

POST STRATEGIC DIRECT TAX ENGINEERING TAX REVENUE PROGRESSION ASSESSMENT

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ABSTRACT

You don't pay taxes—they take taxes."—Chris Rock

PURPOSE – This research paper is to find out and assess the effectiveness of strategic planning 2010-15 by income tax department towards nation building process for optimization of revenue collection, ensuring tax law compliances

DESIGN/METHODOLOGY/APPROACH – The objectives were achieved by looking at total direct tax collection, cost effectiveness in tax collection, direct tax to GDP, Buoyancy factor, case disposal rate. The data regarding tax collections, GDP, case settlements, collection cost etc are collected from the published database by income tax department on their website over a period from 2005-06 to 2016-17. The dependent T test has been applied at the confidence level of 0.05 in order to determine the impact of strategic planning and contribution in nation building process. The author is optimistic in research work application per se with other emerging countries.

FINDINGS – The research work demonstrated significant impact on tax collection and case settlement after 2011-12 but other factors like buoyancy factor, direct tax to GDP ratio and tax collection charges carry insignificant effect after adopting strategic move by income tax department on one hand and amendments through Finance bill 2011 onwards.

PRACTICAL IMPLICATIONS – This paper will be proved as evaluation step in management of tax structure and policy formulation in Indian tax system.

ORIGINALITY/VALUE – Our study would help understanding Indian tax system with reference to direct tax and parameters for its effective evaluation.

KEYWORDS: Nation building process, Buoyancy factor, Indian tax system, Tax-GDP ratio, case disposal rate

INTRODUCTION

Indian tax system functions with majorly two limbs: one direct tax and second indirect tax. Direct tax is the major source of revenue to the central government so as to build the nation and maintain sustainable growth for the country. The statistics shows annual growth of 16% during the period from 2005-06 to 2016-17 and moved

up from Rs. 165216 Crore in 2005-06 to Rs. 849818 in 2016-17. It has weight of 5.6 % of GDP in 2016-17. The optimization of direct tax revenue is sought to be achieved through progressive tax pattern, effective execution and ease of tax reporting.

The income tax department articulated strategic planning to collect total tax dues ensuring minimum compliance cost to the tax payer community. The department aimed to achieve progressive tax form, easy compliance, enforce tax law with fairness and render quality service to tax payer. It will reflect positively in tax collection, GDP, case settlements, tax collection cost.

In various finance bills, amendments were made to levy tax on fairly manner so much so align with nation building goal. Finance Bill 2011 proposed to remove exemption from minimum alternate tax and exemption from dividend distribution tax in the case of SEZ Developers and units in SEZs. It introduced rationalization of provisions relating to Transfer Pricing. Finance bill 2013 introduced Chapter X-A to General Anti-Avoidance Rule and Chapter XII-DA relating to special provisions for tax on distributed income of domestic company for buy-back of shares. Finance bill 2015 introduced measure to curb black money to control mode of taking or accepting certain loans, deposits. The major amendments made to promote domestic manufacturing and improving the investment climate by deferment of provisions relating to GAAR (General Anti Avoidance Rule).

OBJECTIVES:

1. To study post strategic structuring impact of direct tax collection
2. To verify post strategic structuring impact of cost of collection percentage
3. To analyze post strategic planning and implementation effect on Buoyancy factor which reflect responsiveness of tax revenue growth to changes in GDP.
4. To determine post planning direct tax GDP ratio contribution in the nation building.
5. To assess post tax reform planning impact of case disposal

RESEARCH HYPOTHESIS:

1. H₀: Post strategic tax structuring, no significant change in direct tax collection

2. H₀: Post strategic tax structuring, no significant change in cost of collection percentage
3. H₀: Post strategic tax structuring, no significant change in Direct tax GDP ratio
4. H₀: Post strategic tax structuring, no significant change in Buoyancy factor
5. H₀: Post strategic tax structuring, no significant change in case disposal rate

Scope of the study: The research paper strive to assess effective strategic planning framed in 2010-11 by income tax department to align with nation building objective by progressive tax structure and ease compliance to render quality service to tax payer. The study is aimed to analysis post planning performance like tax collection, buoyancy factor, direct tax GDP ratio and case disposal rate.

Research Methodology: To study influence of strategic tax planning of income tax department, factors like tax collection trend and other related ratios are tested for the period 2005-06 to 2016-17.

Data collection: Data for studying parameters pertaining to tax revenue performance are collected from published time series data by income tax department for the period on tax revenue, cost of tax collection, case settlements GDP etc.

Statistical Techniques: The statistical parameter like mean, variance, standard deviation on collected data are used for descriptive output and paired sample t test applied to test research hypothesis with the help of MS-Excel.

Data Analysis: Pre and post practicing strategic tax planning, all the ratios showing impact for the entire study period are computed or compiled and compared to see significance on results like growth in tax revenue collection, using paired sample t-test at confidence level of 0.05 or 95%.

Limitation of the study: The research confined to tax revenue planning with reference to Indian context for period from 2005-06 to 2016-17 and evaluated on selected explained variables limited to available published data by income tax department. The study has assumption of values & ratios in study during period normally distributed.

LITERATURE REVIEW

The Income Tax Department (ITD) envisaged tax structuring and planning through progressive tax policy, efficient and effective tax administration and improved voluntary compliance. The strategic planning for this purpose will have to be done in dynamic settings taking into account external challenges & opportunities and internal strengths & constraints. This document states the Vision 2020 and a strategic plan covering the five year period 2011-15. (2020, 2016) Indian tax system is extreme progressivity

based tax levy pattern but high weight on lower income ranges leads to corruption, tax evasion and weak enforcement and revision in marginal tax rate. (Gupta, 1982) "India syndrome" of right to corruption is due to prevalence of extremely high rate of taxes at institutional level. (Burgess, 1993). Tax reform should be to revise and correct prevailing distortions and invigorate the market sentiments. (Pillarisetti, 1995). Non planned tax structure leads to tax evasion and causes accounting fraud. (Stavroula Kourdoumpalou, 2012).

Tax policies can be an effective mechanism to promote investments, both international and domestic, which India needs in abundance. Most likely corporate tax can become a potential source of revenue in the future. (Reji George, 2015). Three dimensions of tax complexity encountered by corporate taxpayers were tax computations, record keeping and tax ambiguity. The first two complexity dimensions were faced largely by smaller companies. On the other hand, the least difficult tax-related areas were dealing with tax agents, submitting tax returns within the given time and dealing with the tax authority. (Isa, 2014). Tax policy is considered as the principal form of industrial policy, and business tax incentives seen as instruments of public policy. (Fisher, 1985). It emphasizes on role of corporate tax in developed economies. (Buettner, 2010). Many developing economies offer tax incentives like tax holidays to attract foreign investment by providing a limited period of tax exemption and reduction for tax investors; it is seen that tax holidays affect non-compliance. (Chan, 2000).

The current system of tax in the country suffers from complexities due to amendments that take place each year. (Bansal, 2010). At 15.5 per cent, India has one of the lowest tax-GDP ratios, compared to 17.7 per cent of the middle-income countries. India's per cent share of direct taxes to total taxes is at 37.7 per cent, while it is 57.5 per cent in South Africa, 55.85 per cent in Indonesia, 41.3 per cent in Russia and 75.8 per cent in the USA. (Standard, 2013) It suggests correlation in collection trends in tax revenue. (Harberger, 1962) Base erosion and profit shifting (Devereux, 2004).

Hypothesis Testing: To test hypothesis, pre & post strategic tax planning implementation performance with the help of key indicators are compared to check significance of changes in trends using "paired sample t-test at confidence level of 0.05 or 95 % and also descriptive statistics analysis to ascertain the mean difference.

ANALYSIS OF PAIRED SAMPLE T-TEST ANALYSIS.

- To test income tax department's effective tax formulation, the statistic parameter on direct tax collection like mean difference of 351920.67 Crores, high correlation of 0.99, t-stat -27.9 and p value 0.0000011 which is less than .05 and establish significant impact on tax collection post strategic planning. Hence reject null hypothesis of no difference pre -post reform in tax implementation from 2011-12 onwards and shows high significance.

Table 1-Total Direct Tax collection (Value in INR Crores)

Pre		Post	
2005-06	165216	2011-12	493987
2006-07	230181	2012-13	558989
2007-08	314330	2013-14	638596
2008-09	333818	2014-15	695792
2009-10	378063	2015-16	741945
2010-11	445995	2016-17	849818

t-Test: Paired Two Sample for Means

Total Direct TaxCollections		
Mean	311267	663188
Variance	10207420633	16437523846
Std Deviation	101032	128209
Observations	6.00	6.00
Pearson Correlation	0.99	
Hypothesized Mean Difference	0.00	
Df	5.00	
t Stat	-27.90	
P(T<=t) one-tail	0.00000055	
t Critical one-tail	2.02	
P(T<=t) two-tail	0.0000011	
t Critical two-tail	2.57	

- To test policy effect, the statistic parameter on cost of collection like mean difference of 0.00 %, low correlation of 0.139, t-stat 1.173 and p value 0.294 which is more than .05 and establish insignificant impact on cost of collection post strategic planning. Hence accept null hypothesis of no difference pre -post reform in tax implementation from 2011-12 onwards. There is no difference on cost of collection as percentage.

Table 2-Cost of Collection

Pre		Post	
2005-06	0.72%	2011-12	0.60%
2006-07	0.59%	2012-13	0.59%
2007-08	0.54%	2013-14	0.57%
2008-09	0.67%	2014-15	0.59%
2009-10	0.72%	2015-16	0.61%
2010-11	0.60%	2016-17	0.66%

t-Test: Paired Two Sample for Means

	Pre	Post
Mean	0.0064	0.006033333
Variance	0.0000006	0.000000095
Std Deviation	0.0007	0.00031
Observations	6	6
Pearson Correlation	0.139	
Hypothesized Mean Difference	0.000	
Df	5.000	
t Stat	1.173	
P(T<=t) one-tail	0.147	
t Critical one-tail	2.015	
P(T<=t) two-tail	0.294	
t Critical two-tail	2.571	

- To test hypothesis of impact on direct Tax GDP Ratio, the statistic parameter like mean difference of 0.00, low correlation of 0.64, t-stat 0.32 and p value 0.38 which is more than .05 and establish insignificant impact on direct tax GDP ratio post strategic planning. Hence accept null hypothesis of no difference pre -post reform in tax implementation from 2011-12 onwards.

Table 3-Direct Tax GDP Ratio

Pre		Post	
2005-06	4.47%	2011-12	5.48%
2006-07	5.36%	2012-13	5.53%
2007-08	6.30%	2013-14	5.62%
2008-09	5.93%	2014-15	5.55%
2009-10	5.85%	2015-16	5.47%
2010-11	5.81%	2016-17	5.60%

t-Test: Paired Two Sample for Means

	Pre	Post
Mean	0.0562	0.055416667
Variance	0.000040752	0.000000374
Std Deviation	0.0064	0.0006
Observations	6	6
Pearson Correlation	0.64	
Hypothesized Mean Difference	0	
Df	5	
t Stat	0.32	
P(T<=t) one-tail	0.38	
t Critical one-tail	2.02	
P(T<=t) two-tail	0.76	
t Critical two-tail	2.57	

4. To test hypothesis of impact on buoyancy factor , the statistic parameter like mean difference of 0.51 , low correlation of 0.237, t-stat 1.599 and p value 0.171 which is more than .05 and establish insignificant impact on buoyancy factor post strategic planning. Hence accept null hypothesis of no difference pre –post reform in tax implementation from 2011-12 onwards.

Table 4-Buoyancy Factor

Pre		Post	
2005-06	1.76	2011-12	0.62
2006-07	2.42	2012-13	1.07
2007-08	2.27	2013-14	1.16
2008-09	0.48	2014-15	0.86
2009-10	0.90	2015-16	0.80
2010-11	0.95	2016-17	1.22

t-Test: Paired Two Sample for Means

	Pre	Post
Mean	1.46	0.96
Variance	0.64	0.05
Std Deviation	0.80	0.23
Observations	6	6
Pearson Correlation	0.237	
Hypothesized Mean Difference	0	
Df	5	
t Stat	1.599	
P(T<=t) one-tail	0.085	
t Critical one-tail	2.015	
P(T<=t) two-tail	0.171	
t Critical two-tail	2.571	

5. To test hypothesis of impact on case disposal rate, t-stat -2.736 and p value 0.041 which is less than .05 and establish significant impact on case disposal rate post strategic planning. Hence reject null hypothesis of no difference pre –post reform in tax implementation from 2011-12 onwards.

Table 5-Case Disposal Rate

Pre		Post	
2005-06	0.71	2011-12	0.71
2006-07	0.69	2012-13	0.66
2007-08	0.54	2013-14	0.65
2008-09	0.50	2014-15	0.68
2009-10	0.54	2015-16	0.77
2010-11	0.58	2016-17	0.76

t-Test: Paired Two Sample for Means

	Pre	Post
Mean	0.595	0.708
Variance	0.007	0.002
Std Deviation	0.084	0.049
Observations	6	6
Pearson Correlation	-0.09126579	
Hypothesized Mean Difference	0	
Df	5	
t Stat	-2.736	
P(T<=t) one-tail	0.020	
t Critical one-tail	2.015	
P(T<=t) two-tail	0.041	
t Critical two-tail	2.571	

Table 6-Summary of Paired Sample t-test for Performance Indicators

Ratio/value	Mean		std. deviation		Mean Difference	Correlation	t-value	p-value
	Pre	Post	Pre	Post				2 tailed
1. Tax collection	311267.17	663187.83	101031.78	128208.91	351920.67	0.99	-27.90	0.00
2. Cost of Collection	0.01	0.01	0.00	0.00	0.00	0.14	1.17	0.29
3. Direct Tax GDP Ratio	0.06	0.06	0.01	0.00	0.00	0.64	0.32	0.76
4. Buoyancy Factor	1.46	0.96	0.80	0.23	-0.51	0.24	1.60	0.17
5. Case Disposal Rate	0.59	0.71	0.08	0.05	0.11	-0.09	-2.74	0.04

CONCLUSION

The research work initiated to verify the impact of tax reform and strategic development in Indian tax structure from financial year 2011-12 by structural changes. The finance bills introduced several amendments towards tax progression, circumvent the tax evasion practices by firms, enhancing tax base and bringing administrative effective onwards financial year 2011. The study shows using statistical parameter of descriptive and paired sample t test on factors like tax collection, collection cost, buoyancy factor, direct tax to GDP ratio, case settlement level. The analysis shows significant impact on tax collection and case settlement whereas buoyancy factor, collection charges velocity, direct tax to GDP ratio disclosed indifferent impact on tax reform in

administration and amendment effect through finance bill during study period.

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