RATIO ANALYSIS: A TOOL FOR THE ANALYSIS OF UNIVERSITY FUND

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ABSTRACT

Universities need huge funds to provide higher education and to continue its activities in a smooth and systematic manner. UGC is the funding agency for universities and statutory body of the central government. So this paper deals with understanding the funding pattern of the central university and the various sources under which UGC provide financial assistance to the university and also to analyze the expenditure pattern of the university. Ratio analysis as a tool for analyzing the income and expenditure pattern is used under the three funding heads namely Non-Plan, Plan and Earmarked and Friedman Test is used to identify the most important source of fund to the university. From the test it is revealed that the important source of fund is the Plan fund.

Keywords: UGC, University, Ratio, Plan, Non-Plan, Earmarked, Friedman

INTRODUCTION

Universities plays a prominent role for higher education in India and all the important and major decisions are taken by the Central Government and implemented through University Grants Commission (UGC), which enables Universities to provide quality education. The role of Universities is not only to provide higher education but also involve themselves in research and development projects for increasing the existing body of knowledge. But in doing so, Universities are in need of huge funds to continue their activities and operations in smooth and systematic manner.

The UGC is the funding agency for the Universities, which is a statutory body of the central government. The funds are provided to UGC by Department of Higher Education through the Ministry of Human Resource Development (MHDR).

In case of Central Universities the entire financing is done by the central government and all central Universities become a nation's priority Universities in which students from all over the country enroll themselves. Government also sanctions some proportionate funding to state

Universities. But the number of Universities has increased tremendously, and there is pressure on government either to convert some Universities to central or to open more central Universities. The number of Universities at the time of independence funded by UGC was 20 which has increased to1015Universities/colleges/institutions in India till march 2017, out of which 360 are state Universities, 262 private Universities, 123 deemed Universities and 47 central Universities.

The numbers of central Universities are less as compared to other Universities but the major section of government fund move towards funding the Central Universities. Table 1show the total fund allocated to central Universities from the year 2007-08 to 2015-16

Table 1: showing funds released by UGC to Central Universities

Figs. In Lakhs

Year	Plan Fund	Non-Plan Fund
2007-08	63035	130452
2008-09	63558	174798
2009-10	97642	266972
2010-11	157700	261206
2011-12	101783	297436
2012-13	202919	313723
2013-14	178425	337690
2014-15	183567	352745
2015-16	152234	395949

Source: Annual Report UGC

From table 1 it is clear that UGC has released huge amount to Central Universities and from the year 2007-08 to 2015-16 shows the difference of Rs. 89199 lakhs under plan fund and Rs. 265497 lakhs under non-plan fund.

The entire management system fully depends on finance and its proper utilization is important. University is a source to produce highly qualified and skilled human resource which are absorbed by various corporate and organizations.

OBJECTIVE OF THE STUDY

1. To find out the various sources of funds of Tezpur University.
2. To study the expenditure pattern of Tezpur University.
3. To study the importance of different sources of fund of Tezpur University.

METHODOLOGY

The nature of study is analytical. The study is conducted by taking secondary data from the audited annual accounts of the Tezpur University from the year 2006 which is also taken as a base year for the study, because the researcher wants to study the changes of funds and to know the financial trend. Simple descriptive statistics and ratio analysis is used as analytical tool for analysis. The researcher purposively selected Tezpur University for the study.

Also to know the important source of university fund of Tezpur University, *"Friedman Test"* is used.

Categories of Fund Received By University

The University Grants Commission has been providing grants to Central and Deemed to be Universities, both under Plan (Development) and Non-Plan (Maintenance) Schemes/ Programmes while assistance to State Universities is being made available only under Plan (Development) Schemes/Programmes. General Plan (Development) Grant to Universities is being made available during XII Plan on the basis of the outlays determined and communicated to the Universities. The outlays shall be in operation for the period from 1st April, 2012 to 31st March, 2017.

Table 2: showing fund received by Tezpur University from all the Heads

Amt in Rs.

Year	Non Plan	Plan	Earmarked
2006-07	79,182,588	161,333,291	34,327,453
2007-08	95,295,739	183,588,741	25,646,992
2008-09	160,497,423	534,142,159	86,798,613
2009-10	262,478,763	875,856,110	326,616,462
2010-11	244,076,612	551,770,188	85,364,905
2011-12	293,168,748	530,266,848	221,880,151
2012-13	340,694,440	784,657,938	112,089,189
2013-14	440,867,642	204,546,390	209,496,773
2014-15	410,403,802	218,919,031	403,944,462
2015-16	722,006,861	461,797,484	293,705,728

The table 2 reveals that all the three heads fund i.e. Non-Plan, Plan and Earmarked has increased. The reason for increase of non-plan amount was increase in salaries, wages and establishment expenses. For reason for plan fund was that the university in under the process of infrastructure and facility development. At last the earmarked fund also increased because the number of projects was only 77 where as in the gap of 3 years the number of projects increased to more than 200. At the same time the number of workshops, seminars, scholarship etc. also increased simultaneously.

The sources of University fund can be categorized into two different heads such as external source and internal source of funds. External source of funds is one of the major sources of fund to Universities as 70% to & 75% of entire university funds is from the external source. Whereas internal source of funds is categorized under four sub-heads namely Academic Receipts, Income from Investment, Interest Earned and Other Income, which contributes to 10% to 15% of entire university fund. Out of which maximum fund is generated from academic receipts which is 6% as compared to the total grant received, followed by other income which is 5%.

Ratio analysis a tool

Though Universities are not aiming at profit, but they should be self-sufficient to run as there may cripple some challenges in future for fund procurement. So, to improve Universities productivity, proper analysis to income and expenditure of Universities should be done by applying the modern techniques of corporate accounting with suitable modification.

Ratio and its application is best described by Om Prakash *" the Latin word ratio stands for reason and indicates the relations or the proportion of one thing to another and accounting ratios have been amply developed to diagnose and study the effectiveness of organizations. Modern Management Science, in an endeavor to import objectivity and precision into the decision making process, has come to rely rather heavily on quantitative techniques, a joint family within which ratio analysis appears to be the most conveniently approachable member. However, for the most part, the exercise has been limited to the area of financial management."*

Considering the immense value of ratio analysis and the methods of accounting being uniform for Universities, the ratio analysis is taken as a measure to compare the financial aspects of the funds under different heads. The annual accounts provide information on four major heads i.e. Non-plan, Plan, Earmarked and Debts and Deposits a/c. Here an attempt is made to envelope a package of ratio which could indicate the comparative status of Universities. Absolute values cannot be compared because multifarious factors affect the absolute values. For example, a young university has a limited aspect in case of assets as compared to a university functioning from centuries. Therefore, with the help of ratio, the limitation of time and units are removed and hence it helps to make a reasonable comparison. A certain number of possible ratios are worked

out from the data relating to the annual accounts of Tezpur University from the year 2006-07. The following ratios will be presenting the profile of the financial accounts of Tezpur University:

Ratios of major heads of accounts

i. ***Ratios of receipts****: Receipts ratio will indicate the amount of fund received under each head as compared to total receipts.*

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Table 3: showing all the ratios of receipts

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Years	OB/TR	NPR/TR	PR/TR	ER/TR
2006-07	0.138	0.229	0.466	0.099
2007-08	0.21	0.154	0.296	0.041
2008-09	0.079	0.13	0.434	0.071
2009-10	0.091	0.119	0.397	0.148
2010-11	0.292	0.138	0.311	0.048
2011-12	0.135	0.174	0.314	0.131
2012-13	0.118	0.166	0.381	0.054
2013-14	0.205	0.282	0.131	0.134
2014-15	0.126	0.273	0.146	0.269
2015-16	0.153	0.365	0.234	0.149
OB Opening Balance, NPR Non Plan Receipts, PR Plan Receipts, ER Earmarked Receipts, TR Total Receipts				

From the ratios of receipts, it was found that university utilize up to 85% to 90% of the total funds and can adjust the opening balance up to 10% to 15 % every year to any other heads as and when required. The percentage of non-plan receipt between the year 2006-07 to 2012-13 lies between 11.9 %(0.119) 22.9 % (0.229) but from 2013-14 it showed an increased trend, the reason for such growth is that the amount of salaries, wages and administration expenses increase. The percentage of plan receipt was above 30 % (.30) throughout the study period, but in two years 2013-14 and 2014-15 the percentage is below 15% (.15) as the university has invested 38% (.38) in the previous year 2012-13 and the major work was under work in progress. And the earmarked funds are being realized in a phase-wise basis and is utilized and reduced in the subsequent years. A rise is also evident in the year 2014-15 to the highest level. This is due to the major new projects that were taken up by the University during the aforesaid year.

ii. **Ratios of payments**: *Payment ratio will indicate the amount of expenditure incurred under each head as compared to total payments.*

Table 4: showing all the ratios of payments

Years	CB/TP	NPP/TP	PP/TP	EP/TP
2006-07	0.376	0.189	0.415	0.043
2007-08	0.157	0.152	0.335	0.061
2008-09	0.162	0.136	0.406	0.033
2009-10	0.235	0.116	0.334	0.045
2010-11	0.128	0.113	0.281	0.118
2011-12	0.144	0.17	0.274	0.169
2012-13	0.156	0.164	0.382	0.113
2013-14	0.122	0.211	0.45	0.215
2014-15	0.201	0.328	0.225	0.16
2015-16	0.175	0.338	0.14	0.126
CB Closing Balance, NPP Non Plan Payment, PP Plan Payment, EP Earmarked Payment, TP Total Payment				

From ratios of payment it was found that approximately 15% of the total fund remains as closing balance every year. Under Non-plan payment the ratio shows downward trend for first 5 years and then upward trend for the remaining years, clearly depicting under utilization of funds in the first 5 years For Plan payment the trend is uniform and showing almost 28% to 41% utilization of funds from 2006-07 to 2013-14 and 22% to 14 % in the last two years. And lastly earmarked payments shows an upward trend in payment from 4% in the year 2006-07 to 21 % in the year 2013-14 and declining in the last two years.

iii. **Interlink ratio of receipts and payments**: *This ratio will help to know the inter-link between the total receipts and total payments.*

Table 5: showing all interlinked ratios

Years	CB/OB	NPP/NPR	PP/PR	EP/ER
2006-07	2.719	0.827	0.89	0.437
2007-08	0.75	0.991	1.132	1.477
2008-09	2.051	0.416	0.934	0.466
2009-10	2.591	0.974	0.842	0.301
2010-11	0.439	0.817	0.901	2.455
2011-12	1.066	0.977	0.874	1.283

2012-13	1.324	0.993	1.002	2.082
2013-14	0.592	0.746	3.434	1.599
2014-15	1.588	1.201	1.543	0.597
2015-16	1.146	0.925	0.6	0.847

The ratio of payments to receipts signifies whether receipts and payments are equal; or to what extent there is a deficiency and what those major heads are. Wherever the ratio is below 1, the receipts are greater than the payments and wherever the ratio is above 1, the payments are greater than receipts which indicate that the funds are either being utilized from opening balance or from other Heads. Under Non Plan Head, Funds were underutilized in the year 2008-09, whereas in the year 2014-15 the ratio is above 1 indicating over utilization of funds and in all the other years fund utilization was almost near to 1. Under Plan Head, four years shows ratio above 1 indicating over utilization of funds and in other years fund utilization was almost near to 1. And for Earmarked Fund Head for 5 different years out of 10, the fund utilization was having a ratio above 1 which indicates over-utilization of fund whereas in 2015-16 it was showing 87.4% utilization of funds and in the year 2006-07, 2008-09, 2009-10 and 2014-15 the fund utilization was below 60%.

Friedman Test

To find out the important source of funds to Tezpur University, Friedman test is applied.

Descriptive Statistics			
	N	Mean	Std. Deviation
NONPLAN	10	304867261.8000	190393944.03338
PLAN	10	450687818.0000	255019164.69615
EARMARKED	10	179987072.8000	131021637.98698

Table 6: showing Analysis of Friedman test

Funds	Mean Rank	Rank
NON-PLAN	2.20	2
PLAN	2.50	1
EARMARKED	1.30	3

The results of Friedman test discloses that the most important source of fund for Tezpur university is Plan fund, followed by Non-Plan and Earmarked, on the basis of the data where N=10 i.e. 10 years starting from 2006-07 to 2015-16.

To find out the important source of funds under the sub categories of receipts funds

Descriptive Statistics			
	N	Mean	Std. Deviation
INVESTMENT	10	9927891.7000	5648782.85331
INTEREST EARNED	10	8689713.2000	5135439.76581
OTHER INCOME	10	29431521.5000	23189310.63419
ACADEMIC RECEIPTS	10	46844784.8000	34900598.94286

Table 7: Showing Friedman Test

Internal Source of Funds	Mean Rank	RANK
INVESTMENT	1.90	3
INTEREST EARNED	1.40	4
OTHER INCOME	2.80	2
ACADEMIC RECEIPTS	3.90	1

The results of Friedman Rank test on internal source of fund for Tezpur university discloses that the important source is Academic Receipts, followed by other income, then Investment and lastly interest earned, on the basis of the data where N=10 i.e. 10 years starting from 2006-07 to 2015-16.

CONCLUSION

As the financial management is an important aspect for each and every organization, the same is applied on Universities as well. The different sources of university funds is categorized into two different parts namely external source which comes from different organization such as UGC, AICTE, DST, CSIR, etc. and internal source like academic receipts, interest earned, investment and other sources. And accordingly the expenditure of Tezpur University is incurred in the ratio of 3:3:1:1 under Plan, Non-Plan, Earmarked and Closing balance respectively.

Tezpur University being young in nature results higher investment under Plan Funds for infrastructure and facility development. During the course of time Non-Plan Funds increased due

to increase in Establishment Expenses. Earmarked funds are also moving upwards as the number of projects was also constantly increased.

Ratio Analysis becomes an important tool as it indicates that the funds are not properly utilized throughout the decade. Administrators should try their best to utilize the funds in the best possible manner. Tezpur University is not self-sufficient in generating funds from internal source, rather it has to depend on external funding and hence it becomes an important source of fund to the University.

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