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Editorial Article

History and Heritage of Indian Tax System: A Journey from 1860 to 1960

Dr Priyabrata Panda
Assistant Professor and Head, School of Commerce, Gangadhar Meher University, Amruta Vihar, Sambalpur, Odisha, India

1. INTRODUCTION

The research work deals with the analysis of history of income tax department since 1860 to 1960. The reforms which are undertaken in this period are studied with possible impacts. Efforts are made to dig out the philosophy behind these reforms. British India Government stressed more revenue generation than economic development as their prime strategy for tax reform. They experimented the tax system of India with different reforms like high tax rates less savings and capital formation. Their policy created inequality in the society which widened the gap between the rich and the poor. They referred Manu's tax policy to impose tax on citizens. As a result, Income Tax Act 1860 came into force. The important features are discussed below.

2. INCOME TAX ACT OF 1860

Following are the features of first Income Tax Act of India.

1. The Act was divided into 21 parts and 259 sections.
2. Income was classified into four schedules as follows
   - i) Income from land property.
   - ii) Income from profession and trade.
   - iii) Income from securities, annuities and trade.
   - iv) Income from salaries and pensions.
3. Exemption limit for the general public, military and police and naval and maritime officers was Rs. 200/-, Rs 4980/-, Rs 2100/- respectively. Agricultural income was subject to tax.
4. The tax rate was 2% for income between Rs 200/- to Rs 449/- and 4% for more than Rs 499.

5. Every tax payer was liable to submit return. Land revenue officers administered the tax collection. Financial year starts from 1st August, 1860.

Government generated Rs 1.5 crores from this process. Bengal was the highest contributor to the total income. The Act was lapsed in 1865 and was reintroduced in 1867 in form of a Licence Tax. This tax was charged on trades and profession on the basis of annual income. Tax deduction from salaries from Government employees had been started. Certificate Tax was introduced in 1868 which was similar to Licence Tax. Government excluded Agricultural Income from both Licence Tax and Certificate Tax.

In 1869 Government tried to give a complete form to Certificate Tax. As a result, general income tax came including agricultural income to its purview. In 1873, this Income Tax was abolished.

The great famine of 1876-78 compelled British Government to revive Income Tax Act. Government charged license tax on traders and levied cess on land from the year 1877. For the first time local acts were introduced for better tax administrations. Calcutta (Kolkata), Bombay (Mumbai) and Madras (Chennai) witnessed local acts. Various amendments were made to this Act till 1886.

Income tax system of India from the period 1860 to 1886 was used as a laboratory by Britishers where Acts are introduced and abolished in experimental basis. Like License Tax was introduced in 1867 and abandoned in 1868, Certificate Tax was introduced in 1868 and abolished in 1869, general Income Tax was introduced in 1869 and abolished in the year 1873, and a license tax was framed in the year 1878. A comprehensive Income Tax Act was introduced in 1886 by abolishing all other previous Acts.

Todhunter Committee (1993) specifically mentioned that the period of twenty-six years from 1860 to 1886 was one of continuous trial and error with different schemes of direct taxation, not less than twenty-four Acts being passed.

3. INCOME TAX ACT OF 1886

The Income Tax Act of 1886 was the outcome of two important incidents which was Anglo-Russia war and annexure of upper Burma to British frontier. These two incidents required huge financial resource for British Government. To meet this financial need, the Governor General Lord Dufferin introduced Income Tax Act 1886 which is a combination of License Tax and Income Tax.

Important features of Income Tax Act 1886.

1. It excluded agricultural income from the ambit of Income Tax.
2. For the first time income was divided into four categories i.e., income from salaries and pensions, profits of companies, income from securities and other sources.

3. Income from other sources includes income from house property.
4. Tax was levied on each source of income not on gross total income.
5. Salaries, annuities and pensions are taxable at the rate of five pies in a rupee if income is Rs 2000 or more. A rate of four pies in a rupee was taxable if income lies between Rs 500-1999. Interest on securities was also taxable on this rate.
6. Companies were taxable at a uniform rate of 5 pies in a rupee on their profits.
7. Collector was the chief officer in charge of revenue administration of the districts and deputy collector was the assessor under income tax act.
8. Rs 13547350 were generated in the first year and Bengal was the highest contributor followed by Bombay.

4. THE AMENDMENTS MADE FROM 1987 TO 1918

In 1903 the minimum tax rate was raised to Rs 1000. Tax rates are increased over the year. Again, a war trussed British Government to change the income tax law. Britishers were in the extreme need of fund to finance the European war which broke out in 1914. They made complex changes in 1886 Act which was even difficult to administer. The 1886 Act found a major amendment in 1916 when eight different tax rates were prescribed for the different brackets of Income.

As the 1857 revolt created the income tax system of India, the first world war brought high rates of tax called Super Tax to our country in 1917. In the same year it was made mandatory for the assesses to furnish a return (except of a company) with an income of Rs 2000 or more. The total number of tax payers in 1914-15 was 332000 and only 37000 assesses were in tax bracket of more than Rs 5000.

The super tax was introduced in 1917 to neutralise the resource shortage for war effect. It was levied on individuals, companies on undistributed profits, profits of firms and joint families. The rate of super tax continued till 1920.

5. THE 1918 ACT

In the evolution process, Act VII of 1918 was introduced to revamp the entire law. The ridiculous concept of 'all income' was introduced with the insert of Sec 3 which defines as if it accrues or arises or is received in British India from whatever source it derived. The previous year concept was abolished and tax was levied on the income of the assessment year. The term assesses for the first time took HUF and Firm to its purview. Sec 3(2) was re-cast to contain ten exemptions including agricultural income. Taxable income was expanded to six heads viz. Income from salary, income derived from house property (which was in other sources), interest on securities, income derived from business, income from professional earning and income derived from other sources.

The Act-1922 was enacted and The Act -1918 was abolished with the recommendations of All India Tax Committee, appointed in 1921.

6. THE 1922 ACT

The Indian Income Tax Act XI of 1922 came to force with some crucial changes. The administration of income tax shifted to central Government from provincial Government. The rates of tax were to be adjudicated by the Finance Acts. The effect of previous year was reintroduced. Super tax was incorporated as an additional duty of income tax. The assesses were Individual, HUF, Firm, and other Association of Individual. The act allowed set off of loss under one head of income with profit of other head (s) in same assessment year. The Act also granted relief in respect of discontinuous of business which had been assessed under the Act 1918.

This Act undergone twenty amendments up to 1939. The act had also loopholes in terms of tax administration, tax avoidance and evasion as a result of increasing tax rates. Thus, the Income Tax Act was proposed.

The increase tax rates over the year poured the British Government revenue. The chart below could reveal the increased collection of tax revenue over the year.

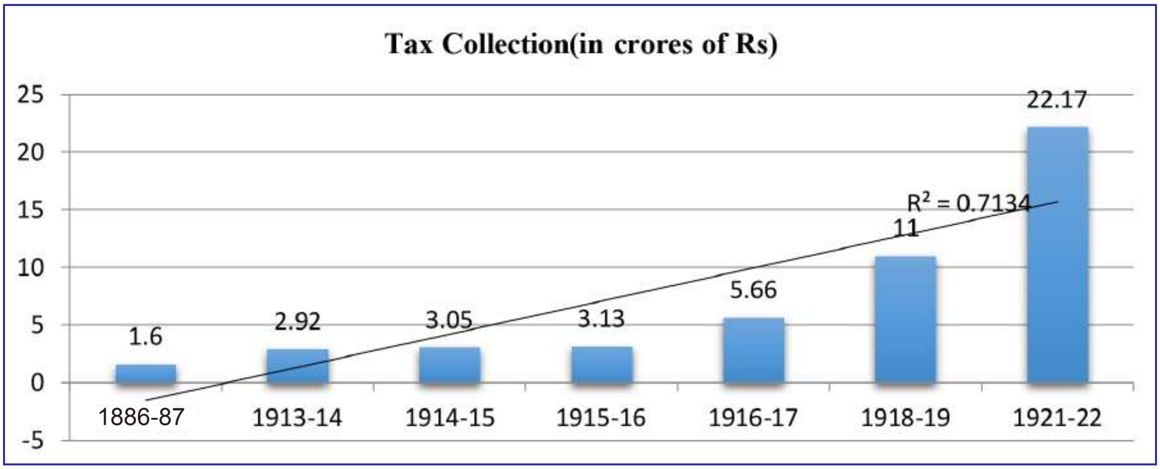

Figure 1: Tax collection over the year from 1886-87 to 1921-22

Source: Hundred years of Income Tax Department: Book published by IT Dept.

The above chart depicts a steady growth of tax collection over the year. In 1886-87 the amount of tax collection was Rs 1.6 crores when 1921-22 the collection was Rs 22.7 crores. This period of twenty-five years was experienced with highly enhanced tax collections. A constant and marginal increase of taxation revenue took place from 1986-87 to 1915-16.

The year 1918-19 witnessed 95% increase of tax collection from 1916-17. The tax collection of 1918-19 was Rs 11 crores and increased to Rs 22.17 crores in 1921-22. This was a record growth of tax collection, increased by 101% within four years from 1919 to 1922. It is simply impossible in today's context.

The record increase of tax revenue for British Government was due to constant and continuous increase of tax rates which can be observed from the following table.

Table 1: Charge of Income Tax during 1886-1922 (Pies in rupee)

Year & Rate/ Income	*1886*	*1903*	*1916*	*1919*	*1921*	*1922*
500-999	4	--	--	--	--	--
1000-1999	4	4	4	--	--	--
2000-4999	5	5	5	5	5	5
5000-9999	5	5	6	6	6	6
10000-19999	5	5	9	9	9	9
20000-24999	5	5	9	9	12	12
25000-29999	5	5	12	12	12	12
30000-39999	5	5	12	12	14	15
40000- & above	5	5	12	12	16	18

Source: Hundred years of Income Tax Department: Book published by IT Dept.

In 1886, 4 pies in a rupee had been charged for the income slab Rs 500-999. Same rate was for Rs 1000-1999. 5 pies in a rupee had been charged for the income category Rs 2000 and above. In 1903, minimum exempted limit was RS 1000. The rate of 4 pies in a rupee was levied for the income category Rs 1000-1999 and 5 pies in a rupee for income more than 1999. In the year 1916 minimum exemption limit were same Rs 1000 and 5 pies in a rupee were levied for income group Rs 2000-4999. At a rate of 6 pies for Rs 5000-9999, 9 pies for 10000-24999 and 12 pies for anything more than 24999 was chargeable.

In 1919, minimum exemption limit was doubled to Rs 2000 as compare to the year 1916. 5 pies in a rupee was chargeable for the income group Rs 2000-4999, 6 pies for 5000-9999, 9 pies for Rs 10000-19999 and 12 pies for anything more than Rs 29999. In 1921, minimum untaxed amount was Rs 2000 which was same from the year 1919. The rate of 5, 6 and 9 pies were same from 1919 to 1921. Rate of 12 pies for Rs 20000-29999 was chargeable. 14 pies in a rupee were introduced for the income bracket of Rs 29999- 40000 and 16 pie in a rupee for the income category Rs 40000 and more. In 1922, minimum exemption limit, rate of 5, 6, 9 and 12 pie in a rupee was same as 1921. For the income slab Rs 29999- 40000, 15 pies in a rupee were levied and 18 pies in a rupee for the income category Rs 40000 or more. Interesting inference can be drawn from the above analysis. The rates were all most same between the years 1886 to 1903. The year 1916 saw three different rates which were 6, 9 and 12 pies in a rupee. No significant changes in tax rates have been occurred between the years 1916 to 1919. The rates were same except the exemption limit was increased from Rs 500 to Rs 1999 from 1916 to 1919. This exemption limit was persisted from 1919 to 1921. The income group for the rate of 5, 6, 9 and 12 pies remained same for this period as well. A rate of 14 pies and 16 pies in a rupee was charged for income group Rs 29999-40000 and Rs 40000 and more respectively. The rates in 1922 were same as 1921. Only 14 and 16 pies were changed to 15 and 18 pies for the highest income category.

The above analysis can give a bird's eye view on the constant increase of tax rates by British (India) Government from the period 1886 to 1922.

The table below can show the charge of super tax in nutshell during 1917-1922.

Table 2: Charge of Super tax during 1917-1922 (Pies in rupee)

Income	*1917*	*1921*	*1922*
First Rs 50000	--	--	--
Over Rs 50000	12	12	12
100000-150000	18	18	18
150000-200000	24	24	24
200000-250000	30	30	30
250000-300000	36	36	36
300000-350000	36	42	42
350000-400000	36	48	48
400000-450000	36	48	60
450000-500000	36	48	66
500000 and more	36	48	72

Source: Hundred years of Income Tax Department: Book published by IT Dept

The financial strength of British Government had been stuck out by the get going of First World War. The government introduced super tax for highest income group to mitigate the grievous financial problem in 1917. The rate of 12 pies in rupee for income more than Rs 50000 was imposed in the initial year. The rate of 18, 24 and 30 pies was levied for every addition of Rs 50000. 36 pies in a rupee were charged for income more than Rs 250000 in the year of implementation.

The rates of super tax of 1921 were same as 1917 up to income level Rs 300000 from the income Rs 50000 with addition of every Rs 50000 with rates of 12, 18, 24, 30 and 36 pies. 42

pies were applicable for income range Rs 300000-350000 and 48 pies was charged on income more than Rs 350000 or more.

The rates of super tax of 1922 were same as 1921 up to income level Rs 300000 with rates of 12, 18, 24, 30, 36 and 42 pies in a rupee. 48 pies were applicable for income range Rs 3500000-400000 and 60 pies was charged on income range between Rs 400000 to Rs 450000. 66 pies in a rupee were imposed on the income range between Rs 450000 to Rs 500000. For income Rs 500000 or more a highest rate of super tax of 72 pies in a rupee was chargeable. The super tax generated maximum revenue for the government.

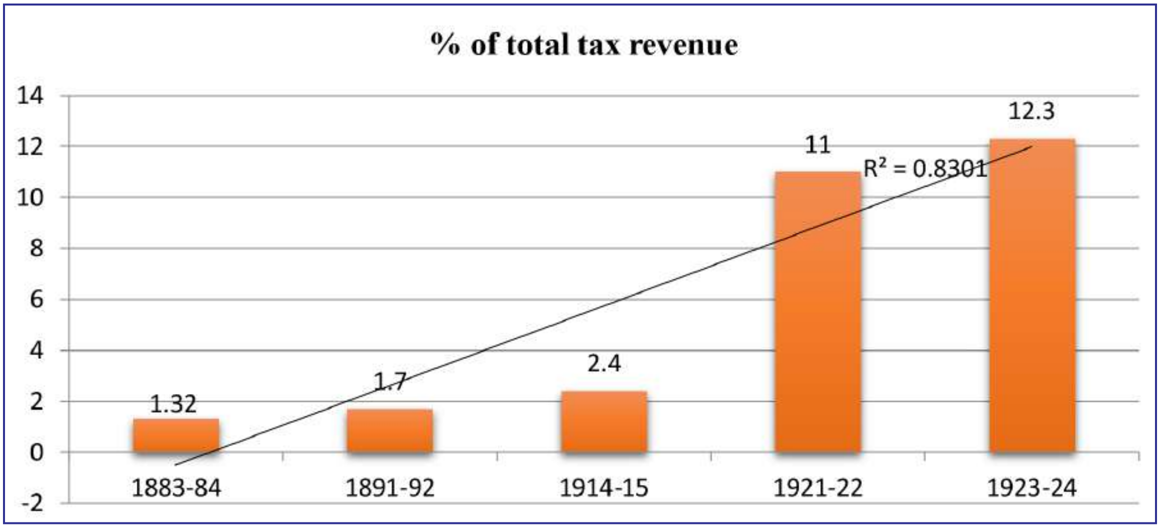

Figure 2: Contribution of Income Tax to Total Tax Revenue from 1883-84 to 1923 to 24

Source: Hundred years of Income Tax Department: Book published by IT Dept.

The share of income tax to total government revenue was negligible in the initial years. Income tax only contributed 1. 32% to total tax revenue in 1883-84. The share was marginally increased to 1.7% 1891-92. The contribution was slightly stepped up to 2.4% in the year 1914-15. But the share of income tax to total tax revenue enhanced to 11% in the year 1921-22. The year 192-24 was also experienced the same as compare to the earlier periods. R square value is .83 which is quite satisfactory.

7. IMPORTANT EVENTS FROM 1939 TO 1947

The above table reveals various important events which affect income tax structure of India largely. Enactment of Income Tax Act 1939 is a major policy reform in direct tax regime in pre independence period

Table 3: Important Events Affecting Income Tax Department from 1939 to 1947

Year	Events
1939	• Enactment of 1939 Act. • Appellate functions separated from inspecting functions. • A class of officers known as AACs came into existence. • Jurisdiction of Commissioners of Income tax extended to certain classes of cases and a central charge was created at Bombay.
1940	• Directorate of Inspection (Income-tax) came into being. • Excess Profits Tax introduced w.e.f. 1-9-1939.
1941	• Income-tax Appellate Tribunal came into existence. • Central charge created at Calcutta.
1943	• Special Investigation Branches set up.
1946	• A few officers of Class-I directly recruited. • Demonetisation of high denomination notes made. • Excess Profits Tax Act repealed
1947	• Business Profits Tax enacted (for the period 1-4-1946 to 31-3-1949).

Source: https://www.incometaxindia.gov.in/pages/about-us/history-of-direct-taxation.aspx

The prime feature of such Act is discussed below.

The income tax Act 1939 was the result of the recommendations of Aiyer's committee report 1936. The committee recommended the concept of resident, non-resident, resident but not ordinary resident. These connotations were the main feature of this Act. An inclusive definition on "income" came out with expanding its scope and including more incomes in its purview. Businesses were granted to carry forward its loss up to six years unlike in 1922 Act. The present slab system of Income Tax was the up-spring of 1939 Act. The Act also prescribed various provisions to check tax avoidance.

In addition, Income tax Act 1939 segregates appellate functions from administrative functions of income tax commissioners by creating a different post called appellate assistant commissioner. Thus, appellate tribunal starts its operation from 1941. Income tax act 1939 also created a central charge in Bombay to control and regulate entire work of income tax department across the country as a result Directorate of Inspection (Income Tax) came to existence 1940.

Introduction of Excess Profits Tax and Business Profits Tax was situational as World War II created opportunity to earn unusual profit by businessman during 1940 to 1947. Both the tax was repealed later in 1946 and 1949.

Another important economic reform was demonetisation of higher denomination notes in 1946. Notes of Rs 500, Rs 1000, Rs 10,000 were ceased to be legal tender. On January 1946 Government announced demonetisation of such notes from the very next day.

"Soon after the war, while Government was giving attention to ways and means of averting the expected slump, thought was also given to check black market operations and tax evasion, which were known to have occurred on a considerable scale. Following the action in several foreign countries, including France, Belgium and the U.K., the Government of India decided on demonetisation of high denomination notes, in January 1946" (https://mostlyeconomics.wordpress.com)

The concept of advance tax was introduced in 1944. The scheme of provisional assessment was brought in for the first time in 1948 and capital gain in 1946. This phase of Income Tax faced an enactment like Taxation of Income Investigation Commission Act, 1947. This phase had also been experienced with the setup of Investigation Commission 1947.

8. CONCLUSION

The 100 years of tax reform from 1860 to 1960 witnessed trial and error method. British India government used Indian economy as a laboratory house. Lots of experiments were undertaken. At the same time so many tax concepts were also raised like different heads of income, advance tax, exemption of agricultural income etc. which have implication in the present context also. The first demonetisation was declared in 1946 which ceased the legal status of Rs 500, Rs 1000, Rs 10,000 notes. India got a compressive direct tax regime with the emergence of Income Tax Act 1961.

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Agricultural Finance: Comparison among select Banks with special Reference to Scheduled and Non-Scheduled Districts of Odisha

Pragyan Parimita Nayak[1], Kiranbala Swain[2] and Kashinath Pati[3]

[1]Ph. D. Scholar in Economics, Maharaja Sriram Chandra Bhanja Deo University, Baripada, Odisha, India.
E-mail: ppnayak100@gmail.com
[2]M.Phil Scholar in Economics, Maharaja Sriram Chandra Bhanja Deo University, Baripada,Odisha, India.
E-mail: kiranbalaswain111@gmail.com
[3]Assistant Professor of Commerce, Kalinga College of Commerce, Bhubaneswar, Odisha.
E-mail: knpati970@gmail.com

Abstract: Agriculture continues to be the backbone of the Indian economy. Nearly 58 percent of the rural households depend upon agriculture for their livelihood, but this sector continues to be subsistence-oriented and susceptible to natural shocks such as droughts and floods. Finance in agriculture is a major concern for small and marginal farmers in India. However, lack of availability, as well as the inaccessibility of adequate and timely financial resources, is an obstacle for many farmers which make them unable to purchase agricultural inputs and adopt modern technology. What is more, the socio-economic development approaching a slow path for the agricultural farmers in particular and the Indian economy in general. Commercial banks, Regional Rural Banks (RRB), and cooperative banks are the main institutional agencies providing finance to agriculture as a priority sector. This study attempts to assess the progress of agricultural finance by select banks in Odisha and in India. It also compares agricultural credit flow in scheduled and non-scheduled districts of Odisha. The study reveals that there is an uneven growth of the institutional credit flow to agriculture in Odisha and in India. It is also found that there is an existence of disparity in the availability of agricultural credit flow in scheduled and non- scheduled districts of Odisha. Statistical tools like averages, compound annual growth rate (CAGR), coefficient of variation (CV), semi-log model, and analysis of variance (ANOVA) have been used to analyse the secondary data compiled from various authenticated sources.

Keywords: Agricultural Finance, Scheduled and Non-Scheduled Districts

JEL Codes: Q_1, $Q_{140,}$ A11

1. INTRODUCTION

The importance of agriculture is attributed in India to the fact that its performance in output is strong. About 54.6 per cent of the total workforce in the country is still engaged in agricultural and allied sector activities which accounts for approximately 17.8 per cent of the country's Gross Value Added (GVA) for the year 2019-20 at current prices(Government of India, January, 2021).For many developing Countries, agriculture sector plays an important role in their economy. In India agriculture contributes 21 percent in GDP and near about two-third of the population is dependent on it (Singh & Negi, 2020). India has traditionally been an agricultural country and even today continues to be so in-spite of efforts over the last sixty years for building up sound industrial base (Thitte, 2012). Agriculture is treated as an occupation and in turn stands as backbone of Indian economy. Development of this sector is an emerging need for agro-based socio-economic development of majority sections of the country India. Though agriculture in India occupies key importance as a primary source of livelihood and a substantial contribution to India's gross domestic product (GDP), it suffers from a number of difficulties. In comparison to other countries India's agricultural sector is still backward. It fails to provide optimum production of the farm land. Basically, landholding pattern, irrigation facilities, marketing system, agricultural inputs, lack of finance has kept them in back foot point (Mohanty, 2017). Yet access to agricultural finance is often a hurdle. Lack of access to finance stops many farmers from adopting new technology and improving their efficiency (Chahal, 2017). Credit is essential for any activity and agriculture is no exception to this (Patro & Nanda, 2014-15).

The importance of agriculture is also realised in the state of Odisha. The performance of agriculture determines food and nutrition security of the population and is important for reducing poverty and achieving inclusive growth (Patra, 2014). Agriculture and allied sector are the main stay of the economy with about 1/5th share in gross state domestic product (GSDP) and about 50 per cent share in employment (Government of Odisha, February 2021). The economy of Odisha has been lagging behind the national economy by several decades (Panda, 2008). The growth rate of gross state domestic product (GSDP) of Odisha is lower than national average. Although multiple factors are remained behind this slow progress of GSDP of the state Odisha, low growth rate of agriculture is one of these. Agricultural sector in Odisha is characterised with numerous hindrances like traditional methods of cultivation, use of traditional equipment, unskilled man power etc. in one hand and on the other side lack in capital or finance for investment on agrarian packages are responsible for low production of the agricultural land in Odisha.

Agricultural finance is the study of financing and liquidity services credit provides to farm borrowers. It is also considered as the study of those financial intermediaries who provide loan funds to agriculture and the financial markets in which these intermediaries obtain their loanable funds (Mishra & Mohapatra, 2017).Formal and informal are two sources of agricultural finance in India. Formal institutions are cooperative banks, commercial banks, regional rural banks, NBFCs etc. Whereas informal sources include moneylender, merchants, relatives, and friends, etc. The formal institutions are very much strict on their lending principles (Mohanty, 2017). The first step for institutionalization has begun with the cooperative societies act in

1904 in India. The Reserve Bank of India Act, 1934 envisaged a special developmental role for the Reserve Bank in the sphere of agricultural credit with responsibility in particular, for financing seasonal operations and the marketing of crops (Chakrabarty, 2003). Although the agriculture finance commenced in the earlier, it has not yet reached its pinnacle even in the 21st era. (Siddarth & Hosmani, 2020).

2. LITERATURE REVIEW

Kumar et al. (2021) have examined the pattern of credit among agricultural households in Eastern India to identify the correlates of their access to institutional credit for policy imperatives. The study reveals that access to credit is strongly associated with the socioeconomic and demographic characteristics of agricultural households. However, about half of the farmers in the eastern states of India lack access to institutional credit despite the government's attempts to include them in the ambit of formal financial services. Ray (2019) has studied the challenges and changes in the Indian rural credit market in the post-independence period. It is found that volume and number of households indebted, has increased substantially. However, the sharp rise in outstanding debt is a matter of concern. The share of credit from institutional agencies has seen a continuous decline post liberalisation period but the non-institutional agencies, continue to be the most preferred sources of credit owing to their flexible nature of operation. Moreover, rise in credit usage for non-income generating activities amongst poor households is another important concern. Biswal, Mishra, & Mahala (2019) have discussed a causal relationship between availability of banking services and agricultural productivity of rice in the state of Odisha. It was found that availability of banking services does not have any significant impact on rice productivity in Odisha. Mallick (2018) has examined the beneficiaries of commercial banks on agricultural credit and to access the impact for bank finances and the borrower farmers. The study reveals pattern of financing by commercial banks to agricultural sectors and opines that banking system is still hesitant in various ground to provide agricultural credit to small and marginal farmers. Makar, Ghosh, & Nyekha (2017) have investigated institutional barriers, which appear unique in character and dimension, towards extending agricultural finance to tribal hill people of Nagaland. This paper finds that in tribal hill areas in North-eastern Region are plagued with some institutional barriers which stand in the path of their achieving desired economic growth. Panda (2017) has examined the trend and pattern of the flow of institutional credit to agriculture in the state Odisha along with the growth of the state economy and agricultural sector in recent years. The study reveals that despite improvement in the flow of credit to agriculture, the state suffers from lower per hectare credit compared to all India average. Besides, there exists high degree of regional and size-class inequality in the distribution of agricultural credit in the state. However, the state agriculture has shown signs of better growth in recent years. Among the institutions, the Co-operatives are found accessible by the small farmers and an improvement in operational efficiency of the Primary Agricultural Credit Co-operative Societies (PACS) by reduction in inter-district disparity in terms of area, population, and membership coverage. Swamy & Dharani (2016) have analysed the agricultural value chain (AVC) financing approaches and tools in India. This study presents a proper understanding of the different case studies of Indian AVC financing models and related instruments. The authors observe that rather than investing in one component of the chain, the financial institution can grow expertise in the chain, share this knowledge and provide financing to support services. This not only benefits clients, but also expands lending opportunities while lowering the risks. Gashayie & Singh (2015) has identified constraints that keep the financial sector from serving agriculture effectively in developing countries and Ethiopia in particular. In spite of government programmes undertaken over the years, supply and demand for financial services continue to be mismatched, both in terms of the types and the volume of services. The study suggests that to alleviate these constraints successful agricultural finance innovation is necessary in each developing country. Barot & Patel (2015) this paper examines the scope to strengthen agriculture finance system for the comprehensive growth of agriculture, food security and rural development in India. The study reveals that; though the institutional credit in India to agriculture sector is increased in quantity, serious efforts are required to provide it to the right kind of people, at right time, on right places and in right quantity; which boost Indian agriculture sector in a right way. Mishra (2014) has examined the scenario of rural credit system in Dasarathpur Block of Jajpur District of the state of Odisha. It approaches to assess the impacts and achievements of the selected credit agencies (co-operatives, commercial Banks and RRB's) in the agricultural sector. The study concludes that informal agencies in the rural credit has significantly declined but not completely eliminated, moreover inter-regional disparities in the flow of agricultural credit depends upon the infrastructural facilities, approaches and attitudes of financing institutions towards less development regions. Mathur & Kalra (2008) have viewed that despite the significant strides achieved in terms of spread, network and outreach of rural financial institutions, the quantum of flow of financial resources to agriculture continues to be inadequate. Jugale (1991) has critically analysed the agricultural finance system and to review theories of agricultural finance. Cooperative village banks (CVB) are suggested as a means of restructuring Primary Agricultural Cooperative Societies in rural areas in order to improve the functioning of the agricultural credit requirements of rural India.

3. OBJECTIVES OF THE STUDY

- To examine the progress of agricultural finance by select banks in Odisha and in India.
- To assess availability of crop loans in scheduled and non-scheduled districts of Odisha.
- To compare the trend of agricultural credit flow in Odisha with that of India.

4. DATA SOURCES AND METHODOLOGY

The paper is based on the secondary data which are compiled from diverse sources like Agriculture Statistics at a glance (2008), Department of Agriculture and Cooperation, Ministry of Agriculture, Government of India; reports on currency and finance, RBI, various annual reports of National Bank for Agriculture and Rural Development (NABARD) and Economic survey of Government of India. Statistical tools like arithmetic mean, coefficient of variation (CV), analysis of variance (ANOVA), t- test, compound annual growth rate (CAGR) using Semi-log model have been used to analyse the secondary data. Growth rate analysis of distribution of agricultural credit over the period in Odisha state and in India is measured by using CAGR through semi-log model. Compound annual growth rate (CAGR) is estimated as(Seedari, Sethy, Kumar, & Modem, 2016):

$$Y_t=AB_t$$

After log transformation the function can be written as:

$$\text{Log } Y_t = \text{Log } A + t^* \text{ Log } B$$

where, Y_t = Amount of credit issued in t^{th} period,

B = (1+r), r = Compound growth rate of Y,

A = Intercept and

t = Time in years

Compound annual growth rate (CAGR) was estimated as:

$$\text{CAGR } (\%) = \{\text{Antilog } (\log B) - 1\}^* \; 100$$

In order to examine the status of agricultural finance the 30 districts of the state Odisha are divided into two categories on the basis of STs population: (i) Scheduled Districts and (ii) Non-Scheduled Districts. Scheduled districts are Gajapathi, Koraput, Kandhamal, Malkangiri, Mayurbhanj, Nabarangpur, Rayagada and Sundargarh and non-scheduled districts are rest of the districts of Odisha. In both the cases. agricultural finance of commercial banks, regional rural banks of Odisha and India have and co-operative banks has been taken for analysis.

5. ANALYSIS AND DISCUSSIONS

5.1 Status of Agricultural Finance in India

Table 1: Agricultural Credit Advance by Different Banks from 1998 to 2019 in India (Rs in Crores)

Parameters	*Commercial Bank*	*Regional Rural Bank*	*Co-operative Bank*	*Total*
Average	2,13,648	49,399	1,76,356	4,39,403
SD	276195.27	49118.32	206757.43	391890.85
CV	129.28	99.43	117.24	89.187
CAGR	0.202	0.213	0.113	0179
CAGR%	20.2	21.3	11.3	17.9

Source: Authors' Own Compilation

The table 1 depicts the issue of agricultural credit by commercial banks, regional rural banks and cooperative banks during 1998-99 to 2018-19 in India. It is observed that compound annual growth rate is higher in RRB (21.3 percent) followed by Commercial Banks (20.2 percent) and Co-operative Banks (11.3 percent). On the contrary Commercial Banks occupy highest position in average amount (Rs. 2,13,648 crore) of sanctioned loan to agricultural sector followed by Co-operative Banks (Rs. 1,76,356 crore) and Regional Rural Bank (Rs. 49,399 crore). It is also examined that more instability is experienced by commercial banks providing agricultural credit with CV equals to 129.28 and more consistency is found in case of Regional Rural Banks (CV i.e., 99.43).

Table 2: Comparison of Agricultural Credit Advanced (crore of rupees) by Commercial Banks, RRB and Cooperative Banks during 1998-99 to 2018-19 in India

Source of Variation	SS	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	311405893103.75	2.00	155702946551.87	3.85	0.03	3.15
Within Groups	2428901489759.52	60.00	40481691495.99			
Total	2740307382863.27	62.00				

Source: Authors' Own Compilation

It observed from the table 2 is that p value is less than significance level (0.05). Therefore, the null hypothesis is rejected. It describes that there are significant differences between the Commercial Banks, Co-operative Banks, and Regional Rural Banks in average lending of agricultural credit in India. As discussed in table 1, commercial banks are the major player of agricultural finance in comparison to other banks under study.

5.2 Agricultural Finance by Select Banks in Odisha

Table 3: Agricultural Credit Advance by Different Banks from 2001-02 to 2015-16 in India

(Rs in Crores)

Statistics	*Commercial Banks (including RRB)*	*Co-operative Banks*	*Total*
Average	2875.82	3138.39	6014.30
SD	2761.10	2681.86	5427.60
CV	96.01	85.45	90.24
CAGR	0.27	0.21	0.236
CAGR (%)	27	21	23.6

Source: Authors' Own Compilation

The compound annual growth rate is higher in commercial banks including RRB (27 percent) in Odisha (table 3). But more variation is found in case commercial banks i.e. 96.01 during period 2001-02 to 2015-16. The Co-operative Banks experiences highest average amount agricultural lending (Rs. 3138.39 crore) followed by Commercial Banks including RRB (Rs. 2875.82 crore). It is opined that cooperative banks also play major role in issuing agricultural credit in Odisha. The compound annual growth rate of total agricultural lending by the select banks is 23.6 percent in Odisha.

Table 4: Comparison of Agricultural Credit Advanced by Different Banks

Parameters	*Commercial Banks*	*Co-operative Banks*
Mean	2875.820667	3138.39
Variance	7623683.057	7192367.94
Observations	15	15
Pooled Variance	7408025.499	
Hypothesized Mean Difference	0	
df	28	
t Stat	-0.264194273	
P(T<=t) one-tail	0.396782569	
t Critical one-tail	1.701130908	
P(T<=t) two-tail	0.793565138	
t Critical two-tail	2.048407115	

Source: Authors' Own Compilation

From the table 4 it is examined that t-statistic value is less than t-critical value. Therefore, null hypothesis is accepted which describes that there is no significant variation among select banks in providing agricultural finance in Odisha.

5.3 Comparison of Agricultural Finance in between Scheduled and Non-Scheduled Districts of Odisha

Table 5: District-Wise Trend of Agricultural Credit in Scheduled and Non-Scheduled Districts of Odisha 2006-07 to 2020-21)

Name of the Districts	*Target CAGR%*	*Achievement CAGR%*
Scheduled Districts		
Gajapati	22.45	14.08
Koraput	22.04	19.67
Malkangiri	22.79	16.09
Nabarangpur	22.39	16.55
Rayagada	23.17	16.02
Mayurbhanj	24.13	18.02
Kandhamal	27.07	25.05

Name of the Districts	*Target CAGR%*	*Achievement CAGR%*
Sundargarh	17.94	20.65
Total	21.88	18.63
Non-Scheduled Districts		
Balasore	18.95	15.20
Bhadrak	21.30	17.06
Balangir	21.34	23.56
Sonepur	18.45	18.47
Cuttack	16.29	15.47
Jagatsinghpur	21.46	16.93
Jajpur	21.96	22.72
Kendrapara	20.83	24.70
Dhenkanal	17.96	12.81
Angul	18.33	14.41
Ganjam	15.23	13.67
Kalahandi	23.83	17.04
Nuapada	19.51	14.83
Keonjhar	20.85	16.58
Boudh	20.77	22.88
Puri	22.73	18.86
Khurda	22.49	21.30
Nayagarh	17.57	16.01
Sambalpur	22.44	16.61
Bargarh	18.84	19.02
Deogarh	18.82	24.17
Jharsuguda	24.26	21.90
Total	19.55	17.59

Source: Authors' Own Compilation

It is observed from the table 5 that the compound annual growth rate of achievement is very low than target of ACP (Agricultural Credit Plan) in both scheduled and non-scheduled districts of Odisha. The growth rate in achievement of ACP (18.63) is lower than target (21.88) of ACP in scheduled districts. Only Sundargarh district have higher achievement (20.65 percent) than target (17.94 percent) of agricultural credit among all scheduled districts. Moreover in the case of non-scheduled districts CAGR of achievement (17.59 percent) of ACP is also lower than target (19.55 percent). The non-scheduled districts viz; Balangir, Jajpur, Kendrapara, Boudh, Bargarh and Deogarh have experienced higher CAGR of achievement in ACP than target during 2006-07 to 2020-21. Further it is observed that more gap in between target ACP and achievement is realised in case of scheduled districts.

The banks do not meet the target ACP in agriculture in case of both scheduled and non-scheduled districts of Odisha.

Table 6: Status of Agricultural Credit in Scheduled and Non-Scheduled Districts of Odisha 2006-07 to 2020-21)

Year	*Crop Loan*	*Non-Scheduled Districts*		*Scheduled*	
		Average (in Crores)	*CV*	*Average (in Crores)*	*CV*
2006-07	Target	89.01	69.58	47.21	73.85
	Achievement	94.56	64.23	51.68	59.29
2007-08	Target	102.95	63.97	50.81	62.69
	Achievement	99.33	65.57	60.06	69.66
2008-09	Target	123	66.66	64.77	67.24
	Achievement	97.15	63.41	59.62	70.16
2009-10	Target	156.9	62.21	91.28	59.11
	Achievement	149.85	56.74	81.02	52.64
2010-11	Target	232.94	62.77	128.47	58.64
	Achievement	312.66	59.95	93.53	37.22
2011-12	Target	332.68	59.11	172.72	50.17
	Achievement	266.73	52.28	122.98	71.94
2012-13	Target	365.64	67.71	189.76	50.76
	Achievement	328.8	64.4	152.92	49.83
2014-15	Target	570.5	54.16	342.45	55.84
	Achievement	449.59	55.17	176.51	44.38
2015-16	Target	701.9	55.47	398.66	60.28
	Achievement	615.42	57.86	291.18	58.44
2016-17	Target	797.98	54.42	492.67	50.26
	Achievement	593.26	57.06	310.31	66.76
2017-18	Target	766.77	53.55	492.32	49.92
	Achievement	631.5	53.85	329.59	65.39
2018-19	Target	945.73	54.41	619.76	52
	Achievement	712.11	52.24	383.26	70
2019-20	Target	1029.18	54.44	680.39	51.2
	Achievement	766.59	54.12	445.96	76.09
2020-21	Target	1084.19	51.15	753.34	50.22
	Achievement	913.54	51.01	565.00	72.85
Comb. Average	Target	521.38		323.19	
	Achievement	430.79		223.12	

Source: Authors' Own Compilation

Table 6 depicts the between scheduled and non-scheduled districts of Odisha concerning to average and variability of both target and achievement of ACP in agricultural finance during 2006-07 to 2020-21. During this period the average of ACP in agricultural finance concerning to both target as well as achievement is lower for scheduled districts in comparison to non-scheduled districts. It is also further opined that more variation is also realised for scheduled districts than non-scheduled districts for target and achievement of ACP in agriculture.

Table 7: Comparison of Total Credit Agricultural Credit of Commercial Banks, RRB and Cooperative Banks in Odisha and India during 2001-02 to 2018-19

	Total Credit (India)	*Total Credit (Odisha)*
Mean	505094.17	6014.30
Variance	148688913770.85	29458826.39
Observations	18.00	15.00
Pooled Variance	81552385731.42	
Hypothesized Mean Difference	0.00	
df	31.00	
t Stat	5.00	
P(T<=t) one-tail	0.00	
t Critical one-tail	1.70	
P(T<=t) two-tail	0.00	
t Critical two-tail	2.04	

Source: Authors' Own Compilation

It is observed from table 7 that t statistics value is greater than t critical value. Therefore, it is failed to accept the null hypothesis. However, there is significant difference is found in variability of agricultural finance by banks in between Odisha and India.

6. MAJOR FINDINGS

Although it is observed that Commercial Banks, Regional Rural Banks, and Cooperative Banks have increased agricultural finance over last twenty years, it is not able to solve the finance problem in agriculture in both Odisha and India. Discontinuity and inconsistency are associated with the agricultural credit flow of these banks during the study period. Regional Rural Banks have achieved higher growth rate in agricultural finance but commercial banks provide highest amount of loan in terms of average and total to this sector in India. Commercial Banks face more inconsistency in comparison to Regional Rural Banks and Cooperative Banks in disbursement of agricultural credit in India. So far as Odisha is concerned, growth rate of agricultural credit is higher for commercial banks including RRB with less consistency nature.

On the other hand, the Co-operative Banks provide highest average amount agricultural lending in terms of average and total. It is opined that Cooperative Banks play a major role in issuing agricultural credit in Odisha. In non-scheduled districts of Odisha banks have more agricultural finance both in terms of target and achievements in comparison to scheduled districts.

7. CONCLUSION AND POLICY IMPLICATION

To strengthen the economy, it is important to eliminate poverty, food insecurity and unemployment from Odisha and India. Agriculture operates as a key source of employment and livelihood for major sections of the society more particularly in rural economy and also stands as a complementary sector for the growth of industrial and service sector. Therefore, it is the emerging need to solve the major obstacle finance problem in agriculture. This problem can be resolved by targeting Agriculture Finance issue.

Agriculture credit structure needs revamping to improve the efficiency of the credit delivery system in Odisha. To conclude, an assessment of agriculture credit situation brings out the fact that the credit delivery to the agriculture sector continues to be inadequate. It appears that the banking system is still hesitant on various grounds to purvey credit to small and marginal farmers. The situation calls for concentrated and dedicated efforts to be made on part of the banking sector as well as government to increase the flow of credit to agriculture. Moreover, innovations in product design and methods of delivery and repayment are to chalk which may help to provide sufficient in time credit to the agricultural sector.

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Goods and Services Tax and Insinuations on Various Sectors of Indian Economy: A Bibliometric Analysis

Dr. Sanjeeb Kumar Dey[1] and Dr. Debabrata Sharma[2]
[1]*Asst. Prof. in Commerce, Principal Investigator, OURIIP Seed Project, Department of Commerce, Ravenshaw University, Cuttack, Odisha. E-mail: kumarsanjeebdey@yahoo.co.in*
[2]*Research Assistant, OURIIP Seed Project, Department of Commerce, Ravenshaw University, Cuttack, Odisha. E-mail: sharmadebabrata6@gmail.com*

Abstract: The most important and welcome tax reform in India is Goods and Services Tax (GST) since independence. This is the recent buzzword from businessman to layman. The basic philosophy behind implementation of GST is to remove complexities of erstwhile indirect taxation system and to ensure uniformity in prices of goods and services throughout the country. It took almost 13 years to implement this new law after its inception. The fundamental purpose of it is to improve the lifestyle of the common people in our society along with more revenue to the Government exchequer. The implementation of GST would be successful if it is afforded by different level of people where it helps to reduce the economic imbalance in our country. Different people have different views and opinions about the rules, regulations and procedures of GST. It creates confusion among the manufacturers, sellers, consumers, practitioners, etc. Further, tax authority frequently changes the laws, procedures, applicability, etc. that adds more confusion among the stakeholders. With this backdrop, it is pertinent to perform a systematic review of various scholarly works that have been done so far covering all such aspects.

Keywords: *Goods and Services Tax, Indian Economy, Bibliometric analysis, sectorial impact*

JEL Codes: *K34, Y91, H20*

1. INTRODUCTION

Taxation system is an incredible tool in the hands of any Government to establish vertical equity through income redistribution or reduce the gap between the rich and the poor. It refers to a mandatory levy by the Government on its citizen either on their income i.e., income tax or on consumptions or productions i.e., value added tax, services tax and custom duty to meet the financial requirement for social and economic development activities of the country. The existing indirect tax system was characterized with double taxation due to cascading effect, complex procedure, multiple taxation system, non-availability of tax credit throughout the value change, etc. With a view to eliminate these shortcomings, Government of India has introduced Goods and Services Tax under the banner of "one nation- one tax- one market" with effect from 1st July 2017 after fourteen years of deliberations and discussions which is applicable to the whole of India. It is considered to be biggest and revolutionary tax reform since our independence (Garg & Kumar, 2017; Kawale & Aher, 2017; Patil, 2017; Tiwari & Singh, 2018). It subsumes almost all indirect taxes lived by the States and Central Government and resulted into one tax i.e., Goods and Services Tax.

This new taxation system is characterized by seamless claim of input tax credit throughout the value chain, destination-based taxation as against origin-based taxation, avoiding double taxation resulted from cascading effects, more transparent system, increased ease of doing business, simpler and user-friendly compliance, digital platform, increase the revenue base, etc. (Beri, 2017; Leena & Sameena, 2017; Nayyar & Singh, 2018; Dey, 2021). GST is going to celebrate its fifth anniversary during July 2022, but still the system requires continuing changes to bring transparency and ease of compliance with law. In this backdrop, it is protenant to perform a systematic review of various scholarly works that have been done so far covering all such aspects.

2. REVIEW OF LITERATURE

Implementation of Goods and services tax is one of the most significant changes in the Indian history and it has led to tremendous changes in the Indian economy. Every individual sector irrespective of nature and size along with the whole economy are affected because of its enactment.

Mussaiyib (2016) tried to summarise the possible effect of introduction of GST on the Indian banking sector, financial services sector, IT sector, real estate sector, automobile sector, telecom sector, FMCG sector and pharmaceutical sector. Elavarasan and Jagadeesan (2018) reported that the Indian FMCG sector is affected by the introduction of GST in terms of tax bracket adjustments and decrease in distribution costs. In the words of Bala and Mali (2017) the pharmaceutical industry should assess the potential effects of GST in advance to avoid disruptions in business and to accomplish full compliance in terms of legal and regulatory requirements. According to Jain (2020) GST has a mixed effect (both positive and negative) on the different sectors of India as she reported a positive effect on employment sector, FMCG sector, IT sector, manufacturing sector, etc. and concluded that the introduction of GST will bring more employment opportunities, commercial benefits and economic benefit. Mohan and Ali (2018) assessed the effects of GST on the MSME sector by performing personal interviews with the owners and reported that GST was complex, costly to execute and have a significant effect on their profits. Also, there were problems in the website of GST filing, connectivity issues and absence of feedback mechanism. Mukherjee and Rao (2019) suggested that the exclusion of petroleum products, crude petrol, natural gas and electricity from the GST structure can result in cascading in different sectors. According to Digal (2020), GST has both positive and negative effects on the Indian micro, small & medium enterprises (MSME). GST has turned out to be a double-edged sword for the restaurants and food service business of India (Panwar & Patra, 2017). According to Kumaraswamy (2020) GST has a strong effect on the short-term working capital needs of Indian SMEs in the short run. Chakraborty (2018) states that introduction of GST has ushered in a plethora of changes in the textile business of India with an overall positive impact on the sector

Govind (2011) viewed that the implementation of GST in India will have a significant impact on the relationship between the central government and state government. Sharma and Sain (2017) concluded that stock prices are positively affected by the introduction of GST in India.

Yong et al. (2019) evaluated the impact of GST on trading volume and stock market's overreaction in the context of Malaysia and Australia. Their study revealed that the Malaysian stock market overreacted with the enforcement of GST while it was opposite in case of the stock exchange of Australia as the Australian stock market did not overreact with the introduction of a new tax system. The findings of Ruggeri and Bluck (1990) had shown that both VAT and GST are more regressive than the existing Manufacturers' Sales Tax (MST) of Canada and the government can provide low-income credit by imposing more income surtax or more GST. Due to lack of adequate knowledge, contractors of Singapore construction industry faced many problems after the enactment of GST in the areas of compliance cost, grasping GST principles, item classification, etc. (Pheng & Loi, 1994). These problems could have been avoided had the contractors given more effort to understanding GST rules and principles. International evidence suggested that GST has a negative correlation with developing countries' economic growth and a positive relation with the economic growth of developed nations (Abd Hakim et al., 2016).

As per their review made in the context of Malaysia, Goh et al. (2017) propounded that the understanding and acceptance of GST by the consumers will play a major role in its success. According to the locution of Venkadasalam (2014) the magnitude of the effect of GST is dependent on the economic distortion, governance and compliance cost. GST will have a positive effect if its structure is rational, neutral, simple, and transparent. Asafu-Adjaye and Mahadevan (2002) analysed the welfare effects of Australian GST and suggested not to have a uniform tax structure as GST showed a negative effect on social welfare. Their study indicated that the government can increase the overall welfare of the nation by shifting the taxes to durables and clothing, alcohol and tobacco, and footwear from food, housing and transport. Mujalde and Vani (2017) envisaged that the proposed GST system will increase the costs in the aviation industry along with the costs of motor insurance and life insurance. Damania (2000) evaluated the effect of GST on the product market competition. The results showed that in an oligopoly market setting, GST forces firms to increase their output levels. In the words of Arora (2016), GST is the need of the hour for a country like India as it has certain inherent benefits. It will boost the economic growth and resolve the issues in the present tax system.

According to Mukherjee (2020), the GST collection capacity of India depends on the magnitude of economic activity of a state and the structural composition of the economy. His results showed that states with higher per capita income have lesser tax efficiency in contrast to low-income states. Ciak and Gruszczyńska (2019) studied the role of GST in the tax systems of countries belonging to the European Union (EU). They found that GST has caused less dynamic changes in the tax rates, tax revenues and tax revenue structures in developed countries of the EU. Lee et al. (2018) investigated the leverage effect and change in market efficiency after the enforcement of GST on financial services in Malaysia and Australia and reached at the conclusion that the informational efficiency of the stock market in Malaysia has been reduced due to the levy of GST on fee-based financial services. In Australia, policy makers of developed economies should consider levying GST on the fee-based financial services. Chandren et al. (2018) found that Malaysian GST is very beneficial for businesses and it has significant contributions towards the economy. They also reported a decline in the sales growth of Malaysian business houses during the implementation phase but the operational performance had improved remarkably well during and after the introduction of GST. Zhou et al. (2013) expected that GST will increase the cost of living in Malaysia during the initial stage by increasing the rate of inflation.

3. OBJECTIVES OF THE STUDY

This article represents existing literatures regarding goods and services tax with bibliometric analysis. This method is necessary to map past and current research in order to direct future research. Previous articles in the taxation field that use bibliometric analysis are related to tax evasion (Buele & Guerra, 2021), tax accounting (Henrique et al., 2020), tax competitiveness (Mazurenko & Tiutiunyk, 2021), and taxation (Ya'u & Saad, 2021). So far our search except one paper by Dhar & Khandelwal, 2020, there is no article discussing goods and services tax implication on various sector using bibliometric analysis. The research questions posed in this study are: First, what are the trend and current state of publication in GST research? Second, who is the most popular author of tax compliance research? Lastly, what are the future avenues of tax compliance research?

4. METHODS

The bibliometric method has advantages relating to quantification and objectivity; therefore, it can reduce subjective biases and validate what experts may intuitively presume (Fauzan & Jahja, 2021). By employing this method, researchers can identify publication trends, citation analysis, popular authors, and research themes on goods and services tax. Bibliometric study is an analytical approach that uses the empirical and quantitative study to explain the distribution dynamics of research papers with a particular topic and a given period of time (Almind &

Ingwersen, 1997; Persson et al, 2009). We have taken research publication summary as a form of bibliometric analysis on "Goods and Service tax" from the year 1990 to 2022.

We have used google scholar database for searching the papers having "Goods and Service tax in title, abstract or keyword from the year 1990 to 2022. This database was chosen because of its wider accessibility and free availability. The keyword "Goods and Service Tax" was used for searching papers. Initially 260 documents were found but further our searching was confined to research articles and reviews and ignored the conference papers and others. 246 research and review papers have been published during the year of 1990 to 2022. Metadata was analysed using Microsoft Excel for frequency analysis, VOSviewer for data visualization, and google scholar for citation metrics.

5. RESULTS AND DISCUSSION

In a bibliometric study, the basic question that needs to be addressed is the trends and current state of publications. In this context, we tried to describe trends and publications by year, document type, document source, publication by country, document language and subject area.

Table 1 shows productivity in terms of publications on GST by year. The popularity and pattern of research can be observed over time through document examination by year of publication. Research on GST has been conducted from a very long time. Table 1 also reports the total number of publications (TP), number of cited publications (NCP), total citations (TC) and average citations per publication (C/P). The highest total citations occurred in 2018, with 610 citations per year with publications numbering thirty. It is observed from the tables that with every year number of publications has also been increasing. Figure 1 depicts total publications and citations by year.

Table 1: Year of Publications

Year	*TP*	*%*	*NCP*	*TC*	*C/P*
1990	1	0%	0	1	1
1992	1	0%	0	1	1
1993	1	0%	0	0	0
1994	1	0%	0	1	1
1995	1	0%	1	1	1
1996	1	0%	0	2	2
1998	1	0%	2	1	1
1999	3	1%	0	10	3.33
2000	2	1%	1	12	6
2001	4	2%	0	8	2
2002	2	1%	1	6	3
2003	2	1%	3	12	6
2004	1	0%	6	6	6

Year	*TP*	*%*	*NCP*	*TC*	*C/P*
2005	1	0%	4	14	14
2006	2	1%	9	12	6
2008	1	0%	4	18	18
2009	1	0%	8	14	14
2010	5	2%	11	67	13.4
2011	8	3%	26	58	7.25
2012	7	3%	13	65	9.29
2013	7	3%	14	80	11.43
2014	10	4%	18	123	12.3
2015	17	7%	16	147	8.65
2016	23	9%	14	240	10.43
2017	40	16%	25	354	8.85
2018	30	12%	30	420	14
2019	21	9%	12	256	12.19
2020	24	10%	34	128	5.33
2021	18	7%	24	388	21.56
2022	10	4%	2	24	2.4
Total	246	100.00			

Source: Collected and Complied from google scholar

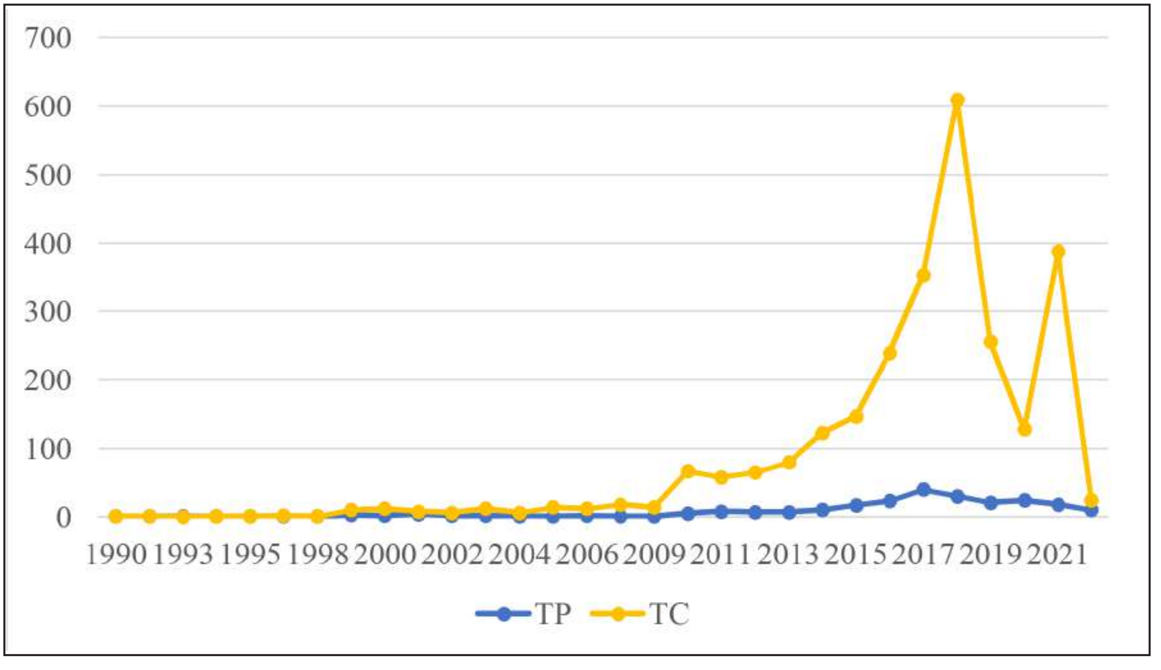

Figure 1: Total Publications and Citations by Year

Source: Collected and Complied from google scholar

Document types comprise articles, book chapters, and review papers; document sources include journals and books. Table 2 reports nine types of documents. Most publications were from articles (93%), followed by book chapters (4%). The smallest proportions belong to books which is 1% in document types. Subsequently, Table 3 reports the source of documents in GST research publications. The source of the document is measured by the title of the source presented. There are two sources of documents used in this study (viz; journals, and books). Most of the total sources of these documents are Journals, with 234 documents representing 95% of the total publications, followed by books with 12 documents (5%).

Table 2: Document Type

Document Type	*Frequency*	*%*
Article	230	93%
Book Chapter	10	4%
Review Paper	4	2%
Book	2	1%
Total	246	100.00

Source: Collected and Complied

Table 3: Source of Documents

Document Source	*Frequency*	*%*
Journal	234	95%
Book	12	5%
Total	246	100.00

Source: Collected and Complied

Researchers in all significant countries have contributed to the publication of GST research. Table 4 displays only few important countries that contributed to the publications on GST. Interestingly, the Asian countries are the ones who contributed the most towards GST publications. However, as it turns out, India is leading in GST research. Particularly after the enactment of GST, researchers are increasingly contributing towards this domain of tax. During this research endeavour, India is leading among the top countries contributing to the publications on GST with 160 documents (65%).

Table 5: Top Countries contributed to the publications

Country	*Total Publication*	*%*
India	160	65%
Austalia	15	6%
Malaysia	19	8%
New Zealand	13	5%

Country	*Total Publication*	*%*
United States	10	4%
United Kingdom	5	2%
Indonesia	20	8%
Italy	2	1%
France	2	1%
Total	246	100.00

Source: Collected and Complied

Based on metadata taken from the google scholar database, there are various fields of study related to the publication of GST research. Table 6 displays various subject areas of GST research, where Economics, Business, and Social Science subjects dominate. This table indicates that tax compliance is a multidiscipline field of study.

Table 6: Subject Area

Subject Area	*Total Publication*	*%*
Economics, Econometrics and Finance	118	48%
Business, Management and Accounting	49	20%
Social Sciences	22	9%
Psychology	17	7%
Arts and Humanities	16	7%
Computer Science	13	5%
Multidisciplinary	11	4%
Total	246	100.00

Source: Collected and Complied

We used VOS viewer to visualise certain landscapes of our research. Since we don't have access to databases like Scopus, Web of Science, PubMed, etc, we are able to showcase the authors and keyword map. We performed a co-authorship analysis which aims to determine collaboration between authors on GST research publications. Authors who have at least two documents and have at least one citation been counted using the full counting method. VOSviewer produces network visualizations between authors who collaborate in GST research. The strength of the relationship between authors is indicated by the color, circle size, font size, and thickness of the connecting line. Figure 2 shows collaborating authors grouped under the same color. The visualization results from VOS viewer indicate that most of the authors made collaboration in GST research publications. In this sense, Bidin, Omar and Sanusi are the authors who were the most frequent co-authors.

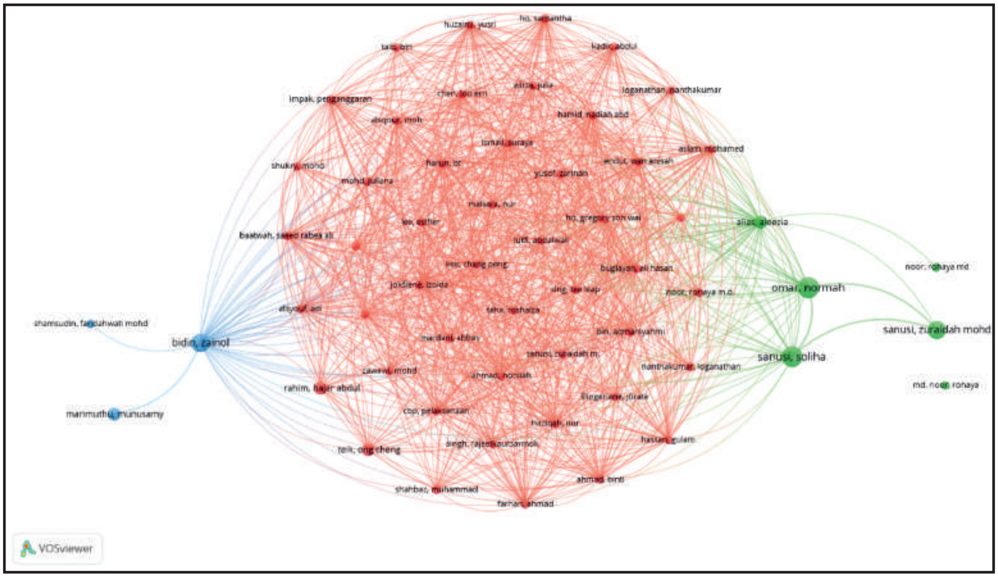

Figure 2: Network Visualization Co-occurrence network based on the Author

Source: Compiled in VOSViewer

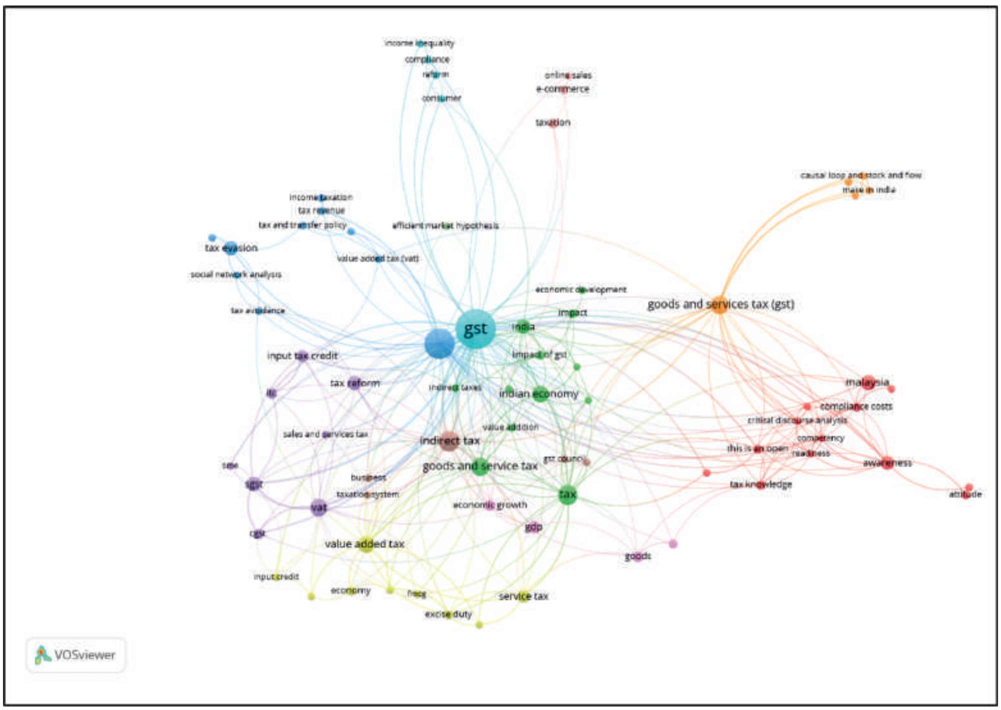

Figure 3: Network Visualization map of the Author Keywords

Source: Compiled in VOSViewer

Keyword analysis was conducted by employing VOSviewer to visualize the dynamics and structure of the topic under study. VOSviewer is a software that has a strong network to perform in-depth co-occurrence analysis on keywords and helps explore the targeted research field. Figure 3 presents the network visualization of keywords. The strength of the relationship between keywords is expressed through colour, circle size, font size, and thick-ness of connecting lines.

There are various keywords in GST research. Few keywords are frequently used in our study. They are GST (53 occurrences), goods and services tax (30 occurrences), indirect tax (14 occurrences), tax (13 occurrences), goods and services tax (gst) (11 occurrences), vat (10 occurrences). Those themes are discussed a lot in the documents used in this research. These analyses showcase the keywords on which researchers have focused till now. Future researchers can focus either on these keywords for quick and increased recognition of their work or they can use new keywords to venture into new domains of GST research.

6. CONCLUSION

The number of publications on goods and services tax has grown significantly. Most articles were published in journals and conferences, mainly in English. The most widely cited articles and most co-authors come from the India, United States, New Zealand, Australia, Malaysia, and Indonesia. This study identifies the widely discussed themes and possible themes for future research. GST and Indian economy studies are increasing in number science 2015 and are being carried out with a multidisciplinary approach by authors from various countries. This paper also proposes some future avenues of GST research. In future research, it is recommended to extend the use of databases and to include more fields in search queries.

7. LIMITATIONS AND SCOPE FOR FUTURE STUDY

Our study is subject to some limitations. This study mainly uses data from the google scholar database. The database used needs to be expanded to obtain more thorough findings in future research. Other databases that can be used in future research are Scopus, Scope, Dimension, Web of Science and PubMed. Although google scholars is the free access, popular and common academic database, there is the possibility that many reputed journals have not been covered in this database. Further, all papers available in google scholar do not have required information from which visual presentation can be generated using VOSviewer software. Normally, no search query is 100% perfect. However, despite all these constraints, our research has contributed to the bibliometric analysis GST from Indian context field, which has not been researched yet. It provides meaningful insights that can be used as a reference for developing knowledge in this field.

CONFLICT OF INTEREST

There is no conflict of interest among the authors involved in this article.

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Determinant for the Development of Tourism Industry in the Post Pandemic Period: A study of Southern Odisha

Dr. Yadav Devi Prasad Behera[1] and Shibani Sharma[2]
[1]*Faculty, Dept. of Business Management, Central University of Odisha, Koraput, Odisha, India.*
E-mail: deviprasadyadav2009@gmail.com
[2]*Assistant Professor, School of Management, Gangadhar Meher University, Odisha.*
E-mail: shibanisharma1947@gmail.com

Abstract: The pandemic has effectively restricted mankind in the houses and created a great deal of fear for the physicality of social interaction. This trepidation has affected the mindset of the tourist and eventually affected the tourism industry as well as the livelihood of a great mass of people depending upon the tourism industry for their survival. The tourism industry can flourish again in a sustainable manner, only if the attitude of the travelers and their needs are properly addressed. The study proposed to identify the preferential needs of the travelers in the post-pandemic period and to find out its impact on the travelling attitudes towards tourist destinations. The study followed a causative research design. Stratified random sampling is used to collect 116 numbers of samples from the four districts of southern Odisha i.e. Koraput, Kalahandi, Malkanigiri and Rayagada. Factor analysis is used to extract the preferences of travelers. Multiple linear regression is used to find the impact of these preferential factors on the travelling attitude of the tourists. The study found 7 factors that influence the travelers to travel. They are amusement facilities, social media marketing, adequate information and communication facilities, banking and internet facilities, sanitation and vaccination, grievance handing facilities and lodging and dining facilities. These factors affect the attitude of travelers towards travelling to tourist places significantly. Sanitized and hygiene environment must be provided with better guidance and communication facilities along with hygienic food, lodging, internet and banking facilities. So, tourism departments, as well as the local people residing in the nearby tourist area, must take effective measures to attract the tourist to their respective locations. The sustainability of the tourism industry will lead to the sustainability of many livelihoods in the rural tourist areas.

Keywords: Tourism promotion, social media marketing, travelers' attitude, brand awareness

JEL Codes: M37, M31.L83.

1. INTRODUCTION

Humanity has seen many changes in different decades, which absolutely changed the way, they ever lived. Life has never been the same, after those incidents happening in one's life. The perceptions towards global scenario have changed along with the way of life. The pandemic in the shape of COVID-19 has brought devastation and brought many changes to the modern-day world. Many countries in the world are shut down and locked down, resulting in decrease in normal global activities leading to global financial crisis (Kant, 2020). Many sectors in the economy like real estate, metal, oil, motor etc. have a hit due to COVID 19 (Thomala, 2020). But one the most affected sector is tourism (Marwah, 2020) because of lockdown across the globe.

Over the past years, most of the countries have considered tourism as a contributor to economic growth and is widely accepted that year after year throughout the world a massive investment continues to pour in its development. Whenever there has been any major impact on the economy of any country, tourism has always been the first one to get affected as people start to cut down their travel budgets first. However, tourism relatively has a direct role to play when it comes to COVID-19 which has widely spread in most of the countries with a high number of tourists. The COVID-19 pandemic has had a significant impact on tourism industry due to the resulting travel restrictions as well as slump in demand among travellers (Kundu & Mukherji, 2020).The tourism industry has been massively affected by the spread of corona virus, as many countries have introduced travel restrictions in an attempt to contain its spread. The United Nations World Tourism Organization estimated that global international tourist arrivals might decrease by 20–30% in 2020, leading to a potential loss of US$30–50 billion. In many of the cities, planned travel went down by 80–90% (Joppe, 2020). Many tourist attractions around the world, such as museums, amusement parks and sports venues, are closed.

Travel & tourism industry in India has been a significant contributor to the country's GDP. The sector even generates a large employment base. India lost almost 1000 crores rupees because of nation-wide shut down (Singh, 2020). So, when by mid-March, the popular tourist attractions in India started to close, and the news on putting a halt on flying began to make rounds, we all started to predict the grim future of the travel industry in the country already. In fact, the shutting down of the iconic Taj Mahal on March 17, 2020, which attracts millions of visitors every year, was a sign enough to assess the hard blow this pandemic was launching at us. Because of Corona virus, the Indian tourism and hospitality industry is expecting a potential loss of jobs i.e., around 38 million. In the third week of March 2020 itself, the hotel sector saw a decline of more than 65% in occupancy levels as compared to the same period in 2019 (Lamba, 2020) with international and domestic travel on halt and demand for turbine fuel has substantially declined.

Indian Association of Tour Operators (IATO) estimates the hotel, aviation and travel sectors together may suffer a loss of about ₹85 billion keeping in mind the travel restrictions imposed on foreign tourists (Goyal, 2020).The restaurant industry in India is expecting almost zero revenue in the immediate term, and a drop of 50% in the months to come. At least 30 per cent of hotel and hospitality industry revenue could be affected if the situation doesn't improve by the end of June 2020.There is a threat of job loss of nearly 15% in the hotel and restaurant industry once the lockdown is lifted, as they will not see an immediate surge in demand. Aviation industry in India could incur losses worth ₹ 27,000 crore ($3.3-3.6 billion) in the first quarter of 2020-21. The passenger growth of airlines is likely to fall sharply to a negative 20-25% growth in the 2020-21. Although international travel ground got halted in the first quarter of 2020, domestic tourism could become a popular approach to stimulate economic growth as restrictions are eased in many countries around the world. The revival of domestic travel in emerging markets is being led by countries that have been comparatively successful in avoiding large-scale outbreaks of the virus, and which rely on tourism for a significant portion of GDP.

The revival of the tourism sector is very essential in this regard in the post COVID situation. So, it is a crucial study on developing the domestic tourism industry by examining the factors, which encourages traveller and tourist to visit the tourist areas. So, the current study focuses the attitude of the travellers and the determinants that are the reason behind the travelling intention of the people.

The tourism industry felt a setback due the COVID situation. The world needs better understanding of the travellers to encourage them to visit the tourist destinations. Encouragement in this regard needs better understanding of the travellers and their attitude towards travelling, so that agencies and the tourism sector could focus on those elements and can encourage people to visit after the pandemic is over. In this regard the research question is "Can the determinants of the travelling preference of the travellers encourage them to travel and enhance their travel intention?"

2. LITERATURE REVIEW

Many countries across the world depend on their tourism industry for their foreign exchange reserves. Tourism sector has been proven to be a sustainable way of generating income for local as well as foreign currency earning by government. The foreign exchange earnings from tourism sector increased from $3.46 billion in the year 2000 to $29.96 billion in 2019 but due to the outbreak of COVID 19 pandemic, it fell to $6.15 billion (Statista, 2021). The outbreak has led to loss of earning for many households and created fear among people to travel. Measures must be taken for the revival of this sector and must focus on the sustainability of it. So, we need to understand the need and preferences of tourist, which affects their intention to travel.

The sustainability of the tourism sector must be given paramount importance. In this regard De Jesus (2010) has expressed that a country needs to make certain policies to build up new infrastructural projects to provide better road ways and airways for safe and timely communication. Chin et al. (2017) has suggested in his study that vital information and knowledge of the places of visit should be provided to the tourist both in digital forms and physical form, so that they can have a bird's-eye view before travelling to any place. Local food culture must be introduced to attract the foreign masses as well as domestic tourist from different ethnicity to visit other areas (Enzenbacher, 2020). The private sector must be encouraged to set up some amusement facilities at tourist areas for beautification and cultural enhancement of the tourist places (MacKenzie & Gannon, 2019). The surrounding areas must also give importance for legitimising tourism and hospitality development. Coroş et al. (2017) suggested in their study that tourist must be given safety assurance at the places of visit by maintaining law and order situation better and their issues must be properly handled and queries must be addressed. Magnini (2011) found from his study that social media platforms can be used to promote, and marketing strategies must be made by informal ways of communication to raise awareness level related to the visiting places. Internet facilities and basic banking facilities must be provided for the convenience of the tourist (Vargas-Hernandez, 2012). Private tourism entrepreneurship must be encouraged for collaboration with government for development and expansion of tourism industry (Ateljevic, 2009).

3.1 Objectives of the Study

1. To find out the determinants and its effect on the traveling attitude of the travelers.

3.2 Hypothesis of the Study

$H_0$1- There is a significant impact of the determinants on the traveling attitude of the travellers.

4. DATA AND METHODOLOGY

The study followed the causative research design. The study followed the causal research to find out the impact of determinants of travellers' attitude affecting their intention to travel. Deductive research approach has been used for empirical derivation of inferences. Stratified Random sampling technique is used to find out samples which are collected from 4 district of southern Odisha, i.e., Koraput, Berhampur, Malkanigiri and Rayagada. A total of 116 samples is collected through a self-structure questionnaire. Scale reliability of the questions are measured by Cronbach Alpha. Factor analysis is used to find out extract the determinants of travellers' attitude. Multiple linear regression is used to find the impact of the determinants of the travellers' attitude on their travel intention in the post pandemic situation. IBM SPSS V24 is used for data analysis and literatures are studied from Elsevier and Emerald Insight.

As the relevance of this study is purportedly useful for domestic tour operators, event planners as well as state tourism department and local tour operators as the varied dimensions of tourism and determinants studied will be of immense use for predicting the future inflow of travellers and will help to customize their offers, minimize cost, optimize revenue and plan future actions.

Data collection was a primary obstacle as the author could have added a greater number of respondents, but the prevailing pandemic stood as a hindrance for physical movement and few respondents could not respond because of not having enough knowledge on responding through online mode and getting enough sample size for the research was a primary concern and hence has an impact on the study. With better sample size, better inferences are expected.

5. RESULT AND DISCUSSION

The study conducted research on the potential tourist and their attitudes related to their future travel endeavour and inferences are drawn based on that. Scale reliability is tested for measuring the reliability of the elements of the questionnaire. The inferences are drawn based on empirical study conducted in this aspect.

5.1 Scale Statistics and Scale Reliability

A total number of 116 fully filled and qualified responses are taken for the study

Table 1: Reliability Statistics

Cronbach's Alpha	*Cronbach's Alpha Based on Standardized Items*	*N of Items*
.845	.861	28

Source: Authors' own findings.

The scale (questionnaire) is optimally reliable, i.e., 86% as the Standardised Cronbach's Alpha is 0.861 with 28 items in the structured questionnaire (excluding demographic variables), referred from the table-1.

5.2 Factor Analysis to find out Factors Affecting Tourist Attitude

Table 2: KMO and Bartlett's Test

Parameters		*Values*
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.723
Bartlett's Test of Sphericity	Approx. Chi-Square	2162.259
	df	253
	Sig.	.000

Source: Authors' own findings.

KMO measure of sample adequacy is 72% which is significant (0.000), so Exploratory factor analysis is applicable here. The significant (0.000) value (0.723) of Bartlett's test of sphericity justify that the correlation matrix is not an identity matrix. This shows that the sample is appropriate and can produce distinct factors as shown in table 2.

Table 3: Total Variance Explained

Component	*Initial Eigenvalues*			*Extraction Sums of Squared Loadings*			*Rotation Sums of Squared Loadings*		
	Total	*% of Variance*	*Cumulative %*	*Total*	*% of Variance*	*Cumulative %*	*Total*	*% of Variance*	*Cumulative %*
1	5.588	24.294	24.294	5.588	24.294	24.294	3.589	15.606	15.606
2	3.156	13.723	38.016	3.156	13.723	38.016	2.796	12.158	27.764
3	2.785	12.108	50.125	2.785	12.108	50.125	2.604	11.323	39.086
4	2.271	9.873	59.998	2.271	9.873	59.998	2.501	10.872	49.958
5	1.695	7.371	67.369	1.695	7.371	67.369	2.283	9.926	59.885
6	1.374	5.972	73.341	1.374	5.972	73.341	2.202	9.574	69.458
7	1.129	4.909	78.249	1.129	4.909	78.249	2.022	8.791	78.249
8	.916	3.984	82.233						
9	.761	3.311	85.543						
10	.652	2.836	88.379						
11	.568	2.470	90.849						
12	.443	1.928	92.777						
13	.328	1.428	94.205						
14	.303	1.316	95.521						
15	.231	1.006	96.528						
16	.203	.884	97.412						
17	.175	.760	98.172						
18	.136	.590	98.762						
19	.090	.389	99.151						
20	.075	.324	99.475						
21	.050	.216	99.691						
22	.041	.178	99.869						
23	.030	.131	100.00						

Extraction Method: Principal Component Analysis.

Source: Authors' own findings

Using the principal component method in above factor analysis, 7 numbers of factors are extracted. These 7 factors explain 78 % of the total cumulative variance as rotated sums of squared loadings is 78.24 as shown in above table 3. That shows that the extracted 7 factors show 78% characteristics of the 23 variables taken for the study.

Table 4: Rotated Component Matrix

Variables	Components						
	1	2	3	4	5	6	7
Cultural reflection must be there at the visiting site	.816						
Selfie points must be made to encourage new aged visitors	.806						
Amusement facilities can be used to develop the count of visitors	.802	Amusement Facilities					
I find information regarding various places from travel planners	.618						
I prefer places with diverse background like water sports/enjoyment zone along with place of visit	.610						
Social media like facebook, instagram must be used to market the visiting place		.815					
I prefer ratings and suggestion from the people before visiting a place		.708		Social Media Marketing			
Feedback system must be there to receive responses on the experience		.664					
Digital platforms must be used to promote the visiting places		.565					
Online information of location and travel route must be provided regarding the tourist spot				.829			
I visit the official sites of the state and central tourism department				.722	Adequate information and communication Facilities		
Cheap local transport is needed in the area of visit				.624			
Banking/ATM facilities must be present at the area of visit				.816			
Mobile and internet connection must be ensured at the site of visit	Banking and Internet Services			.668			
Cleanness of the visiting areas must be ensured					.848		
Local people must be trained regarding sanitation	Sanitation and Vaccination				.657		
Proper toilets and bathing facilities must be present					-.643		
People near the travel areas must be vaccinated					.567		
There shouldn't be any conflict between any parties at the visiting places						.829	
Safety of visitor also needed to be ensured	Grievance Handling					.716	
Visitor issues must be properly handled at the place of visit						.566	
I prefer low-cost lodging availability to visit a place							.858
I need better hotel and restaurant facilities at the tourist spot	Lodging and dining facilities						.828

Sources:
Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
Rotation converged in 10 iterations.

In rotated component matrix it is seen that 7 factors are extracted from the 23 variables for this study and shows the factor loading of each variable under its respective factor as shown in table 4. The factors are named as amusement facilities, social media marketing, adequate information and communication facilities, banking and internet facilities, sanitation and vaccination, grievance handing facilities and lodging and dining facilities.

5.4 Regression Analysis for analysing the effect of the Factors Affecting Tourist Attitude on their travel Intention

Linear regression analysis is used to find the impact of the independent variables, which are the factors affecting the tourist attitude on the dependent variable, i.e., the Travel intention.

Table 5: ANOVA Test Statistics

Model		*Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*
1	Regression	14.112	7	2.016	24.236	.000[b]
	Residual	8.984	108	.083		
	Total	23.096	115			

Notes:

a. Dependent Variable: Travel Intention of the visitors

b. Predictors: (Constant), Lodging and dining facilities, Grievance Handling, Sanitation and Vaccination, Banking and Internet Services, Adequate information and communication facilities, Social Media Marketing, Amusement facilities

Source: Authors' own findings

The above ANOVA table shows that the multiple linear regression is significant for analysis. F statistics (24.236) is significant (p=.000). So, we can proceed for the regression model as shown in table 5.

Table 6: Bootstrap for Model Summary

		Bootstrap			
Model	*Durbin-Watson*	*Bias*	*Std. Error*	*95% Confidence Interval*	
				Lower	*Upper*
1	2.016	-.610	.179	1.054	1.768

Source: Authors' own findings

The autocorrelation is tested by Durbin-Watson test, and it is found to be 2.016 which must remain between the value 1.5-2.5, so as to prove that there is no autocorrelation among the independent and dependent variables. Bootstrapping is used to make 1000 sample out of existing sample to deliver reliability of data and inference.

Table 7: Model Summary

R	*R Square*	*Adjusted R Square*	*Std. Error of the Estimate*	*Durbin-Watson*
.78	.611	.586	.28841	2.016

Source: Authors' own findings

The factor affecting tourist attitude towards travel such as, lodging and dining facilities, grievance handling, sanitation and vaccination, banking and internet services, adequate information and communication facilities, social media marketing and Amusement facilities affect their intention to travel by 59% is significant (p=.000) as adjusted R square is 0.586. The Durbin-Watson statistics (vary from 1.5-2.5) justify the above as it shows 2.016 in the above table 7.

Table 8: Regression Coefficients

Variables	*Beta*	*t*	*Sig.*
(Constant)	4.322	161.39	.000
Amusement facilities	.093	3.442	.001
Social Media Marketing	.165	6.132	.000
Adequate information and Communication Facilities	.118	4.388	.000
Banking and Internet Services	.205	7.626	.000
Sanitation and Vaccination	.067	2.485	.014
Grievance Handling	-.029	-1.063	.290
Lodging and Dining Facilities	.160	5.957	.000

Source: Authors' own Findings

Out of the 7 factors extracted 6 factors shows significant impact on travel intention of the visitors or the tourists. They are amusement facilities, social media marketing, adequate information and communication facilities, banking and internet services, sanitation and vaccination and lodging and dining facilities with beta value .093, .163, .118, .205, .067 and .160 respectively.

6. SUMMARY AND FINDINGS

The factors which affect the travel attitude of the travellers are amusement facilities, social media marketing, adequate information and communication facilities, banking and internet facilities, sanitation and vaccination, grievance handing facilities and lodging and dining facilities. These factors in combination affect the travel intention by a significant amount (i.e. 59% approx.). Out of these 7 factors the 6 factors have the significant impact excluding the grievance handing facilities. The important elements are banking and internet facilities, lodging and dining facilities and social media involvement in the marketing of tourist places.

7. CONCLUSION

Desperate time needs proactive steps for future survival. Tourism industry in the post pandemic era will also necessitate some proactive measure for sustainability of this sector. Social media marketing must be encouraged; making a reach to young masses and can persuade them for travel. Amusement facilities at tourist places must be provided and private sector can be collaborated for this effort. Better dining and lodging facilities must be given importance. People at the tourist places must be vaccinated and sanitation training must be provided. COVID guidelines must be enforced at those areas. Basic banking and internet services must be available for convenience of the tourists. These efforts should be made in direction of the government and applied for revival of tourism sector.

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Financial Performance Analysis of Select Co-operative Banks of DCCBs in the KBK Region

Gopala Bhua[1] and Dr. Shyama Charan Acharya[2]
[1]Research Scholar, Gangadhar Meher University, Amruta Vihar, Sambalpur, Odisha, India.
E-mail: togopal1991@gmail.com
[2]Professor (Retired), School of Commerce, Gangadhar Meher University, Amruta Vihar, Sambalpur, Odisha, India

Abstract: The importance of Co-operative banks in the growth of the Indian Economy is immense. For more than a century, these banks have been mobilising deposits by providing financial services to the lower- and middle-income groups of the urban and rural areas people of the country. In this study, three District Central Co-operative Banks (DCCBs) have been selected to analyse the deposits, source of working capital and branch productivity on the Co-operative Banks of DCCBs in the Koraput -Balangir- Kalahandi (KBK) region. The financial viability with a view to determining how these scheduled banks are operating across the KBK region. Various ratios have been used as analytical technique to assess financial capabilities and the Anova test, the Kruskal-Wallis test and Tukey's post-hoc test have been used to test hypotheses as a statistical tool. It is concluded that the overall financial efficiency of the selected DCCBs is stable and sound, but there is a concern of low Spread ratio and low provision coverage. These banks provide an avenue for the rural population and also the weaker section of the urban population for parking their money through deposit mobilisation and for the direct benefit transfer to their accounts.

***Keywords*:** Co-operative Banks, KBK region, Financial Viability, Weaker Section

JEL Codes: G20, G21, I30

1. INTRODUCTION

The co-operative bank is an institution established on a co-operative basis and dealing in the ordinary banking business. Like other banks, co-operative banks are founded by collecting funds through shares, accepting deposits, and granting loans. The Co-operative Banks issue shares of unlimited liability. In a co-operative bank, one shareholder has one vote regardless of the number of shares he may hold. The Co-operative Banks are generally concerned with the agricultural credit and supply financial assistance for agricultural and rural activities. Co-operative banking in India is federal in structure. Primary credit societies are at the lowest rung. Then, there are central co-operative banks at the district level and state co-operative banks at the state level. Co-operative credit societies are located within the villages that cover the entire country.

Co-operative banks act as a shield for the poor section. It transforms small businesses and gives them a chance to compete and stand in the market. It mainly focused on small-scale industries and agricultural activities which include minor irrigation, farm mechanization, dairy farming, horticulture, fisheries, poultry farming, goat/sheep, land development, SHG farm sector, production of fertilizers, housing, personal loan, and weavers, etc. Normally banks are not willing to lend to the weaker section. So, RBI put them into a priority for the banks to lend them. Financial institutions are always willing to provide loans to non-priority sectors. But they are not ready to give loans to the priority sectors because the poorest and most fragile parts are belonging to the priority sector. The main objective of the priority sector is to ensure that assistance from the banking system is provided to those sectors of the economy that have not received sufficient institutional funds. Co-operative banks are a single-stop shop for the farmers where one can get the loan, farm machinery, and technical support to storage facilities and marketing of products.

The present study on the financial performance analysis of select Co-operative Banks of DCCBs in the KBK region mainly focused on deposits, source of working capital and branch productivity.

2. REVIEW OF LITERATURE

The rural entrepreneurs did not adopt their development skills to provide the rural area problem solved where co-operative banks were most important playing role in the rural area (Gurav, 2020). Mallick & Das (2020) studied the relationship between management efficiency and profitability. The descriptive analysis of the relation between the management ability and profitability of the Non-Interest Income to Working Fund (NNIWF) was very well performance and positively growth. The banks have made rapid growth and intensive efforts to strengthen and encourage the co-operative movement and also fully there are implementing various policies and schemes (Kumar & Singh, 2018). The DCCBs are working efficiently for improving the productivity of their respective banks. Branches per bank have been increased and they need to supply some more impressive benefits to their employees. The state and central government should perceive the co-operative banking model as a proper structure for achieving the goals of financial inclusion in India (Mittal, 2018). District central co-operative banks were divided their performance in the agricultural sector in terms of given revenue from there is a contribution to the agriculture sector. Maximum customers were satisfied from banking services. The farmers had some little developments in the marketing of their produce which required to be enacted by providing good market information to the farmers (Adhikari & Joshi, 2018). Punjab has a good network of co-operative banks with 20 Central Co-operative Banks operating in various districts beside one State Co-operative Bank. In terms of assisting rural masses, only a few banks are giving an excellent performance which is clear from performance indices (Garg, 2018). It is seen that there is no significant difference in the growth rate of the number of members, credit deposit ratio and net profit/loss of the DCCBs (K. Kumar & Agdamawar, 2018). The bank has adequate liquidity to meet its short-term as well as long-term obligations. The bank should also strive for disruptive innovative banking practices to beat other stronger competitors (Bhulal & Dhanna, 2017). The rapid development of RRB has helped in reducing substantially the regional inequality in respect of banking facilities in India. The efforts made by RRB in branch expansion, deposit mobilization, rural development, and credit deployment in weaker sections of rural areas are appreciable. The RRBs play an important role in rural areas intending to provide credit to small, marginal farmers & economically weaker sections, for the development of agriculture, trade, and industry (S. Kumar et al., 2017). The financial soundness & overall performance of co-operative banks has satisfactory during the study period (Narayanrao, 2017). The significant improvement in the financial performance of PACS has been evident whereas improvement in business performance has been conspicuously absent (Patel, 2017). It attempted to evaluate both banks from different angles so that their relative performance can be gauged. After going through all the parameters, it is calculated that HPSCB is showing decreased growth it needs to increase the bank Share Capital. Tandon et al. (2017) studied the District Central Co-operative Banks regarding the growth rate and suggested that they should concentrate on continuous improvement in their overall performance of the banks to meet the new standards in the changed scenario. The banks must spread the entire activities in all levels (Muthukumaresan, 2016). The Co-operative banks have both problems and comparative benefits. The Co-operative bank is just another business model and not by definition the key to success. The success of all banks, including mature co-operative banks, is ultimately determined by the level of customer/ member satisfaction, which is in turn influenced by many variables, including the quality and prices of products and services, innovative capacity, the perceived corporate social responsibility and employee attitude, knowledge and competences (Preety et al., 2016). Productivity in the banking sector was significantly and positively influenced by various aspects of training and development programmes. Therefore, the planners, policymakers, and bank management need to evolve and develop the training and development programmes keeping in view the findings of the analysis (Kaur, 2016). The banking sector is increasingly using computers in strategic planning management control and operation control activities (Raju & Prabhu, 2014). The quality of services provided by the staff is satisfactory because bank catering to a small segment only and the customers are properly dealt with banks should plan to introduce new schemes for attracting new customers and satisfactory the present ones.

3. SOCIAL RELEVANCE OF THE STUDY

Though there are many private & public sectors banks operating in the country, the Co-operative Banks have their own relevance in a state like Co-operative Banks in the undivided

Koraput-Balangir-Kalahandi district. This is due to the rural and agrarian character of the state economy. Further, their banking services are also towards costly for the rural population & hence are beyond their financial reach. The Co-operative banks offer advances at a lower rate of interest & a higher rate of interest on the deposit. The processing of the sanction of loans is also fast compared to other banks. Besides, the co-operative banks have a local feel & familiarity due to which the customers feel comfortable dealing with them. That is why it is imperative for the policymakers to make the co-operative banking system financially vibrant & socially relevant.

4. OBJECTIVES OF THE STUDY

1. To compare deposits of the co-operative banks of DCCBs in the KBK region.
2. To analyze the sources of working capital of the co-operative banks of DCCBs in the KBK region.
3. To evaluate branch productivity of the co-operative banks of DCCBs in the KBK region.

5. DATA AND METHODOLOGY

The present study is based on secondary data using SPSS software, the published statements, annual reports, audit reports & other relevant records of the bank have been used as the sources of secondary data. The researcher has also gone through different reference materials viz. journals, magazines, research papers and thesis as mentioned in the bibliography. The study is based on the data and information relating to the period from 2009-10 to 2018-19 i.e., Ten (10) years only.

5.1 Analysis of Deposits in Banks

Tabel 1: Tests of Normality of Deposits

Variables	*Kolmogorov-Smirnov*			*Shapiro-Wilk*		
	Statistic	*Df*	*Sig.*	*Statistic*	*df*	*Sig.*
Deposit_KODCCB	.300	10	.011	.869	10	.096
Deposit_BDCCB	.156	10	.200	.944	10	.595
Deposit_KADCCB	.193	10	.200	.866	10	.089

Source: Data Compiled in SPSS

The above table reflects the normality of deposit of three banks. The null hypothesis for normality is that data is normal. Thus, such hypothesis must be accepted and p value must be more than .05. In the above case, p value of deposits of all the three banks under Shapiro-wilk test is more than .05. Thus, the data is said to be normal.

Table 2: Test of Homogeneity of Variances of Deposits

Levene Statistic	*df1*	*df2*	*Sig.*
3.697	2	27	.038

Source: Data Compiled in SPSS

The above table depicts homogeneity of groups. Like normality, the null hypothesis of homogeneity is that groups are homogeneous. Thus, p value must be more than .05 but, such value in the above case is .038 which is less than .05. It can be inferred that groups are not homogeneous. Hence, ANOVA cannot be applied. Non-parametric test i.e., Kruskal-Wallis test will be applied. The results are shown as below.

Table 3: Test Statistics of Kruskal-Wallis Test of Deposits

Test Criteria	*Test Statistics*
Chi-Square	.091
Df	1
Asymp. Sig.	.762

Source: Data Compiled in SPSS

The test statistics reveals a p value .762 which is more than .05. The null hypothesis i.e., There is no significant difference in performance among select banks in regard to deposits is accepted. The banks performance in raising deposits is similar.

5.2 Analysis of Sources of Working Capital

Table 4: Tests of Normality of Source of Working Capital

Variables	*Kolmogorov-Smirnov*			*Shapiro-Wilk*		
	Statistic	*df*	*Sig.*	*Statistic*	*df*	*Sig.*
Source_Working_Capital_KODCCB	.218	10	.194	.900	10	.219
Source_Working_Capital_BDCCB	.111	10	.200	.959	10	.774
Source_Working_Capital_KADCCB	.132	10	.200	.950	10	.667

Source: Data Compiled in SPSS

The above table reflects normality of source of working capital of three banks. The null hypothesis for normality is that data is normal. Thus, such hypothesis must be accepted and p value must be more than .05. In the above case, p value of source of working capital of all the three banks under Shapiro-wilk test is more than .05. Thus, the data is said to be normal.

Table 5: Test of Homogeneity of Variances of Source of Working Capital

Levene Statistic	*df1*	*df2*	*Sig.*
4.727	2	27	.017

Source: Data Compiled in SPSS

The above table depicts homogeneity of groups. Like normality, the null hypothesis of homogeneity is that groups are homogeneous. Thus, p value must be more than .05. But, such value in the above case is .017 which is less than .05. It can be found that, groups are not homogeneous. Hence, anova cannot be applied. Non-parametric tool i.e., Kruskal-Wallis test applied. The results are shown below.

Table 6: Test Statistics of Kruskal-Wallis Test of Source of Working Capital

Test Criteria	*Test Statistics*
Chi-Square	13.985
Df	1
Asymp. Sig.	.001

Source: Data Compiled in SPSS

The test statistics reveals a p value .001 which is less than .05. The null hypothesis i.e., There is no significant difference in performance among select banks in regard to current deposit is rejected. The banks performance in rising source of working capital is similar.

Table 7: Tukey post-hoc test

(I) Bank	*(J) Bank*	*Mean Difference (I-J)*	*Std. Error*	*Sig.*	*95% Confidence Interval*	
					Lower Bound	*Upper Bound*
KODCCB	BDCCB	615.52400	12838.30826	.999	-31216.0046	32447.0526
	KADCCB	51572.73500*	12838.30826	.001	19741.2064	83404.2636
BDCCB	KODCCB	-615.52400	12838.30826	.999	-32447.0526	31216.0046
	KADCCB	50957.21100*	12838.30826	.001	19125.6824	82788.7396
KADCCB	KODCCB	-51572.73500*	12838.30826	.001	-83404.2636	-19741.2064
	BDCCB	-50957.21100*	12838.30826	.001	-82788.7396	-19125.6824

Source: Data Compiled in SPSS

The above table reveals the results of post-hoc test. The table indicates the mean difference of source of working capital among banks of KBK regions. From the table it is clear that the mean difference of source of working capital between KODCCB and BDCCB is significant, where the mean difference is found to be 51572.74; on the other hand, the mean difference between KODCCB and KADCCB is not significant. So, it can be said that the source of working capital of KODCCB is significantly higher than KADCCB. Like that, the mean difference of source of working capital between BDCCB and KADCCB is found to be 50957.21, which is significant. So, it can be said that the source of working capital of KADCCB is significantly higher than BDCCB.

5.3 Analysis of Branch Productivity

Table 8: Tests of Normality of Branch Productivity

Variable	*Kolmogorov-Smirnov*			*Shapiro-Wilk*		
	Statistic	*df*	*Sig.*	*Statistic*	*Df*	*Sig.*
Branch_Productivity_KODCCB	.287	10	.019	.840	10	.055
Branch_Productivity_BDCCB	.115	10	.200	.960	10	.789
Branch_Productivity_KADCCB	.195	10	.200	.901	10	.222

Source: Data Compiled in SPSS

The above table reveals normality of branch productivity of three banks. The null hypothesis for normality is that data is normal. Thus, such hypothesis must be accepted and p value must be more than .05. In the above case, p value of branch productivity of all the three banks under Shapiro-wilk test is more than .05. Thus, the data is said to be normal.

Table 9: Test of Homogeneity of Variances of Branch Productivity

Levene Statistic	df1	df2	Sig.
1.843	2	27	.178

Source: Data Compiled in SPSS

The above table depicts homogeneity of groups. Like normality, the null hypothesis of homogeneity is that groups are homogeneous. Thus, p value must be more than .05. Such value in the above case is .178 which is more than .05. It can be found that, groups are not homogeneous. Hence, the test of anova will be applied. The results are shown below.

The test anova reflects p value .009 which is less than .05. The null hypothesis is rejected. There is no significant difference in the performance of the banks of all the three DCCBs in the KBK region in term of branch productivity is rejected. So there exists a significant difference in the branch productivity among the banks of KBK region. However, as the result of ANOVA

Table 10: Test of Anova of Branch Productivity

	Sum of Squares	*df*	*Mean Square*	*F*	*Sig.*
Between Groups	30610143.355	2	15305071.677	5.568	.009
Within Groups	74217909.762	27	2748811.473		
Total	104828053.117	29			

Source: Data Compiled in SPSS

was significant, so post-hoc Tukey test was applied to use to gain understanding about the between group difference.

Table 11: Tukey post-hoc test

(I) Bank	*(J) Bank*	*Mean Difference (I-J)*	*Std. Error*	*Sig.*	*95% Confidence Interval*	
					Lower Bound	*Upper Bound*
KODCCB	BDCCB	117.87700	741.45957	.986	-1720.5110	1956.2650
	KADCCB	2199.28900	741.45957	.017	360.9010	4037.6770
BDCCB	KODCCB	-117.87700	741.45957	.986	-1956.2650	1720.5110
	KADCCB	2081.41200	741.45957	.024	243.0240	3919.8000
KADCCB	KODCCB	-2199.28900	741.45957	.017	-4037.6770	-360.9010
	BDCCB	-2081.41200	741.45957	.024	-3919.8000	-243.0240

Source: Data Compiled in SPSS

The above table reveals the results of post-hoc test. The table indicates the mean difference of branch productivity among banks of KBK regions. From the table it is clear that the mean difference of branch productivity between KODCCB and BDCCB is not significant; on the other hand, the mean difference between KODCCB and KADCCB is significant, where the mean difference is found to be 2199.29. So, it can be said that the branch productivity of KODCCB is significantly higher than KADCCB. Like that, the mean difference of branch productivity between BDCCB and KADCCB is found to be 2081.41, which is significant. So, it can be said that the branch productivity of BDCCB is significantly higher than KADCCB.

6. MAJOR FINDINGS

The findings of the study are based on the analysis of data at operational analysis. The overall performance of the district central co-operative banks in the KBK region has been enumerated basing upon three basic indicators such as deposits, sources of working capital and branch productivity. It reveals p value .762 which is more than .05. There is no significant difference in performance among select banks in regard to deposits is accepted. It is clear that the mean difference of source of working capital between KODCCB and BDCCB is significant, it is found to be 51572.74; on the other hand, the mean difference between KODCCB and KADCCB is not significant. The mean difference of source of working capital between BDCCB and KADCCB is found to be 50957.21, which is significant. So, it can be said that the source of working capital of KADCCB is significantly higher than BDCCB. It is clear that the mean difference of branch productivity between KODCCB and BDCCB is not significant. The mean difference between KODCCB and KADCCB is significant, where the mean difference is found to be 2199.29. Like that, the mean difference of branch productivity between BDCCB and KADCCB is found to be 2081.41, which is significant. So, it can be said that the branch productivity of BDCCB is significantly higher than KADCCB.

7. CONCLUSION AND POLICY IMPLICATION

The three District Central Co-operative Banks in KBK districts play an important role in helping the rural people to improve their condition. It can be concluded that the DCCBs in KBK are contributing to the agriculture and non-agriculture sector. All these banks are confirming to the priority sector lending target i.e.,40% of the gross bank credit stipulated by the RBI. These Co-operative Banks play a crucial role towards financing of the farm and non-farm sectors in state of Odisha in general and the KBK Districts in particular. These banks provide an avenue for the rural population and also the weaker section of the urban population for parking their money through deposit mobilisation and for the direct benefit transfer to their accounts.

8. SCOPE FOR FURTHER STUDY

The study is based on data from secondary source. One can conduct the study on both structural technique and secondary data. The data is collected for a limited period; one can collect the data for 20 to 30 years for better results. The researcher can extend the study to a broader level that is from the state to the national level and the researcher can conduct a study on different sectors like agricultural and allied activities, MSME, SHGs, Housing, the educational sector, or any other sector.

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Financial Inclusion: An Assessment through Banking Services in India

Manindra Hanhaga[1], Rajat Kumar Mallick[2] and Lipuna Khatei[3]

[1]*M. A. (Economics), Central University of Odisha, Koraput, Odisha. E-mail: manindrahanhaga@gmail.com*
[2]*Asst. Professor of Economics (Former), SAI International College of Commerce & Economics, Bhubaneswar, Odisha. E-mail: rk.mallick100@gmail.com*
[3]*M. Phil. Scholar in Economics, Rajendra University, Balangir, Odisha. E-mail: lkhatei100@gmail.com*

Abstract: Financial Inclusion is one of the yardsticks to measure and boost the growth of an economy. The strategy of financial inclusion plays a key role in the eradication of poverty, reduction of regional disparity and promotion of gender equality in a developing country like India. Financial inclusion includes delivering services of banks at an affordable cost to all the sections of the society, more particularly people having limited advantage and low income. The primary objective of financial inclusion is to attract the people not having bank accounts into the formal financial system providing with financial services ranging from payments transfers, savings, to credit and insurance. Banking services help to channelize money flow to the different branches of an economy and generate positive externalities. Pradhan Mantri Jan Dhan Yojana is the biggest financial inclusion initiative in India for which upto 25th March 2020, 38.32 crore bank accounts have been opened, and Rs. 118434.40 crore has been deposited. This paper studies how financial inclusion leads to the growth of the Indian economy. It also examines the impact of financial inclusion on the economic development over a period from 2013-14 to 2019-20. Secondary data has been analyzed by multiple regression models. The study found a direct and significant impact of the number of bank branches on the gross domestic product (GDP) of the country, whereas an insignificant impact has been observed in the case of credit deposit ratio and the number of automatic teller machines (ATMs) growth on the Indian Gross Domestic Product.

Keywords: Financial inclusion; Financial Institution; GDP, ATMs, and Credit Deposit Ratio.

JEL Code: G_{20}; G_{21}; G_{29}

1. INTRODUCTION

Financial Inclusion is one of the important yardsticks to measure the growth of an economy. It creates a positive externality that boosts the development process of any nation. The strategy of financial inclusion plays a key role in the eradication of poverty, reduction of regional disparity, and promotion of gender equality in a developing country like India. Financial inclusion helps in accessing banking and financial services easily with the help of financial institutions to all especially the weaker section and low-income groups. Financial inclusion implies that all poor and underprivileged people of the country must be provided with the financial services available in the country (Sharma, 2018). The Reserve Bank of India's Khan Commission was set up in 2004 which analysed financial inclusion. The commission proposed relaxing know your customer (KYC) rules, opening bank accounts, issuing general credit cards to the poor. Banking services help to channelize money flow to the different branches of an economy and generate positive externalities. This concept became popular in India and abroad. Mangalam was the first village of our country to provide banking facilities to all households (George & Thomachan, 2018). Pradhan Mantri Jan Dhan Yojana is the biggest financial inclusion initiative in India through which 38.32 crore bank accounts have been opened and Rs.118434.40 crore has been deposited as on 25th March 2020 (Government of India, 2021). In the process of economic development, commercial banks play a very important role. In the recent past, the Indian banking system has shown rapid growth. To achieve the objective of greater financial inclusion, all banks are advised to provide a basic 'no-frills' account with 'nil' or lower maintainable balances as well as lower charges (Reserve Bank of India, 2012). All banks are recommended to provide additional facility such as 'no frills' account, transparently indicating the facilities and charges in the vernacular medium of the region. Non-governmental organizations (NGOs), Self Help Groups (SHGs), and Microfinance institutions (MFIs) do provide financial assistance to the poor and socially disadvantaged by commercial banks. Financial inclusion assures growth and reduction of poverty and inequality especially by savings mobilisation and provision of greater access of resources to households which is helpful for their financial activity and for insuring against shocks (Sethy, 2016). A well-established financial system is the most effective circulation system in the economy. It empowers individuals to access the various facilities of the system in a more efficient manner and contribute considerably to the system in the best possible ways. Success of financial inclusion lies in achievements of three steps: (1) Provision of Bank Account to at least one member of a household; (2) Regular deposit and withdrawals under that bank account and (3) Regular usage of the Bank Account for transactions/payment. In addition, system should take care of facility and security aspects so that individuals should be free from all worries with respect to product pricing (interest rates on deposits and loans, transaction fee, penalty on delay etc.), ease of availability of products, ease of transactions and security at every step (Kumar B., 2018).

2. REVIEW OF LITERATURE

Vijayabhaskar & Kumar (2021) have analyzed effective utilization of financial inclusive services through PMJDY (Pradhan Mantri Jan Dhan Yojana) during the pandemic time on street vendors financial stability and life protection. The Government of India released the PMSVA Nidhi Fund of 5000 Core to Street Vendors in the month of September 2020 but 12,15,000 street vendors applied for Microloan under this scheme. Therefore 4400 core amount remained unutilized from six months to street vendors. The study reveals that apart from financial illiteracy there is a lack of financial awareness and insufficiency of income for savings among street vendors. It is recommended that awareness should be created by the concerned authority and government regarding financial inclusion schemes. Thomas & Subhashree (2020) have analysed the current trend of research on financial inclusion by reviewing existing literature and discussed the various definitions of financial inclusion. The study opines that the various factors affecting the financial inclusion level, but much emphasis is not given to usage dimension; the key role of behavioral, mental, and sociological aspects at the financial inclusion level has not yet been explored. Shihadeh (2020) investigates the relationship between financially included factors and bank performance and risk among (Middle East, North Africa, Afghanistan, and Pakistan) MENAP countries. The result points out that increasing the level of financial inclusion in the region can increase the bank's performance and reduce their risks. Bhatia & Singh (2019) have investigated the dimensions of women empowerment, that is, social, political, and economic change with financial inclusion in India. The result indicated that the PMJDY scheme has been quite successful and positive impact on women empowerment, especially in case of women in slums. Rakhecha & Tanwar (2018) evaluated the contribution of banking sector to financial inclusion process in India. Many policies were formulated after the independence in order to use the banking system as an important tool of change. But the study has indicated that banking industry's penetration to non-banked areas is still found sluggish. Bakar & Sulong (2018) explains the impact of financial inclusion towards various direction like its effect on growth from both positive and negative sides. Authors view links between financial inclusions on growth are still inconclusive due to mixed results found in the literature and suggested use of multidimensional variable for better evaluation of the impact of financial inclusion on development. Abel, Mutandwa, & Roux (2018) have evaluated determinants of financial inclusion in Zimbabwe. The study finds that age, education, financial literacy, income, and internet connectivity are positively related to financial inclusion. Moreover, the documentation and distance required to access bank are negatively related to financial inclusion. Ibor, Offiong, & Mendie (2017) have examined the impact of financial inclusion on the performance of micro, small and medium enterprises (MSMEs) in Nigeria. The study concludes that there is a significant link between financial inclusion and the growth of micro and small enterprises in Nigeria. Iqbal & Sami (2017) examined the effect of financial inclusion on the Indian economic growth for a period of seven years. It was found that there is a direct and positive relationship between the impact of several bank branches and the Credit deposit ratio on the country's GDP. But no significant relationship was found between ATMs growth and GDP of India. Kumar K. (2014) attempts to evaluate the progress of financial inclusion initiatives undertaken in terms of branch and credit penetration, diffusion of financial services with encouraging people to create demand, and financial literacy programs. The study views that despite several measures taken to develop financial inclusion, a whopping 40 percent of India's population is still devoid of even the plain financial services. Financial inclusion is, therefore, more than just an economic imperative for India. Singh et al. (2014) study focused on the use of available sources such as banking technology, mobile phones, India Post Office, Business Correspondents (BC), and Fair Price Shops so that it can be more efficient and affordable for the rural public. The study finds that the success of financial inclusion is slow, due to the lack of a strong network, and financial instruments not suited to rural residents. The reason for low financial service is that rural people are not aware of banking literacy. It also suggests the need for awareness use of mobile phones and banking technology that will change the scenario of the Indian economy. Kamath et al. (2008) made a study to assess the relation between Micro-Finance Institution (MFI) loans and cash flows of daily households by considering patterns of cash inflow and outflow of borrowers of MFI and making a comparison with non-MFI households. The study views that for the urban poor, organizing lives around multiple lending organizations introduces serious limitations on their schedules, apart from the contingent stress of managing debts of small amounts from various lenders. Garg & Agarwal (2014) have studied how financial inclusion leads to the development of society and the economy. This study focuses to achieve inclusive growth in the banking sector effort and analyses past years' progress and achievements. The study has suggested that despite of heavy efforts by the stakeholders, expected results are not yielded. Sharma & Kukreja (2013) studied the development of State Cooperative Banks as part of financial inclusion and analysed the current position of financial inclusion in Indian economics. The study concludes that financial inclusion has a significant role in the economic and social development but there is a need for lots of effort from the ground level to reach the goal.

Financial inclusion will enable the Government to provide social development benefits and subsidies directly to the beneficiary bank accounts, thereby drastically reducing leakages and pilferages in social welfare schemes. It could be an instrument to provide financial boost to economic development and to inclusive growth. The present scenario of Indian economy is growing, and the rate of growth is more than many other developed countries, but what we need is uniform growth; the condition of the poor people in our country should also be improved at a faster rate. The role of commercial banks is very important in the progress of the economic development of India. According to the RBI guidelines, banks in India should implement financial inclusion policy to enter vulnerable groups, by providing adequate financial services and by mobilizing their small savings (Raihanath. & Pavithran, 2014). Thus the present paper aims to throw light on the importance of commercial banks to achieve financial inclusion in India.

3. OBJECTIVES OF THE STUDY

- To examine the present scenario of financial inclusion in India.
- To study the impact of financial inclusion indicators on the growth of the Indian economy.

4. DATA AND METHODOLOGY

This study is based on secondary data based on the Report of RBI, Government of India, Ministry of Finance, Research Articles, and E-Journals. Various websites were also used like RBI, Ministry of Finance, and Government of India (GoI). The period under consideration for the study is ten years from 2013–2014 to 2019–2020. Multiple regression analysis has been used to establish an empirical relationship between financial inclusion and the growth of the country. The present study considers Gross Domestic Product (GDP) as a dependent variable and the number of Bank Branches in the country, ATMs growth rate across the country, and Credit deposit ratio as independent variables.

$Y = b0 + b1X1 + b2X2 + b3X3 + e$

Where, Y = Gross Domestic Product (GDP)

X1 = Number of Bank Branches

X2 = No of ATMs

X3 = Credit deposit ratio

5. HYPOTHESIS OF THE STUDY

Based on the objectives of the study, the following hypothesis has been formulated:

H_{01}. There is no significant impact of financial inclusion on the growth of the Indian economy.

H_{A1}. There is a significant impact of financial inclusion on the growth of the Indian economy.

Sub-hypotheses

$H_{01.1.}$ There is no significant impact of number of bank branches on India's GDP.

$H_{A1.1.}$ There is a significant impact of number of bank branches on India's GDP.

$H_{01.2.}$ There is no significant impact of ATM growth on the GDP of the Indian economy.

$H_{A1.2.}$ There is a significant impact of ATM growth on the GDP of the Indian economy.

$H_{01.3.}$ There is no significant impact of the credit deposit ratio on the GDP of the Indian economy.

$H_{A1.3.}$ There is a significant impact of the credit deposit ratio on the GDP of the Indian economy.

6. ANALYSIS AND DISCUSSION

Table 1 statistics shows that present scenario of financial inclusion in the Indian banking network in which substantial progress towards opening of accounts, providing basic banking services during the recent years as indicated above. However, all the sections must be financially included to have financial stability and sustainability of the economic and social order. The progress made on these parameters is at the end of December 2020. The RBI has motivated banks to execute planned Financial Inclusion Plans (FIPs) for the development of the country. A time period of ten years was covered in the first phase of FIPs i.e., from 2010 to 2019. Table 1 shows that so many bank accounts have been opened during this period which led to a large banking network across the country. The results of the first FIP showed that there were no significant improvement operations concerning transactions.

Table 1: A snapshot showing the performance of banks under FIP up to December 31, 2020

Particulars	*Mar-10*	*Dec-19*	*Dec 2020$*	*Change (2019-2010)*
Banking Outlets in Villages-Branches	33,378	54,481	55,073	21,103
Banking Outlets in Villages >2000*-BCs	8,390	1,28,980	8,51,272	1,20,590
Banking Outlets in Villages <2000*-BCs	25,784	3,83,864	3,85,537	3,58,080
Total Banking Outlets in Villages – BCs	34,174	5,12,844	12,36,809^	4,78,670
Banking Outlets in Villages -Other Modes	142	3,473	3,440	3,331
Banking Outlets in Villages –Total	67,694	5,70,798	12,95,322	5,03,104
Urban Locations Covered Through BCs	447	5,51,327	3,24,345	5,50,880
BSBDA - Through Branches (No. in Lakh)	600	2,558	2,891	1,958
BSBDA - Through Branches (Amount in Crore)	4,400	90,731	1,25,898	86,331
BSBDA - Through BCs (No. in Lakh)	130	3,409	3,601	3,279
BSBDA - Through BCs (Amount in Crore)	1,100	62,095	77,163	60,995
BSBDA - Total (No. in Lakh)	735	5,967	6,492	5,232
BSBDA - Total (Amount in Crore)	5,500	1,52,826	2,03,061	1,47,326
OD Facility Availed in BSBDAs (No. in Lakh)	2	62	59	60
OD Facility Availed in BSBDAs (Amount in Crore)	10	455	500	445
KCC - Total (No. in Lakh)	240	479	490	239
KCC - Total (Amount in Crore)	1,24,000	7,09,377	6,79,136	5,85,377
GCC - Total (No. in Lakh)	10	200	199	190
GCC - Total (Amount in Crore)	3,500	1,84,918	1,73,968	1,81,418
ICT-A/Cs-BC-Total Transactions (No. in Lakh)#	270	22,500	35,183	22,230
ICT-A/Cs-BC-Total Transactions (Amount in Crore)#	700	6,06,589	8,28,795	6,05,889

*: Village population. : Significant increase in numbers is due toreclassification done by a bank.

#: Transactions during the year. $: Provisional data.

Source: FIP returns submitted by banks.

Table 2: Bank group and population group-wise number of functioning branches as of March 31, 2021

Variables	*Minimum*	*Maximum*	*Mean*	*Std. Deviation*	*Skewness*	*Kurtosis*
Rural	124	20913	8765.83	8136.657	0.522	-0.951
Semi-urban	184	17592	6997.67	6477.433	0.898	0.043
Urban	165	12698	4514.83	4804.641	1.162	0.486
Metropolitan	388	13013	4658.50	5360.952	0.940	-0.954

Source: Authors Own Compilation.

Table 3: Results of regression analysis model Summary

R	*R Square*	*Adjusted R Square*	*Std. Error of the Estimate*	*Durbin-Watson*
0.989	0.978	0.955	710435.745	2.884

Source: Authors Own Compilation.

Table 4: Results of ANOVA[a]

	Sum of Squares	*df*	*Mean Square*	*F*	*Sig.*
Regression	6.63435E+13	3	2.21145E+13	43.815	.006[b]
Residual	1.51416E+12	3	5.04719E+11		
Total	6.78577E+13	6			

a. Dependent Variable: Gross Domestic Product (GDP)

b. Predictors: (Constant), Credit deposit ratio, No. of Bank Branches, No of Bank ATMs

Source: Author's Own Compilation.

Table 3 and 4 show the model summary of multiple regression analysis which has been carried out with the help of SPSS. the model shows that the R value is 0.989 indicating a high correlation between dependent Gross Domestic Product (GDP) and the independent

Table 3: Results of Coefficients

	Unstandardized Coefficients		*Standardized Coefficients*	*t-value*	*Sig.*	*VIF*	*H0 rejected/ accepted*
Variables	*B*	*Std. Error*	*Beta*				
(Constant)	-1996061.741	19972085.819		-0.100	0.927		
No. of Bank Branches	504.959	67.783	1.435	7.450	0.005	4.986	Rejected
No of Bank ATMs	-184.699	71.346	-0.636	-2.589	0.081	8.109	Accepted
Credit deposit ratio	-218286.969	184599.346	-0.167	-1.182	0.322	2.667	Accepted

a. Dependent Variable: Gross Domestic Product (GDP)

Source: Authors Own Compilation

variables. Here, the R square is .978 and the Adjusted R square is 0.955. The p value is 0.006 which infers that model is fit. The value of the Durbin–Watson test less than one or greater than three is not acceptable, as a rule of thumb, and is an indication of autocorrelation problem. The model summary displays the value of Durbin–Watson statistics 2.884 which indicates no autocorrelation problem.

Table 3 reveals the coefficients analysis results for GDP and financial inclusion indicators, it is to be noted that financial inclusion variables include the number of bank branches, bank ATMs in the country and credit deposit ratio. Multiple regression indicates that the coefficient of number of bank branches is 504.959 showing a positive impact on GDP. The p value is .005, which infers that there is significant impact on GDP. It further shows that the beta value of bank ATMs is -184.699 and the *p* value is 0.081 which is more than 0.05 and hence indicates a negative insignificant impact on GDP. The credit deposit ratio of India shows the beta value of -218286.969, which indicates a negative impact on the dependent variable. The *p* value for the Credit deposit ratio is 0.322 which is higher than .05. So, it has no significant impact on GDP. The VIF values more than 10 are not acceptable as a rule of thumb as it indicates multicollinearity. Here, as all VIF values are less than 10 for all of the explanatory variables shown in table 3, this regression model is free from multicollinearity. The following regression equation was obtained:

$$Y = -1996061.741 + 504.959X1 - 184.699X2 - 218286.969X3 + \varepsilon$$

Therefore, the study finds that there is a vigorous relationship between economic growth and the financial inclusion indicators in our country, India.

7. MAJOR FINDINGS

The Reserve Bank assessed the banks' performance under their financial inclusion initiatives has Financial Inclusion Plans (FIPs). During 2010–2019 i.e., the first phase of FIPs, a large number of bank accounts were opened. However, it is observed that there are no substantial operations in terms of transactions due to the accounts opened and the banking infrastructure created. During the period of 2010–2019, 503104 banking outlets were opened which has increased the total number of outlets to nearly 1295322 by the end of 2020. The result of multiple regressions shows that the beta value for bank branches number is 504.959 and hence it indicates a positive impact on GDP. The p value is .005. So, it indicates a statistically significant impact on GDP at 5%. Hence the financial inclusion indicator i.e., number of bank branches is strongly associated with the progress on GDP in India. It further reveals that the credit-deposit ratio and number of ATMs have shown statistically insignificant impact on the GDP of India, which p value is more than the .05 at significance level.

8. CONCLUSION AND IMPLICATION

The RBI has taken several initiatives towards financial inclusion to provide formal banking facilities to all. The blueprint for providing outlets in unbanked villages having a population of less than 2000, has been drawn and provided to banks. Banking institutions have a very critical role in developing economies like India in the mobilisation of savings and allocations of credit for production and investment (Chakrabarty, 2013). The banks also contribute to the economic growth of the country by recognising the potential entrepreneurs to initiate new commercial activities successfully and allocating credit to them. Financial inclusion includes delivering services of banks at an affordable cost to all sections of the society, more particularly to low-income and disadvantaged groups. The main objective of financial inclusion is to attract the unbanked population into the formal financial system by providing them with financial services like savings, payments transfers, credit, and insurance. Banking services help to channelize money flow to the different branches of an economy and generate positive externalities. Reserve bank of India (RBI) and the government have a significant role in the growth of financial inclusion for economic development. It will lead to an increase in the installation of new ATMs, banking penetration and implementation of different schemes in the country (Raman, 2012). The present study found that the number of bank branches and credit deposits affect the GDP of the country in a significantly positive manner. Whereas ATMs growth has no significant impact on Indian GDP. So, it is observed that financial inclusion is strongly connected with the development and growth of the economy. Furthermore, there should be a need for appropriate financial inclusion regulation in the country which will help in accessing financial services and awareness of customers. Financial literacy and digital banking training programmes should be conducted to successfully implement the goals of financial inclusion in India.

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Fifteenth Finance Commission and Fiscal Autonomy of States in India

Pradeep Kumar Panda
Sector Lead – Economic, SDG PMU, Planning & Convergence Department, Government of Odisha.
E-mail: pradeep25687@yahoo.co.in

Abstract: The XVFC, appointed on 27th November 2017 under the chairmanship of N.K. Singh has recommended maintaining the vertical devolution at 41%. The recommendations of the XVFC will confer more fiscal autonomy to unions as well as states on the revenue and the expenditure fronts, as the total transfers (devolution and grants) add up to around 34% of estimated Gross Revenue Receipts to the Union. Besides the various categories under which it is implemented, what makes the transfer of funds more complex is that some funds lie between being completely tied and completely untied. However, the future contour of the vertical devolution of resources between the Union and the States is to share gross revenue receipts similarly in about equal ratio between the Union and States, while assuming no further decline in the divisible pool as a proportion of gross revenue receipts. This balance has been achieved through 41% of the divisible pool being devolved to the twenty-eight States and the balance devolution taking place through various forms of Finance Commission and non-Finance Commission transfer mechanisms. In absolute terms, for the period 2021-26, the states will be provided a total amount of Rs.42.2 lakh crore in tax devolution (Including total grants of Rs 10.33 lakh crore). The cumulative transfers to States are expected to remain at around 50.9% of the divisible pool during the same period as per estimation. The XVFC made a very all-round assessment of the expenditure and revenue of States and the Union. An increase in the overall share will encourage States and Local Governments with more freedom. With many taxes subsumed under it, GST accounts for 35% of the gross tax revenue of the Union and 44% of the own tax revenue of the States. XVFC recommended non-financial recommendations for promoting cooperative fiscal federalism.
Keywords: Finance Commission, Fiscal Autonomy, Federalism, Devolution, Growth, Deficit, India
JEL Codes: E62, H00, H77, O40, H63, H68

1. INTRODUCTION

The Union Finance Commission is a Constitutional body formulated under Article 280 of the Constitution. It is constituted every 5 years by the President to review and assess the state of finances of the Union and the States and suggests measures for maintaining a stable and sustainable fiscal environment. It also makes recommendations regarding the devolution of taxes between the Center and the States from the divisible pool which includes all central taxes excluding surcharges and cess which the Centre is constitutionally mandated to share with the States. The Fifteenth Finance Commission (XVFC) was appointed on 27th November 2017 under the chairmanship of Shri N.K. Singh. In addition to the primary objectives mentioned above, the terms of reference for the commission sought suggestions regarding the principles which would govern the quantum and distribution of grants-in-aid (non-plan grants to states), the measures, if needed, to augment State government finances to supplement the resources of local government and to review the state of the finances, deficit and debt conditions at different levels of government. In addition to the primary objectives mentioned above, the terms of reference for the commission sought suggestions regarding the principles which would govern the quantum and distribution of grants-in-aid (non-plan grants to states), the measures, if needed, to augment State government finances to supplement the resources of local government and to assess the state of the finances, deficit and debt conditions at various levels of government. Shri Shaktikanta Das, former Secretary to the Government of India, and Prof. Anoop Singh, Adjunct Professor, Georgetown University were appointed full-time Members. Dr. Ashok Lahiri and Dr. Ramesh Chand were appointed as part-time Members. Shri Arvind Mehta was appointed as the Secretary of the Commission. Shri Ajay Narayan Jha, former Finance Secretary, Government of India, was later appointed as member with effect from 1 March 2019 in place of Shri Shaktikanta Das. Throughout the Commission's tenure, changes including the present one in membership were subsequently notified by the President's order. In the late 1990's India's States were facing sharp fiscal deterioration. The problem was particularly serious in the poorer States. A slow deterioration in fiscal performance over the 1980s and 1990s was culminated into a State level fiscal crisis by late 1990s. Almost all the States had to revise the salaries of their employees as they were under tremendous pressure to do so after the Central government, implementing the recommendations of the Fifth Central Pay Commission, hiked the salaries of its employees in 1998. Unlike the Central government, State governments' fiscal performance did not show any improvement in the first half of the 1990s, and their deterioration in the second half has been rather sharp. In fiscal federalism, crisis at one level of government is bound to spill over. So far as the fiscal imbalances are concerned, which continued till today, had appeared in the Central government's budget in the form of deficit in its revenue account in 1979-80. States' revenue account experienced the same in the latter half of the 1980s. Warnings about the sustainability of fiscal stance and the impending crises started appearing in academic and professional circles since the mid-1980s (Mundle and Rao,1992).

But the entire literature on Indian Public Finance remained focused on the fiscal crises faced by the Central government. State government finances, though, started showing deterioration remained largely neglected. Even when the crises situation forced the Government of India to undertake economic reforms, which included fiscal discipline, no serious beginning was made as such at the State level. The point largely missed by the government and academics alike was that reforms would not succeed unless undertaken simultaneously at both levels. In a fiscal federalism, Centre and States are not watertight compartments and therefore the Center cannot remain insulated from the happenings at the State levels. So, the analytical framework and the logic employed to study the Central government finances are equally applicable at the State level. India's fiscal federal system has served the country well and has brought stability over an extended period. But with the growing fiscal stress and divergence in performance, the system itself came under scrutiny if it was responsible for the imbalances in the State finances. Therefore, the literature scanned for the present study can be classified into three categories: 1. The theoretical framework (or in other words, the economics of deficits).2. The theoretical and the empirical studies on fiscal federalism.3. Analytical studies on the fiscal imbalances in the Central and in the State government's finances.

Since the publication of the monumental work of Musgrave (1959) where he explained the fiscal functions of allocation, distribution, and stabilization to be performed by the government in accordance with the objectives of economic efficiency and social optimality, plenty of literature has been produced over the question on how these functions are best performed in a federal country. How should the various layers of government be assigned various responsibilities and tax jurisdictions? What principles should govern the formation of federalism and how such federalism should be geared to realise social, economic, and political objectives, is the subject matter of such studies. There appears to be a consensus on the proposition that the primary responsibility for macroeconomic stabilisation policies and the redistribution of income and wealth must be of the Central government, while the sub-national governments can be entrusted with the large part of allocation as the decentralised provision of public goods can cater to the local demands more efficiently.

Oates (1977) provided an approach that seems to generate insight, useful for analysis of the government's budgetary policy. But the application of such tools is difficult for all aspects of fiscal programs like revenue sharing.

Garg (2006) found that the ever-increasing financing of state sectors over the years, affecting autonomy and its responsibility generally transcended the states' jurisdiction. Such an instrument of financing influences States' policies which results in passing states' budgets meant for local bodies is a significant irritant.

Heredia and Rider (2005) found that the high transfer dependency of the States has weakened accountability and fiscal discipline. As the transfer system is complex and less transparent, and there is a lack of coordination among the institutions responsible for the transfers, it produces distorting incentives. To address the problem of perverse incentives, structural changes in the system of transfers are required.

Chakraborty (1998) analysed the relative importance of the various components of resource transfers from the Center to the States and concluded that Center-State financial relations evolved over the years, still it failed to reduce the vertical imbalance. The continuous decline of own revenue as a percentage of States' revenue expenditure could be another indicator of vertical imbalance.

Singh (2004) stated that objectives of horizontal equity can be achieved by reducing the channels of transfers between the governments. It would also help in managing political challenges arising from increased regional inequality within the federation.

The objective of the present study is to:

i) Outline major recommendations of XVFC;

ii) Assess fiscal autonomy of states of India in light of recommendations of XVFC;

Data was collected from various Finance Commission reports and publications Ministry of Finance, Government of India. The study gives a review of the existing literature review.

2. ASSESSMENT OF XVFC'S RECOMMENDATION

The XVFC has suggested to maintain the vertical devolution at 41% as per the interim report for 2020-21. 14th Finance Commission also suggested the same level of 42% of divisible pool**.** Adjustment of 1% has been made as per requirement due to the status change of the erstwhile State of Jammu and Kashmir into the new UT of Ladakh and Jammu and Kashmir. It can be seen as a great uplift to state fiscal autonomy which is a historical shift in the Centre-State financial relations. The analysis states that though the ratio of unconditional transfers to states is increasing, it is still insufficient. The fund coming from Union to state governments can be either tied or untied. Tied transfers are those where the Union government exercises strict control over how these funds are utilised by the states but untied funds can be utilised by the state government as per their requirements. Therefore, the XVFC has suggested to increase in the share of untied funds.

Table 1: Global Sharing for Vertical Fiscal Balance

Finance Commission	*Percentage Share Recommended*
X FC	29.0
XI FC	30.5
XII FC	31.5
XIII FC	32.0
XIV FC	42.0
XV FC	41.0

Source: Finance Commission of India -Report

There are various categories under which it is done. But some funds lie between being fully tied and fully untied making fund transfer more complex. However, for this analysis, the funds have been considered to be either completely tied or completely untied. The famous figure of 41% indicates the states' share in the 'divisible pool' of Union taxes. Divisible pool means the part of Union taxes that needs to be shared with the states. The XVFC has recommended providing Rs 2.9 trillion as revenue deficit grants to 17 states during 2021-26. These grants will be unconditional and 70% of the grants will be distributed to states during 2021-22 and 2022-23. These grants will help the recipient states to recover from damage caused to tax revenue due to pandemic. With many taxes subsumed under it, GST accounts for 35 percent of the gross tax revenue of the Union and 44% of the own tax revenue of the States. With gross tax revenue of the Union determining the divisible pool of taxes and, hence, transfers from the Union to the States, and changes in States' own taxes affecting their resource requirements, GST has become a critical factor in Indian federal finance. The recommendations of the XVFC will confer more fiscal autonomy to union as well as states on the revenue and the expenditure fronts, as the total transfers (devolution and grants) add up to 34% of estimated Gross Revenue Receipts to the Union. Besides the several categories under which it happens, what makes fund transfer far more complex is that certain funds lie between being entirely tied and entirely untied. However, the future contours of the vertical devolution of resources between the Union and the States is to share gross revenue receipts similarly in about equal ratio between the Union and States, while assuming no further decline in the divisible pool as a proportion of gross revenue receipts. This balance has been achieved through 41% of the divisible pool being devolved to the twenty-eight States and the balance devolution taking place through various forms of FC and non-FC transfer mechanisms. In absolute terms, for the period 2021-26, the states will get a total amount of Rs. 42.2 lakh crore in tax devolution (Including total grants of Rs 10.33 lakh crore). The cumulative transfers to States are predicted to remain at 51% of the divisible pool during such period.

The XVFC has recommended that the normal limit for net borrowings of state governments be fixed at 4% of GSDP in 2021-22, in line with the enhanced baseline borrowing limit for the year. This will ease to 3.5% by 2022-23, thereafter reverting to the erstwhile 3% limit till 2025-26. The additional borrowing space of 0.5% of GSDP for states is conditional on the completion of power sector reforms. This is, however, lower than the 1% limit permitted by the Union for 2020-21 that was linked to a set of four reforms.

The devolution by the XVFC will benefit states like Bihar, MP, Maharashtra, Rajasthan, and West Bengal the most, according to the survey. Most of the states like Goa, Haryana, Himachal Pradesh, MP, Odisha, Tamil Nadu, UP and West Bengal have no significant change in the total divisible pool, whereas, Bihar, Chhattisgarh, Maharashtra and all the northeastern states except Assam have benefitted from the change in the devolution formula which now gives greater weight to state's forest and ecology, demographic performance, and tax effort, the report pointed out. The net result of the change in criteria is that the share of ten states in the divisible pool has declined during its award period, relative to the previous commission's period. Almost all the southern states barring Tamil Nadu have emerged as the biggest losers from the distribution of taxes. Karnataka is the biggest loser, while Maharashtra is the biggest gainer.

Table 2: Total Grants to States

Type	*Amount (Rs. Crores)*
Local Bodies	436361
Disaster Management	122601
Post-Devolution Revenue Deficit	294514
Sector-specific	129987
State-specific	49599
Total	1033062

Source: Finance Commission of India -Report

Though the use of dated population data is unfair, the XVFC stated that the Census 2011 population data represents the present need of States in a better way. the States having better performance on the demographic front have been assigned a 12.5% weight to the demographic performance criterion by HVFC. It has introduced the tax effort criterion again to reward fiscal performance. The XVFC has maintained a moderate weight of 15% for the area criterion in consonance with the approach of FC-XIV.XVFC believed that big forest cover brings huge ecological benefits, but the opportunity cost in terms of area is not available for other economic activities and it also results in fiscal disability. XVFC has assigned 10% weight to the forest and ecology. The increase in weight is also recognition of forests, a global public good, as a resource that ought to be preserved and expanded through afforestation of degraded and open forests for national benefit as well as to meet our international commitments. XVFC has decided to get back to the method of representing fiscal capacity in terms of income distance and gave it 45% weight. XIVFC recommended that the local bodies should be required to spend the grants only on the basic services within the functions assigned to them under relevant legislation. XIVFC recommended that income of own taxes and non-taxes, assigned taxes, grants from the Finance Commission, devolution and grants from the State, and grants for any agency functions assigned by the Union and State Governments should be reflected in the books of accounts prepared by the local bodies. XIVFC suggested the distribution of grants to the States using 2011 census data with the weight of 90% and area with the weight of 10%. According to such recommendation, the grant to each state will be divided into two categories, a grant to duly constituted gram panchayats and a grant to duly constituted municipalities, based on urban and rural population of that state using census 2011 data.

Table 3: Criteria and Weights Adopted by Finance Commissions

FC/Criteria & weights	*X*	*XI*	*XII*	*XIII*	*XIV*	*XV*
Population	20	10	25	25	17.5	15
Income Distance	60	62.5	50		50	45
Area	5	7.5	10	10	15	15
Tax Effort	10	5.0	7.5			2.5
Fiscal Discipline		7.5	7.5	17.5		
Fiscal Capacity Distance				47.5		
Index of infrastructure	5	7.5				
Demographic Change					10	12.5
Forest Cover					7.5	10
Total	100	100	100	100	100	100

Source: Finance Commission of India -Report

In line with the FC that is set up at the Union level, the Constitution requires and expects state governments to set up State Finance Commissions. The XVFC has asserted that the mandate of any given SFC is intended to be applicable only for five years. It revealed that only 15 states have set up their fifth or sixth SFCs, whereas several states have not moved beyond their second or third SFC. Accordingly, a staggering 84% of the Rs 4.4 trillion grants for local bodies recommended by the XVFC are conditional on the states setting up SFCs for the coming five-year period and acting on their recommendations by March 2024. A staggering 84% of the Rs 4.4 trillion grants for local bodies recommended by the XVFC are conditional on the states setting up SFCs for the coming five-year period and acting on their recommendations by March 2024. The total grant to local bodies is fixed at Rs 90,000 crore for 2020-21, of which Rs 60,750 crore is recommended to be used for rural local bodies and Rs 29,250 crore for urban local bodies. Such allocation is 4.31 percent of the divisible pool. This shows an increase over the grants for local bodies in 2019-20 that amounted to 3.54% of the divisible pool (Rs 87,352 crore). The grants will be divided between states based on population and area in the ratio 90:10. The grants will be made available to all three tiers of Panchayat- village, block, and district.

The Commission recommended to set up National and State Disaster Management Funds to promote local-level mitigation activities. The Commission has also recommended to retain the existing patterns of cost-sharing between states and the centre to fund the new SDMF and the existing SDRF. The pattern of cost-sharing between centre and states is (i) 75:25 for all

Table 5: Grants for disaster risk management (In Rs. crore)

Funding Windows	*National corpus*	*States' corpus*
Mitigation (20%)	2,478	5,797
Response (80%)	9,912	23,186
(i) Response and Relief (40%)	4,956	11,593
(ii) Recovery and Reconstruction (30%)	3,717	8,695
(iii) Capacity Building (10%)	1,239	2,998
Total	12,390	28,983

Source: Report for the year 2020-21, XV Finance Commission

states, and (ii) 90:10 for north-eastern and Himalayan states. A suggestion was made to permit States to breach the FRBM borrowing limits in the event of a shortfall in tax devolution. It was also suggested that States should be allowed a higher debt ceiling of at least 30% of GSDP because, under the debt target of 20% of GSDP, many of them would have to keep fiscal deficit below 3% of GSDP. There were also proposals for building in escape clauses for States under the FRBM framework. The Government of India urged the Commission to incentivise States to amend their FRBM acts to bring the debt-GDP ratio to 20% of their GSDP by 2024-25, by linking its transfers to fulfillment of this goal.

3. CONCLUSION

The XVFC has recommended maintaining the vertical devolution at 41%. The recommendations of the XVFC will confer more fiscal autonomy to union as well as states on the revenue and the expenditure fronts, as the total transfers (devolution and grants) add up to 34% of estimated Gross Revenue Receipts to the Union. Particularly in 2021-22, the states will get a total of Rs.8, 55,176 crore in tax devolution. In absolute terms, central tax devolution to states had peaked at Rs 7.6 trillion in 2018-19. It contracted by 15% each over the next two years and it is forecasted to expand by 21% in 2021-22 to Rs 6.7 trillion, which appears to be a credible assessment. The XVFC drew a very comprehensive assessment of the revenue and expenditure of States and the Union. A staggering 84% of the Rs 4.4 trillion grants for local bodies recommended by the XVFC are conditional on the states setting up SFCs for the coming five-year period and acting on their recommendations by March 2024.

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The Rise of the Balanced Scorecard from Traditional Performance Measurement System: A Conceptual Review

Dr. Rajanikanta Khuntia[1]
[1]*Asst. Professor in Commerce, Dhenkanal Autonomous College, Dhenkanal.*
E-mail: rajanikanta.research@gmail.com

Abstract: Traditional performance measurement systems are largely based on financial measures and focus on profitability. The use of financial measures alone has limitations as they are backward-looking and do not indicate future stability. The definition of success has to change from being profitable to being sustainable. The performance measurement systems must incorporate the innovations and customer-centricity of the corporate which ultimately add value to the stakeholders. The impact of intangibles like innovations in products, processes, and services on customer satisfaction and customer retention leads to long-term value creation. The need of the hour is to have a performance measurement system that incorporates the tangibles and the intangible measures to give a holistic view of company's performance. Balanced Scorecard is a technique of performance measurement which includes both quantitative and qualitative factors of performance and measures performance from four perspectives: Financial, Customer, Internal Processes, and Learning and Growth.

The present study proposes to comprehend the reasonableness of the Balanced Scorecard over the other conventional performance measures. It aims at contributing to the conceptual knowledge of Balanced Scorecard by carrying out an extensive study of the vast literature available from previous studies conducted on Balanced Scorecard. The study is descriptive in nature and based on secondary data.

Keywords: *Balanced Scorecard, Financial measures, traditional performance measurement systems, qualitative factors of performance.*

JEL Codes: *O3, M10, M11, C5*

1. BACKGROUND OF THE STUDY

Improving organizational performance has always been a cause for concern for corporate leaders and entrepreneurs. Organizations accumulate their resources to keep up with the constantly changing business environment to survive, succeed, and remain competitive. Business and operational strategies should not exclusively be continually surveyed and changed; they should also be executed at a pace quicker than ever before. In the volatile state of the present business environment, sole dependence on financial or accounting-related performance metrics is insufficient. Increasing consciousness of the significance of non-financial performance measures in providing long-term value development and long-term strategic orientation even as their effect on firm performance has prompted various advancements in the sphere of performance measurement systems. One of the famous improvements in this area is called Balanced Scorecard (BSC) which has been developed by Kaplan and Norton in 1992. The BSC replaces conventional financial measures with non-financial measures that concentrate on at least three other perspectives–customers, internal business processes, and learning and growth.

Niven (2006) was of the opinion that 60% of the Fortune 1000 companies are either implementing or in a process to implement the BSC. Further, Bain & Co (2009) have studied that about 54% of organizations in Europe, 49% in North America, 52% in Asia, and 56% in Latin America use the BSC. Niven (2006) in his study demands that BSC was judged as one of the 75 most innovative ideas of the twentieth century by The Harvard Business Review. Waruhiu, (2009) in his study found that the BSC was ranked the sixth most widely used Management tool in the year 2008, as it was used by 53% of 1430 companies. Despite the popularity of BSC among corporate leaders all across the world, the success of the BSC is not satisfactory.

2. CATEGORIES OF PERFORMANCE MEASURES

There are mainly two categories of performance measures i.e., financial and non-financial. Measuring performance is a must to control deviations from the established standards. Gone are the days when performance measurement using merely ratios was considered the most important tool for evaluating performance. It is increasingly felt that the traditional ratios are lagging indicators of the performance of an organization with no focus on the future. Emerging trends and structural changes linked with the present challenging environment have made these conventional performance measures like Return on Investment, Residual Income, Economic Value Added, Profitability Analysis, Return on Equity, etc. insufficient. The inclusion of non-financial indicators along with the financial measures is a key to tracking an organization's performance.

3. FINANCIAL MEASURES

The American Accounting Association (1975) defined financial measurement as "pieces of information expressed in monetary information expressed in monetary units and ratios resulting from mathematical manipulations of information". One of the most important diagnostic tools about a firm's performance is its financial/operating measures. These measures evaluate the effectiveness and efficiency with which organizations utilize their funds to create value for shareholders. There are multiple financial accounting measures used to provide such information such as Return on Net worth (RONW), Return on Assets (ROA), Return on

Shareholder's Equity (ROE), Economic Value Added (EVA), Profitability Ratios, Earnings Per Share (EPS) and many others. Purohit et.al (2006) said that many studies prove that the performance of Corporate cannot be merely measured based upon the indicators such as EVA, ROA, ROC, or ROI. There must also be a focus on the non-financial performance measures of the organizations in the services sector. Financial measures are an outstanding way to measure financial performances and would prove to be an excellent instrument for organizations to track their past performances and events. But the most notable drawback of these measures is their backward-looking approach. The financial measures lack in their predictive ability for the future. One of the important functions of a finance manager is maximizing shareholders' wealth. However, maximizing short-term profitability does not essentially ensure that the shareholder returns are also higher. In some cases, there may be chances that the accountants may fudge/manipulate the accounting records to give a better picture of the organization's profitability to its stakeholders. This creative accounting practice will not give an accurate and fair picture of the organization's performance. Moreover, if an organization relies solely on financial measures, the execution of the strategy will not be successful.

Niven (2006) in his study highlighted the limitations of too much dependence on financial measures as under:

- ✓ Increasing significance of intangible assets.
- ✓ Lack of predictive ability for the future.
- ✓ Non-representation of cross-functional and teamwork activities.
- ✓ Emphasis on short-term success rather than long-term value.
- ✓ Non-involvement of all levels of an organization.

These limitations have led to the belief that expansion of financial measures should be done to incorporate organizations' intangible and intellectual assets that are crucial for success in present competitive times. This may give a comprehensive view of the overall performance of an organization.

4. NON-FINANCIAL MEASURES

According to the American Accounting Association (1975), "non-financial performance measurements are information expressed in non-monetary units and ratios". Non-financial measures are summarised into five categories: quality, delivery, production process time, flexibility, and cost (Maskell, 1989). As discussed above, the financial measures focus on short-term performance against specific numeric standards and do not deal with a firm's progress on the customer's or employee's front. Non-financial measures hold equal importance in achieving the desired level of profitability and competitiveness. By supplementing non-financial measures with the financial ones, companies can capture long-term benefits, help to execute strategic plans successfully, and improve their subsequent economic performance. These measures have become extremely significant in decision-making and evaluation of performance. Non-financial measures will ultimately improve the progress in the firm's financial front as well. For instance, if a company has decided to develop its employees' skills extensively would require significant investment in training and development. In the short term, financial results will be affected adversely, but in the longer run, lead to increased productivity, zero defects, innovative products and services, and so on. These intangible results will ultimately result in many financial gains such as increased profit margins, increased demand & sales, and improvement in cash flows. Relying purely upon non-financial measures is not right. There should be a combination of financial as well as non-financial measures of performance to ensure the survival of the fittest and therefore keep in pace with the current, fast-changing environment.

5. SIGNIFICANCE OF NON-FINANCIAL MEASURES IN PERFORMANCE EVALUATION

Financial metrics reflect an organization's overall financial status, while non-financial indicators demonstrate the company's actual and future competitive position. Some of the merits of non-financial performance indicators are:

- ✓ Closely associated with the long-term strategies of the organization.
- ✓ Indicates future financial performance.
- ✓ Communicate objectives and implement strategic plans.
- ✓ Measures firm's intangible assets and provides quantitative indicators
- ✓ Portrays an exhaustive view of the performance of an organization.
- ✓ Focuses on actions that are creating value for the organization and stakeholders.
- ✓ Identifies criteria to meet customers' expectations and to measure the performance of employees.
- ✓ Provides direct and prompt feedback on managerial efforts on organizational objectives and analyses the impact of managerial decisions on organization performances.
- ✓ Financial evaluations are always prone to biases and chances of manipulation are higher. Thus, a non-financial performance indicator provides a better and more comprehensive view of the firm to shareholders and stakeholders.

6. EVOLUTION AND REVOLUTION OF PERFORMANCE MEASUREMENT SYSTEM

The performance measurement method has been a focal point for accounting scholars and professionals since its introduction back in the 1960s during the time of industrialization.

Right then researchers set up a standard management accounting framework based on financial metrics such as traditional budgeting, review of costs and variances, and Cost volume profit. The focus of this modern method of performance measurement was to control organization cost. Nevertheless, owing to the change in the complexity of the market and its environment, this traditional performance measurement system is not feasible concerning the current business situation. The emphasis is no longer on competition, but on consumers, product efficiency, and market services. The shortcomings of current measurement tools have sparked a revolution in performance measurement. The table below shows the history of the performance measurement system and its major areas of focus.

The Evolution of Performance Measurement:

Table 1: The Evolution of Performance Measurement

Measures	*1960's*	*1970's*	*1980's*	*1990 onwards*
Main Focus	Financial	Financial	Financial / Managerial	Financial / Non-financial
Key Developments	Accounting Earnings	Accounting Earnings	Unit Costs	Balanced Scorecard
	Earnings per share	Residual Income	Joined Budgets	Economic Value Added
	ROI	ROI	Operating Profits	Activity-Based Costing
	NPV		Cash Flows	

Source: Swamy, 2002, p44

Table 2: A Comparison Between Traditional and Modern Performance Measures

Traditional Performance Measures	Non-traditional Performance Measures
Based on outdated traditional accounting system	Based on company strategy
Mainly financial measures	Mainly non-financial measures
Intended for top and senior managers	Intended for all employees
Late metrics (weekly or monthly)	On-time metrics (hourly, or daily)
Difficult, confusing, and misleading	Simple, accurate and easy to use
Lead to employee frustration	Lead to employee satisfaction
Neglected at the shop floor	Frequently used at the shop floor
Have a fixed format	Have no fixed format (depends on needs)
Do not vary between locations	Vary between locations
Do not change over time	Change over time as the need changes
Intended mainly for monitoring performance	Intended to improve performance
Not applicable for JIT, TQM, RPR, OPT etc	Applicable for JIT, TQM, RPR, OPT etc
Hinders continuous improvement	Support continuous improvement

Source: Compiled from Different Sources

7. BALANCED SCORECARD – A CONCEPTUAL FRAMEWORK

A balanced scorecard is a method of performance measurement applied in strategic management in identification and optimization of an organisation's multiple internal processes and their subsequent external outcomes. This assists business leaders in transforming and implementing management strategies into operating objectives. The Balanced Score Card system splits the strategy into four different standpoints, those are financial processes, consumer processes, internal business processes, and learning and growth. The four critical steps in Balanced Scorecard design and execution are:

1) Transforming the vision into organizational goals,
2) Transmitting vision and relating it to individual performance,
3) Preparation and modification of a feedback-based approach,
4) Learning;

According to Kaplan and Norton (1996), "Balanced Scorecard is used to match the measures of past performance with measures of the drivers of future performance. These measures are derived from the vision and strategy of the organization. The organisational performance can be viewed from four perspectives: financial, customer, internal business processes, and learning and growth. These four perspectives provide the framework for the balanced scorecard."

Through this way the Balanced Scorecard offers answers to four basic questions that explain the whole company from four relevant perspectives (Kaplan and Norton, 1992):

Table 3: Questions Highlight four Important Perspectives of Balanced Scorecard

Basic Questions	Perspectives
How do customers see the business?	Customer Perspective
What is it important to excel in?	Internal Process Perspective
Can the business continue to improve its ability and create value?	Learning and Growth Perspective
How do shareholders see the business?	Financial Perspective.

Source: Compiled from Different Sources

In this way, the Balanced Scorecard creates an equilibrium between long-term and short-term targets, financial results and performance factors. This provides a continuous learning loop and helps it to adapt to changing approaches. Considering the customer value generation and the expected financial results, the plan is categorized into simple operational priorities. Internal business processes are designed in line with key performance targets from customer and financial perspectives and the opinions of learning and growth. This creates a causal linkage between the targets and perspectives and this process is known as a strategy map. (Kaplan and Norton, 2004). Parity is preserved between short-term and long-term objectives, lead and lag objectives, financial and non-financial targets. These objectives are clearly defined to ensure clear comprehension of the words, though purpose is linked to relevant steps, priorities, and activities.

8. GLOBAL USAGE AND SATISFACTION OF BSC

Bain & Co. (2017) undertook an international study of 1067 global executives in prominent companies from 10 countries divided into four regions: North America (the United States and Canada); Europe, the Middle East, and Africa (France, Germany, Spain, and the United Kingdom); Asia-Pacific (China and India); and Latin America (Mexico and Brazil).

The figure shows the satisfaction level of corporate leaders on different management tools worldwide. The global satisfaction level of the Balanced Scorecard is 3.90 as compared to the global average satisfaction level of different management tools is 3.84.

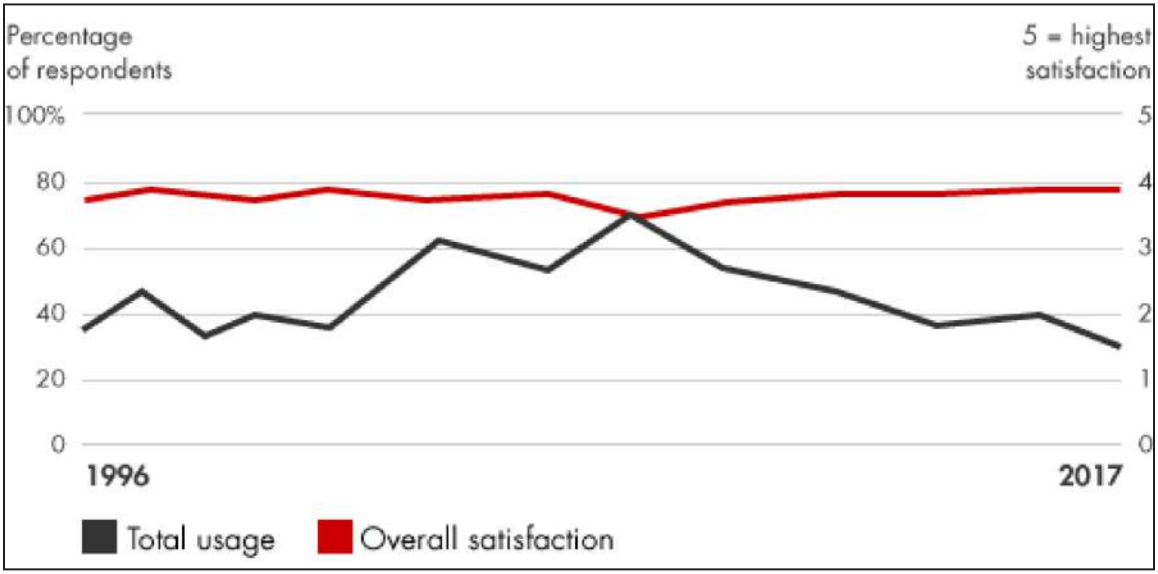

Figure 1: Global usage and satisfaction of BSC (2017)

Source: Bain & Co. (2017), Management Tools & Trends. Retrieved from www.bain.com

9. THE ORIGINS OF THE BALANCED SCORECARD

The Balanced Scorecard model was first conceived by Dr. Robert Kaplan of Harvard University and Dr. David Norton, a Boston area consultant. In 1990, they started to explore a method for evaluating organizational performance using a more structured collection of performance metrics. The dynamics of the Balanced Scorecard concept can be traced out to various origins and stages.

Tableau de bord (French engineers-1930s)

Tableau de bord is a communication tool that was developed in France in 1930 and described as a "dashboard" used by managers to direct companies towards their goals (Bessire and Backer, 2005). The Tableau de bord has been very well known as far back as its origin in France, and it is used by most the organisations. It is claimed that the Balanced Scorecard is identical to the metric method "Tableau de Bord" (TBD) developed by French engineers in the 20th century (Souissi, Mohsen, 2008). Even though both are rooted in a common way of thought stressing the relation between financial and non-monetary measures, the Balanced Scorecard and the French TDB differ in several respects. Balanced Scorecard stresses the link between the financial and non-financial measures with the organisation's main goals. On the contrary, the TDB is a tool mostly known for its supervisory and management assistance in the production process.

New Performance Management System (General Electric -the 1950s)

BSC-type architecture was first developed by General Electric (GE in the 1950s, as a prototype for performance control (Hendricks, 2004). The planned community-recommended eight indicators (one financial and seven non-financial) to assess the performance of General Electric's integrated division: competitiveness, market share, efficiency, industry quality, corporate responsibility, workforce growth, employee behaviour, and alignment between short-range and long-range targets (Kaplan, 2010). Given the fact that the tests were not accompanied by the perspectives of the Balanced Scorecard by then, the metrics would accurately represent the four perspectives.

The Concept of "Management by Objectives" (Peter Drucker-1954)

In 1954, in his initial book "The Practice of Management," Peter Drucker proposed the concept of "management by objectives." According to Drucker (1954), "performance necessitates that each activity ought to be coordinated towards the targets." In this way, Drucker's work can be backed up by the big indicators of the structure between the strategic and individual goals typical for the realization of the advanced Balanced Scorecard.

Planning and Control System-based Framework (Robert Anthony-1960s)

Robert Anthony built a mechanism in the middle of the '60s for planning and monitoring processes, identifying three of these process mechanisms i.e., strategic planning, management control, and operational control. In accordance with Kaplan (2010), the fundamental principles of management strategy can be seen in his research, including both financial and non-financial measurement.

The Balanced Scorecard Revolution (Dr. Nolan Norton and Robert Kaplan-1990s)

The Balanced Scorecard was the result of an ongoing performance measurement analysis study that began to operate in 1990-1991 to evaluate what successful companies were assessed in the fundamental framework. A consultancy firm headed by Dr. Nolan Norton led the study. In addition, Professor Robert Kaplan, from Harvard Business School, was co-selected to provide scholastic guidance in the review category. The timing of the Balanced Scorecard introduction and promotion couldn't be better. In 1991, in Harvard Business Journal, Eccles wrote the "Performance Measurement Manifesto." In this article, he expects that a transition in performance measurement would arise over the next five years, during which traditional performance measurement systems will be transposed by non-financial measurement systems. The catalyst of this movement produced the Balanced Scorecard.

The following table shows the origin of the Balanced Scorecard through different phases:

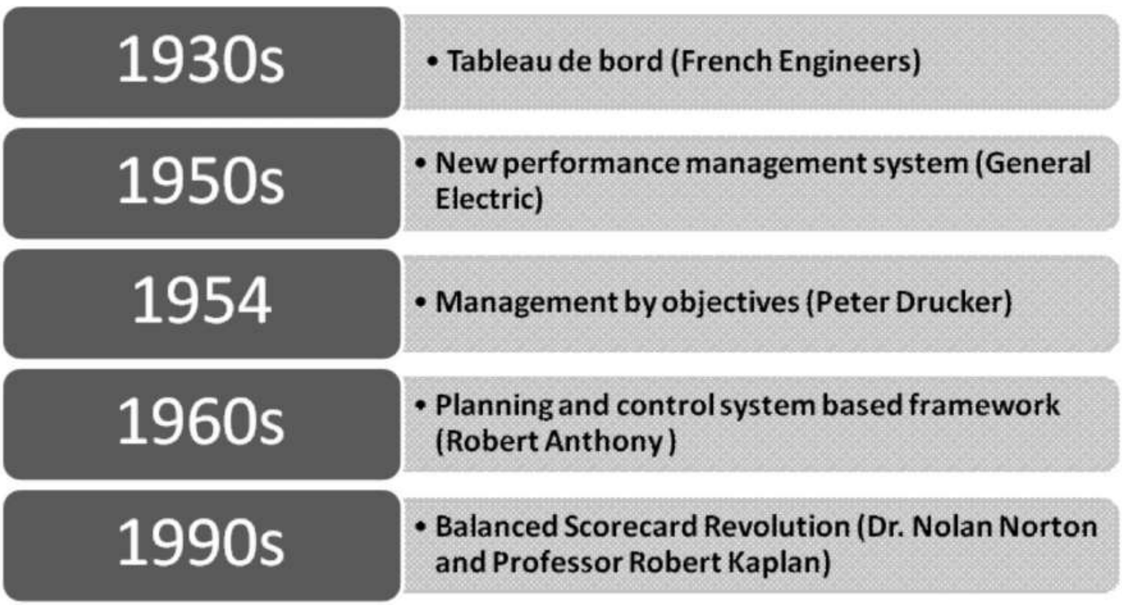

Figure 2: Development of Balanced Scorecard through different phases

Source: Self-compiled

10. EVOLUTION OF THE BALANCED SCORECARD

Since its launch, the balanced scorecard has seen an uninterrupted change in cycle. The conventional Balanced Scorecards have been divided into four segments and are simply called "Financial," "Customer," "Internal Business Processes" and "Learning & Growth." The Balanced Scorecard has been adapted from a performance measurement device to a robust strategic performance improvement system over the last two decades. The way Kaplan and Norton write their works is a new way in the development of the Balanced Scorecard. Balanced Scorecard's development following Kaplan and Norton's publications is illustrated in the following table:

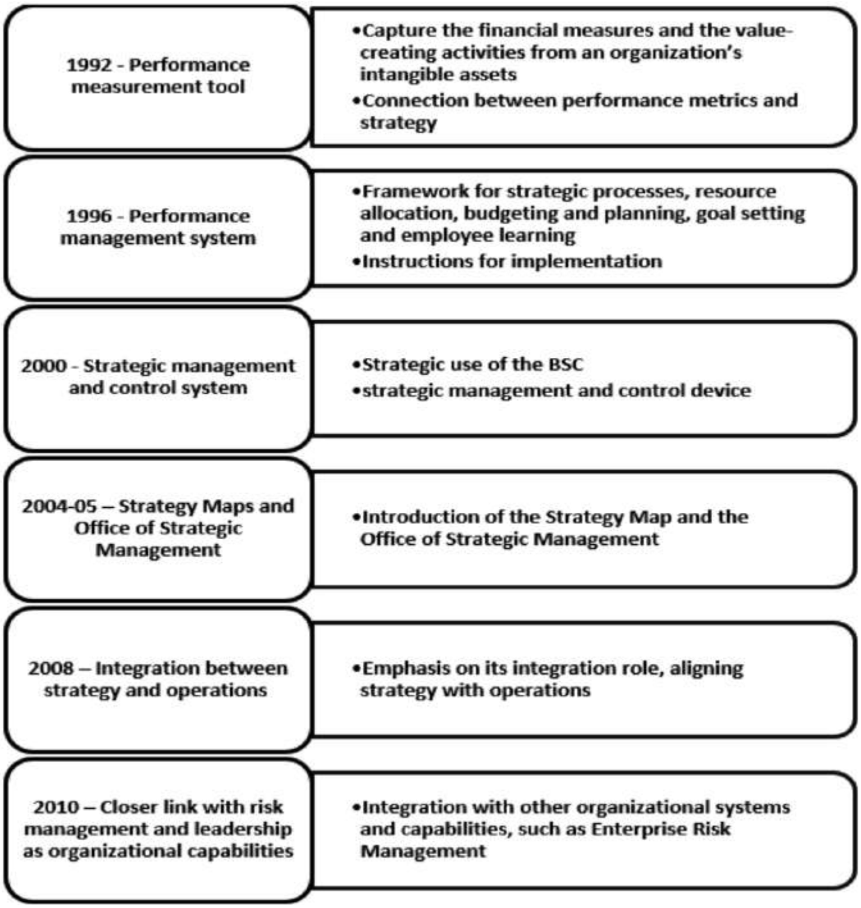

Figure 3: Balanced Scorecard development in the aftermath of Kaplan and Norton publications

Source: Self-compiled

The measurement of performance in organisations is not new but organisations have realized over the last 30 years that financial metrics alone are not enough to determine the progress of a company. In the 1970s efficiency became an important topic and companies and government organisations started following scientific equipment and other tools, began to pursue the efficiency of work and labour. Throughout the 1980s, corporate leaders committed themselves to quality and customer service, which meant that these metrics were a scorecard throughout terms of organization. Throughout the mid-1990s, the definition of a balanced

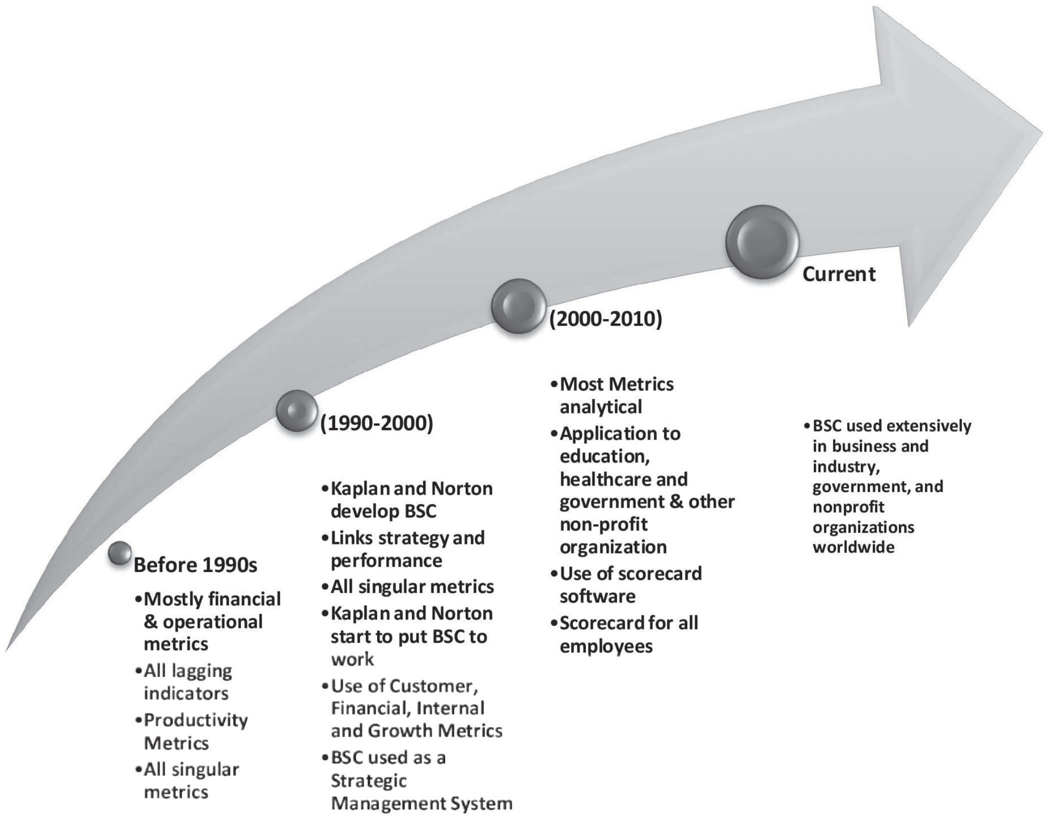

Figure 4: Different Stages of Generic Balanced Scorecard

Source: Self-compiled

scorecard was presented; businesses were asked to actually analyse the number of their metrics and then align their scorecards with non-financial measures. In addition, it is recommended in the balanced scorecard method that fewer is better: there was a long increase in the number of metrics adopted by organizations every year, but Kaplan and Norton suggested that nobody would have more than 15 to 20 scorecards each. Over the past 30 years, companies have undergone three distinct phases or stages in their methodologies to track implementation. Each stage has lasted for 10 or 15 years and the act of measuring performance has become increasingly careful with every progressive step. The method is far from what you would call scientific, but the practice is improving.

11. CONCLUSION

Measuring performance plays an important role in building organizational value through effective strategic management. The work of designing and refining measuring methods for performance includes conceptual and normative as well as empirical and cognitive problems. As performance affects the wealth of a business and aims towards value creation, it requires proper measurement. Without measurement neither comparison nor decision making is possible. Every company must recognize that it must promote not only financial results, but also customer service, the advancement of new technologies, and the formation of a learning and growth environment. The Balanced Scorecard is such a revolutionary instrument that has seen not just the financial metrics but also the non-financial indicators as equally important in assessing the performance of organisations. It brings a link between strategy and execution. The Balanced Scorecard provides the basis for a modern strategic management framework, in addition to performance measurement. This scorecard helps organisations to implement new strategy-oriented governance and renovation processes. Thus, the mechanism is gaining growing prominence among many corporate houses.

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