick, 2013; Mead, 2001).Generally, short-term solvency reveal the government's ability to meet short term financial requirements and service obligations (Kamniker, Kamniker & Deal, 2006)that primarily depict the government's current fiscal situation (Mead, 2001),however, in global perspective, financial status is the appropriateness of whether resource availability is enough and optimally meet the expenditure need, revenue collected reflected the soundness of revenue base and expenditure is compatible with service requirements; so that financial status is defined as function of equalizing the liabilities with assets available, balancing revenue with expenditure need and secure sufficiently from raising risk (Clark & Ferguson, 1983), generating resources to meet funding requirements (Nollenberger et al., 2003), avoiding financial distress, and able to meet the funding need for both the situation of growth and downturn (Maher & Deller, 2001). Describing the financial status with broader perspective is meaningful in determining the local government's financial distress and appropriate understanding of the reasons for such distress(Hendrick, 2004).However, taking into consideration the varying definitions of financial status, several author convinced on it reveal the government's

financial status financial performance, liquidity and leveraging;unexpectedly, not availability of exact yardstick of the constructs as it highly subjective due to dynamism on context of the government geographically as well as socially (Chaney, Mead, & Sherman, 2002) and considerably suitable indicators like ratios that are consistent with practice, theory and behavioral dimension of government' finance (Ramsay, 2013). Existing literature clearly shows that no single set of indicators that measures the financial status and applicable for every organization, so depending upon availability of data and information researchers using wide range of ratios under the dimensions mentioned above measuring financial status of the organizations (Maher & Nollenberger, 2009; Nollenberger et al., 2003; Ritonga, et al., 2012; Wang et al., 2007). Municipalities requires to prepare several financial statements and need to get audited internally and externally however, till the date government accounting practice is found in cash basis and not able to preparing financial statement of affairs so that clear picture of receivable, payable, assets, and liabilities are not available clearly and need to rearrange the data. Moreover, municipal's financial data are also not publicly published (Fox & Menon, 2008). Hence, taking into account this study employs 16 indicators under six different dimensions viz. short-term solvency, budgetary solvency, service level solvency, long-term solvency, financial flexibility and financial independence (Wang et al., 2007; Ritonga et al., 2012) with considering limited data availability and the simplistic nature of municipal operations for the measurement of municipalities' financial status in Gandaki province of Nepal.

Research Methodology

In this research taking into account the complete data regarding revenue and expenditures as well as available data regarding assets and liabilities, attempts to measure financial status by analyzing those data for 27 sample municipalities including urban and rural within Gandaki province of Nepal. Research question pose to this research is "how municipalities perform financially after being

establish as autonomous government during the new practice of fiscal federalism?" and how types and geographically situated municipal's performance can compare based on composite indices? Municipalities of Nepal do not publish the financial data publicly to measure the financial status index even though statutory provision needs to publish their financial data through their respective websites. Analyzed data were gathered through final audit report through the office of the controller of auditor general of Nepal for the fiscal year 2019/20 and 2020/21. Currently, there are 85 municipalities in the within Gandaki province. Within 85 municipalities in the study area altogether, 27

urban municipalities and 58 rural municipalities. Out of 85 municipalities, 27 municipalities were selected as a sample unit. The sample represents approximately 32 percentage of the population. The single metropolitan city was purposively included in the sample. Furthermore, nine urban municipalities and 17 rural municipalities has purposively selected as sample units of the study due to inclusive all the district, categories of municipal and to cover the different topographical location. The summary of sample unit and data collected as:

Table 1: Summary of Data Collected for the Study

Municipalities	Population	Sample	Outliers	Data Used	Percentage
Urban Municipalities	27	10	0	10	37.03
Rural Municipalities	58	17	3	14	24.13
Total	85	27	3	24	28.23
Himaliyan Region	10	5	3	2	20.00
Hilly Region	67	18	0	18	26.86
Terai Region	8	4	0	4	50.00

Even though 27 municipal is taken as sample but while determining the financial viability index result is influenced by the result of three municipality oh Himalayan region due to least population of these municipal unit namely Chame Rural Municipality of Manang district, Baragaun Mukti-kshetra rural municipality of Mustang district and Gharapjhong rural municipality of Mustang district. So, these three municipalities are the outliers and excluded from calculation.

Municipal financial status is measured by composite index following a methodology (OECD, 2008). Theoretically the measures defined as the capacity of the local government to meet current as well as future service requirements and financial obligations (Wang et.al., 2007) and measured through different solvency ratios viz. short-term solvency, budgetary solvency, long-term solvency, service level solvency (Wang, et. al., 2007; Jakob & Hendeick, 2013) further financial flexibility and financial independence (Rating, 2012). Debt and liability paying ability at maturity

is measured by short term solvency. Hence, A comprehensive financial viability index was created using the weighted scores of six financial viability dimensions. They are Budgetary solvency, short term solvency, long term solvency, service level solvency, financial flexibility and financial independents.

Based on Ritonga (2012), the Financial Status Condition Index (FSCI) is the weighted average of six dimensions measuring local government financial viability: short-term solvency, long-term solvency, budgetary solvency, financial independence, financial flexibility and service-level solvency. Financial ratios will be used to measure each dimension because ratios can eliminate the effect of size of the objects measured (Jones & walker, 2007). Higher number of indicators to measure the dimension ensure the better result because of comprehensiveness in measuring the dimension. The indicators of the six dimensions based on prior empirical literature used to

construct the FSCI are given below. The indicators are slightly modified to incorporate financial reporting convention of Nepalese municipalities.

The values of indicators are aggregated to develop dimension indices which are further aggregated to develop the ultimate FSCI. After calculating the aggregate indicator service level solvency ratio 'A' and ratio 'B' need to normalizing because of it expressing in values rather than ratios and then the indicator values using the formula (Actual value - Minimum value)/ (Maximum value - Minimum value) (OECD, 2008), they were aggregated by simple averaging (Wang et al., 2007) to determine dimension indices. In Addition, to reflect the proportional relevance of used ratios, weighted average was also used. Similarly, the same averaging processes were also used to aggregate dimension indices to determine the eventual FSCI. The average and weighted average dimension indices and FSCI were calculated by using the following formula: for average, $\sum_{t=1}^{n} Ai/n$ and for weighted average,

$$\sum_{i=1}^{n} \frac{A_i}{\sum_{i=0}^{n}(A)_i} \times A_i$$

where, A = indicator for dimension indices and dimension for FSCI; n = 2 to 4 for dimension indices and 6 for FSCI.

Simple average perfectly assumes the perfect substitutability of indicators and dimension indices while weighted average puts relative importance on them. One single standardized procedures of averaging cannot be justified for all municipalities as indicator dimensions of FSCI are likely to carry different weights depending on the context (Rating et. Al., 2012) which vary in terms of a municipal size, functions, geographical territory, revenue generation capacity and other significant characteristics (Groves et. al., 1981). Therefore, this study applies both simple and weighted averageto examine robustness of FSCI and its sub-indices to alternative weighting procedures. The rank order correlations between the FSCI and its sub-indices measured by two approaches are very high and significant (see in Appendix III) suggesting both approaches used in this study are robust to each other.

Results and Discussions

Financial status of the sample municipalities based on the audit report for the fiscal year 2019/20 and 2020/21 was analyzed by applying the global established literature. Descriptive statistics of FSCI values are presented on table 3 and 4 and as per the value obtained through processing of data found fluctuating but in most of case it was in increasing trend. Specifically, except the municipalities of Himalayan region all another's mean value is found increasing. Such increasing trend in financial position might be the indicator of growth in revenue and expenditures. Revenue is found increasing not only from fiscal transfer from federal and provincial government's transfer but also from the own revenue viz. taxes and service revenues. Expenditure also found increasing along with changing in people's services expectation require higher administrative and development expenditure but lower current spending for services, lower growth in per capita revenue compared to per capita expenditure (Fox & Menon, 2008) tends to be responsible for their movement forward. It is also notable due to the aggregation methods, average and weighted average, reveal similar trend; however, weighted average resulted in improvement of financial status for all kinds of municipal either urban or rural and causes narrowing down the gap of financial requirements specifically between hilly regions municipalities. This suggests some dimensions have greater impacts than others, which depict clearly by analyzing the dimensions along with their constituent indicators.

Short-term Solvency

Data presented in tables 3 and table 4 shows short-term solvency data are showing an increasing trend for urban municipalities and in the municipalities within Himalayan region but found decreasing in the rural municipalities within other geographical territory. Difference in the value of short term solvency obtained through simple average and weighted average methods is attributable to quick ratio and current ratio, which include accounts receivable and other current assets as numerator, both of which have higher values than cash ratio.

Table 2: Descriptive Statistics of the Measurement of FSCI for Municipalities

Type	Year	Simple Average				Weighted Average			
		Min.	Max.	Mean	Std. Dev.	Min.	Max.	Mean	Std. Dev.
Urban	2019/20	0.2200	0.7600	0.4864	0.1931	0.2000	0.8000	0.5361	0.2103
	2020/21	0.3800	1.0000	0.6304	0.1684	0.4200	1.0500	0.7079	0.1712
Rural	2019/20	0.0000	0.6900	0.3509	0.1908	0.0000	0.7400	0.4070	0.2179
	2020/21	0.0000	0.7000	0.4784	0.2236	0.0500	0.8100	0.5409	0.2326
Himalayan Region	2019/20	0.5500	0.7400	0.6477	0.1333	0.6400	0.7500	0.6932	0.0761
	2020/21	0.6000	0.7100	0.6528	0.0719	0.7900	0.8100	0.8046	0.0137
Hilly Region	2019/20	0.0000	0.2600	0.4435	0.1958	0.0000	0.8000	0.5064	0.2133
	2020/21	0.0000	1.0000	0.5796	0.2193	0.0500	1.0500	0.6523	0.2183
Tarai Region	2019/20	0.1300	0.4000	0.2601	0.1103	0.1200	0.3900	0.2681	0.1108
	2020/21	0.3000	0.6500	0.4676	0.1552	0.3000	0.6400	0.4922	0.1592

*(**Source:** Research's Calculation based on Audit Report of Sample Municipalities)*

However, Nepalese government accounting practice is in cash basis till now and there is not much more information regarding current assets and current liabilities except cash and bank balance, balance of advances and deposit laying with them. The higher short-term solvency for all categories of municipalities might be explained by their increasing trend in higher volume of cash and bank balances because of they have the practice of maintaining entire revenue and funds deposit into bank account and not in the form of other assets. Fox and Menon (2008) stated that increase in administrative and employees cost of municipalities tends to increase in revenue from own sources, another all elements of service expenditures obviously decreased and suggested to follow the cashbox budgeting, so that expenditure need to be paid as and when cash is realized from revenue sources and not accordingly pre-prepared budget. This approach is found common in the practice of local government operation in developing economies and tried to maintain their short-term solvencies (Schick, 2005). Municipalities under studies are not uniform in their budget size, and the varying revenue structure and expenditure pattern might have contributed to the variations in short term solvencies among the municipalities under study. Ritonga et al., (2012) has reported best short-term solvency of municipalities in Indonesia due to having remarkable volume of current assets including cash and bank balance over their current liabilities and similar scenario is found in Nepalese case.

Budgetary Solvency

There are uniform budgetary procedures and practices among the local government units in Nepal. Comparatively this ratio found uniform due to the fact that the mandatory provision to balance their budgets even if it is required them to cut down their operating as well as capital expenditure based on revenue budget. This is in compliance with the findings of Fox and Menon (2008) who states that local governments' total revenues and expenditure found increased almost equally, 17 percent and 17 percent, respectively from 2019/20 to 2020/21 fiscal year of all the municipality under study.Out of the six dimensions for all the municipalities under study, this dimension has the stable values; therefore, this dimension contributed the most in the difference between the two measurement methods for FSCI values. As of working data sheet reveal out of four ratios of budgetary solvency ratio 'A' and Ratio 'D' have the higher values but ratio 'B' and 'C' have smaller as well as stable values. In general, the values of all four indicators of this dimension are found consistent for the municipalities under study. In addition, the annual revenue generated themselves is sufficient to cover their operating expenses except capital cost and manpower cost to providing services in most of the

cases during study period. This finding on municipalities' budgetary solvency in Nepal is also comparable with that of Ritonga et al., (2012) as he reported majority of indicators within budgetary solvency in Indonesia regarding local government need to maintain sufficient budgetary solvency through realizing sufficient revenue to cover the operational expenditures of the local governments.

Long-term Solvency

Table 3 and 4 shows higher indicator values regarding service level solvency in all the cases and found ever increasing the values. However, in Nepal accounting practices of the government unit do not permit to calculate the ratio 'A' of this indicator due to unavailability of the equity. All other indicator of this dimension assets per capita and expenditure per capita found increasing and reveal that the capacity of municipality to provide service is enhancing gradually to their citizen.Even though, due to unavailability of benchmark values to compare it cannot be judge absolutely but in trend it is found ever increasing capacity of the municipalities. It can be said that based on that the higher the values of this dimension, the better the service level solvency (Ritonga et al., 2012). The higher values of service level solvency for urban municipality and municipal of Himalayan region over the study period reveal

the higher budget expending requirements in that municipalities with compare to another. Due to such higher indices, they have higher financial ability to provide growing service requirements of the citizen.

Service Level Solvency

Table 3 and 4 demonstrated the value of this dimension however, this dimension includes four indicators as per the literature out of four indicator ratio 'C' and ratio 'D' cannot computed due to lack of availability of data because of Nepalese government accounting practice do not permits to invest in equities to local government units and depreciation on fixed assets is not accounted. Available two ratios found very high in all the cases and found increasing in case of urban municipalities. Reason behind high value of ratios might be not maintaining long term liabilities except accumulated balance of specific fund and not raising debt by the Nepalese municipalities. Higher values of this index indicate higher long-term solvency (Alam AB, Alam A & Hoque, 2017). Therefore, all municipalities were more solvent in long term. Municipalities in Nepal is authorized to borrow up to 12 percentage of their internal revenue during study period however, no one is found using debt financing to meet their financing requirements.

Table 3: Dimensions of FSCI for Municipalities (Municipal Type)

Dimensions		Urban Municipal		Rural Municipal	
		2019/20	2020/21	2019/20	2020/21
Short-term Solvency	Average	16.3810	71.0264	5.0773	4.4787
	Wt. Average	17.3174	71.2714	5.1947	4.4967
Budgetary Solvency	Average	1.4777	1.4595	1.4503	1.4435
	Wt. Average	1.9687	2.0311	1.8811	1.8311
Long-term Solvency	Average	107.0729	30.9289	23.0965	19.6120
	Wt. Average	187.6008	46.6842	36.3593	31.1745
Service level Solvency	Average	12385.8739	14203.9896	10812.9925	12399.4250
	Wt. Average	13084.6885	15259.7703	11728.4626	13343.2479
Financial Flexibility	Average	19.5810	8.6876	6.7707	5.2703
	Wt. Average	40.8965	14.3583	11.3475	9.6200
Financial Independence	Average	.1889	.2114	.2470	.2830
	Wt. Average	.1892	.2117	.2475	.2837

*(**Source:** Research's Calculation based on Audit Report of Sample Municipalities)*

Despite of not using debt financing in their financial requirements, municipalities in Nepal found to have less-burden on their financial obligations which might be the reason why municipalities in Nepal are solvent in the long term. Ritonga et al., (2012) states that a higher long-term solvency for local government in the context of developed economy with compare to Nepalese municipals. Earlier, no study is found regarding how municipalities in Nepal deal with increasing service demands despite their not incurring long term debt. The variations of long-term solvency among the municipalities might be attributable to long term liabilities arising out of the decision of their internal management like not paying employees' future service contributions or non-repayment of borrowing from other government sources, pension requirements and social security payments. Due to strong financial status municipalities might have feel easy to meet their long-term financial obligations and less difficulty in paying their long-term debt due to their higher revenue generations and sound asset base. Financially weak municipalities face severe difficulty in this regard because of their weak revenue generations and weaker asset base.

Table 4: Dimensions of FSCI for Municipalities (Geographic Region)

Dimensions		Himalayan Region		Hilly Region		Tarai Region	
		2019/20	2020/21	2019/20	2020/21	2019/20	2020/21
Short-term Solvency	Average	62.1683	473.515	5.9780	4.1757	12.0417	4.2408
	Wt. Average	68.5425	475.165	6.0354	4.1917	12.1668	4.2464
Budgetary Solvency	Average	1.4600	1.2325	1.4358	1.4794	1.6063	1.4431
	Wt. Average	2.0010	1.5967	1.9374	2.0610	1.8748	1.6139
Long-term Solvency	Average	76.8050	45.8025	52.4556	25.1369	158.044	21.2638
	Wt. Average	91.7125	45.8085	91.9579	41.9144	287.834	29.812
Service level Solvency	Average	14371.2	14054.7	11929.9	13649.6	9512.80	12262.2
	Wt. Average	15012.8	15995.3	12862.0	14668.8	9732.12	12760.1
Financial Flexibility	Average	18.6383	18.0483	8.2993	6.0009	38.7942	7.5542
	Wt. Average	42.9578	37.0140	14.9011	10.1561	82.9725	10.0949
Financial Independence	Average	.2200	.2200	.1989	.2292	.2743	.3067
	Wt. Average	.2202	.2200	.1992	.2296	.2743	.3067

*(**Source:** Research's Calculation based on Audit Report of Sample Municipalities)*

Financial Flexibility

For the purpose of resolving the conflicting issue toward revenue rights among the three tiers of government with incorporating the matter of revenue sharing, budget management, public expenditure and fiscal discipline among federal, provincial and local government, the government of Nepal formulated and enacted the 'Intergovernmental Fiscal Arrangement Act 2017'. As per the Act, basically as important element of fiscal federalism, responsibilities toward bearing public expenditures and sharing revenue matter is resolved tactfully among three tiers of government in Nepal. This act further tries to build up the feeling of ownership of taxpayer on national revenue through sharing the local consumption-based taxes like Value Added Tax (VAT) and excise duty. It made provision regarding distribution of these taxes among federal, provincial and local government in the ratio of 70 percent, 15 percent and 15 percent respectively (NNRFC, 2018). Till the study period no one municipal has raised the debt and ratio 'A' of this dimension is not available. Other indicators of this dimension found decreasing drastically except the municipalities of Himalayan region. The reason behind this declining might be the longer time taken to small infrastructure build up work in that territory and hold the deposit from the contractors and suppliers.

Financial Independence

As per the schedule eight of the constitution of Nepal 2015

provided rights of local government to raise the different types of taxes and fees as own revenue. Same spirit of law carries on by 'Local Government Operation Act 2017' permitted the municipalities to formulate and enacted the laws and raise the revenue to meet the financial requirements. Due to such legal rights own source of revenue of all municipalities found increasing in volume and indicators mentioned in Table 3 and 4 is also revealed the fact. Despite of increasing the indicators by types of municipal, geographically these indicators found stable. Comparison of own revenue with total revenue and total expenditure percentage obtained regarding is ranging from 8 percent to 35 percent and 10 percent to 50 percent. It might be due to building up of their supra-structure and capacity to raise revenue gradually because of short span of time of such legal provision and obtained such right.

Table in appendix I shows the correlation matrix between simple average value of independent variables short-term solvency, budgetary solvency, long-term solvency, financial flexibility and financial independence with dependent factor local government financial status condition index shown in table appendix I which reveal that there is a positive correlation among some of them. Strong positive correlation (coefficient = 0.998, p<0.01) is found between service level solvency and FSCI of municipalities in Gandaki province of Nepal. Financial performance obviously improved with growth of assets and expenditure within municipalities. Increase in assets per capita service cost per capita and equities per capita might be enhanced the serviceability of the local government unit. Likewise, there is low degree of positive correlation between long term solvency and financial flexibility is also highly positive (coefficient = 0.873, p<0.01) and budgetary solvency and financial independence is also high degree of positive correlation (Coefficient = 0.513, p<0.01) might indicate own revenue generation and effectiveness in services are interlinked. FSCI is also positively correlated with short term solvency; it is 0.183 in values. Between short term solvency and service level solvency is 0.130; 0.130 is found between budgetary solvency and long-term solvency when(p<0.001).

In table of appendix IV municipalities are ranked for F/Y

2020/021 on the basis of Simple average as well as weighted average based local government's FSCI. As per the index in the strongest position Kaligandaki rural municipality is found with the index value of 200 with simple average and 205.20 based on weighted average. This municipality have higher operating cost, moderate own revenue and capital expenditure but the employee expenditure is comparatively very low. With the similar scenario of financial statement second strong position is of Barpak Sulikot rural municipality with the index value 183 and 187.90 with simple and weighted average respectively followed by Malika and Marsyangdi rural municipality with the index value of 184.00 and 185.80; 159.70 and 181.40 with simple and weighted average respectively. Among the urban municipality, Beni municipality is found stronger one with the index value of 170.40 with simple average and 180.60 with weighted average respectively followed by Beshishahar municipality and Gorkha municipality. Hupsekot rural municipality has the least strength among the rural municipality with the index value of 137.60 and 141.50 with simple and weighted averages respectively. Out of 10 sample urban municipalities, only one metropolitan city within the Gandaki province Pokhara Metropolitan city has the least index value of 101.30 and 104.60 with simple average and weighted average respectively. Even though per capita revenue and operating cost are in the higher category of this metropolitan city. The situation might be dependent upon limitations with the financial reporting practice and system because observing the value of different heads of expenditure found noncomparable doubtful since it is only highly populated within the province and largest metropolitan geographically.

Conclusion and Suggestions

Overall, the study results reveal this is contrary to the concerns regarding the financial viability of municipal units they have been found to the satisfactory financial condition, have somehow managed to cover their operating expenditure with their revenue sources and achieve a fair solvency level. The findings show that their financial viability can be further enhanced by increasing their revenue bases and adopting sound municipal governance practices. The successful implementation of fiscal

federalism in Nepal requires strong leadership and coordination of Local, Provincial and Federal governments. The study only measured and compared municipal financial status conditions but did not explore the factors that contribute to their variations among the urban and rural as well as geographic location of the municipalities. Although this study examines and applied the existing empirical literature and its applicability in assessing the financial status of municipalities of developing economies like Nepal despite the literature from developed economies, and contributed toward the development of methodological enhancement by testing robustness through weighted average methods to index aggregation. Based on the fundamental concepts of this study further researches contribute to developing the benchmarks to compare the financial status of individual municipality, additionally the determinants of municipal's financial status as well as examine the management practices toward the municipal's financial status.

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Appendix I: Correlations of Simple Average Dimensions with FSCI

		Avg. LGFVI	Avg. STS	Avg. BS	Avg. LTS	Avg. SLS	Avg. FF	Avg. FI
Avg. LGFVI	Correlation	1						
	Sig.							
Avg. STS	Correlation	.183	1					
	Sig.	.214						
Avg. BS	Correlation	-.190	-.180	1				
	Sig.	.195	.221					
Avg. LTS	Correlation	-.069	.030	.130	1			
	Sig.	.639	.838	.377				
Avg. SLS	Correlation	.998**	.139	-.189	-.113	1		
	Sig.	.000	.346	.197	.445			
Avg. FF	Correlation	-.187	.079	.217	.873**	-.229	1	
	Sig.	.202	.594	.139	.000	.117		
Avg. FI	Correlation	-.432**	-.045	.531**	-.133	-.427**	.002	1
	Sig.	.002	.760	.000	.368	.002	.990	
**. Correlation is significant at the 0.01 level (2 -tailed).								

(Source: Research's Calculation based on Audit Report of Sample Municipalities)

Appendix II: Correlations of Weighted Average Dimensions with FSCI

		Wt. Avg. LGFVI	Wt. Avg. STS	Wt. Avg. BS	Wt. Avg. LTS	Wt. Avg. SLS	Wt. Avg. FF	Wt. Avg. FI
Wt. Avg. LGFVI	Correlation	1						
	Sig.							
Wt. Avg. STS	Correlation	.204	1					
	Sig.	.164						
Wt. Avg. BS	Correlation	-.046	-.132	1				
	Sig.	.758	.370					
Wt. Avg. LTS	Correlation	-.117	-.013	.092	1			
	Sig.	.429	.928	.536				
Wt. Avg. SLS	Correlation	.996**	.162	-.048	-.194	1		
	Sig.	.000	.272	.744	.186			
Wt. Avg. FF	Correlation	-.183	.095	.132	.881**	-.259	1	
	Sig.	.212	.521	.372	.000	.076		
Wt. Avg. FI	Correlation	-.510**	-.046	.332*	-.125	-.498**	.014	1
	Sig.	.000	.756	.021	.397	.000	.927	
**. Correlation is significant at the 0.01 level (2 -tailed).								
*. Correlation is significant at the 0.05 level (2 -tailed).								

(Source: Research's Calculation based on Audit Report of Sample Municipalities)

Appendix III: Pearson Correlations between FSCI and
Its Dimension Indices Measured by Simple and Weighted Averages

	Avg. SLS	Avg. BS	Avg. LTS	Avg. SLS	Avg. FF	Avg. FI	Avg. LGFVI
Wt. Avg. STS	1.00**						
Wt. Avg. BS		0.929**					
Wt. Avg. LTS			0.995**				
Wt. Avg. SLS				0.940**			
Wt. Avg. FF					0.992**		
Wt. Avg. FI						1.00**	
Wt. Avg. LGFVI							0.942**

*** Correlation is Significant at the 0.10 level (two-tail)*

Appendix IV: Rank of Municipal Based on Weighted Average FSCI for F/Y 2021/22

Rank	Municipal	Type	Location	LGFVI (AVG.)	LGFVI (Wt. Avg.)
1	Kaligandaki	Rural	Hill	200.00	205.20
2	Barpak Sulikot	Rural	Himalayan	183.00	187.90
3	Malika	Rural	Hill	184.00	185.80
4	Marsyangdi	Rural	Himalaya	159.70	181.40
5	Beni	Urban	Hill	170.40	180.60
6	Annapurna	Rural	Hill	170.90	179.50
7	Beshishahar	Urban	Hill	168.90	177.30
8	Jaljala	Rural	Hill	145.70	175.00
9	Biruwa	Rural	Hill	167.70	174.30
10	Kathekhola	Rural	Hill	158.90	168.40
11	Gorkha	Urban	Hill	164.90	167.10
12	Rhishing	Rural	Hill	159.50	165.70
13	Kusma	Urban	Hill	137.30	164.50
14	Sahid Lakhan	Rural	Hill	159.10	164.50
15	Kawaswoti	Rural	Tarai	164.50	163.50
15	Vyas	Urban	Hill	160.50	162.80
17	Biniyee Triveni	Rural	Tarai	154.40	161.30
18	Myagde	Rural	Hill	155.10	154.20
19	Waling	Urban	Hill	143.60	147.20
20	Nishikhola	Rural	Hill	147.10	146.40
21	Baglung	Urban	Hill	137.80	142.80
22	Hupsekot	Rural	Tarai	137.60	141.50
23	Gaidakot	Urban	Tarai	103.50	130.50
24	Pokhara	Metropolitan	Hill	101.30	104.60

(Source: Research's Calculation based on Audit Report of Sample Municipalities)