Административно-управленческие проблемы налоговых реформ

Taxpayers' Perceptions Towards Income Tax Administration: A Study from Indian Perspectives

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ABSTRACT

Tax procedures more particularly income tax laws are considered to be more complex and cumbersome by the individual taxpayers. Direct tax constitutes 46.84% of total tax revenue and personal income tax contributes 51.48% of total direct tax in India. Similarly individual taxpayers constitute around 95% of the total taxpayers in India. But individual assesses faces most about compliance challenges and administrative burdens. Governments often introduce new amendments to address these issues and promote economic efficiency. This paper primarily investigates factors influencing tax administration and taxpayer perceptions, particularly in the context of Indian income tax. This analytical study utilizes primary data and focuses exclusively on income taxpayers in Odisha, an Indian state. Despite uniform national tax laws, the study assumes consistency in typical taxpayer behavior across states. To address data collection limitations, nine districts in Odisha with a 2011 census literacy rate above 80% were selected. A structured questionnaire with five-point Likert scale were used to collect responses through random sampling techniques. From the total sample of 1300 respondents, only 1068 provided complete answers. The study's findings are based on this sample. The research employs Exploratory Factor Analysis (EFA) and Structural Equation Modeling (SEM) to identify significant aspects of tax administration. Three factors emerge: tax procedure, tax services, and tax penalty from factor analysis. Notably, all observed variables have positive impacts on these factors, corroborating the hypotheses, except for one. Tax procedure negatively correlates with tax penalty and services, while services positively correlate with the penalty, resulting in a hypothesis rejection. This study confirms that more the simplification of tax procedures, lesser will be the chance of problems in tax services and chances of imposing penalty.

KEYWORDS

tax administration, taxpayer perceptions, income tax, compliance behavior, Indian economy

JEL C38, G41, H24

Отношение налогоплательщиков к администрированию подоходного налога: исследование с точки зрения Индии

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АННОТАЦИЯ

Налоговые процедуры, в частности законы о подоходном налоге, считаются более сложными и громоздкими в восприятии налогоплательщиков. Прямой налог составляет 46,84% от общего объема налоговых поступлений, а личный по-

доходный налог составляет 51,48% от общего объема прямых налогов в Индии. Индивидуальные налогоплательщики составляют около 95% от общего числа налогоплательщиков в Индии. Но отдельные оценщики сталкиваются с проблемами, связанными с соблюдением требований и административным бременем. Правительства часто вносят новые поправки для решения этих проблем и повышения экономической эффективности. В данной работе исследуются факторы, влияющие на налоговое администрирование и восприятие налогоплательщиками, особенно в контексте индийского подоходного налога. В этом исследовании используются первичные данные и основное внимание уделяется налогоплательщикам в штате Одиша. Несмотря на единообразие национального налогового законодательства, исследование предполагает последовательность типичного поведения налогоплательщиков в разных штатах. Для устранения ограничений по сбору данных были выбраны девять округов штата Одиша с уровнем грамотности по данным переписи населения 2011 г. выше 80%. Для сбора ответов методом случайной выборки использовалась структурированная анкета с пятибалльной шкалой Лайкерта. Из общей выборки в 1300 респондентов только 1068 дали полные ответы. Результаты исследования основаны на этой выборке. В исследовании используются исследовательский факторный анализ (EFA) и моделирование структурными уравнениями (SEM) для выявления значимых аспектов налогового администрирования. На основе факторного анализа выделяются три фактора: налоговая процедура, налоговые услуги и налоговый штраф. Примечательно, что все наблюдаемые переменные оказывают положительное влияние на эти факторы, подтверждая гипотезы, за исключением одной. Налоговая процедура отрицательно коррелирует с налоговым штрафом и услугами, в то время как услуги положительно коррелируют со штрафом, что приводит к отклонению гипотезы. Данное исследование подтверждает, что чем больше упрощение налоговых процедур, тем меньше будет шансов возникновения проблем в налоговых службах и шансов наложения штрафа.

КЛЮЧЕВЫЕ СЛОВА

налоговое администрирование, восприятие налогоплательщиков, налог на прибыль, комплаенс-поведение, индийская экономика

1. Introduction

Taxes are the government's primary source of revenue, and they are used to benefit the country's citizens. The central government and state governments both levy taxes in India. The objective of taxes is to provide social welfare by funding public services, property protection, defense costs, and economic infrastructure, among other things. Revenue, redistribution, reprisal, and representation are the four basic reasons of taxation. Direct tax measures at the federal level were an important part of broader fiscal and economic reforms. Income tax is a significant component of direct taxes and a significant income stream for the government. And so, the tax system should include traits like simplicity, feasibility, efficacy, and anti-inflationary characteristics, as well as incentives for the production of fundamental commodities. Furthermore, the tax structure should be less expensive, simple to understand, simple for people to follow, and simple for authorities to administer.

Income tax satisfies all taxation canons, aids the government in attaining socio-economic goals, and is anticipated to aid in achieving distributional justice through differential tax rates between the wealthy and the poor. Despite numerous reforms, India's tax structure is riddled with complications and issues such as multitude of taxes, indirect tax dominance, aphorism, and bias in tax prevalence, complexity and corruption, imbalance in the tax machine, lack of built-in flexibility, and asset wasting, leading to low collection of tax revenue. The tax revenue of the Government therefore demands more attention.

Direct taxes constitute 46.84% of total tax revenue contributing 4.78% of total GDP witnessing a decline in growth rate of –9.85% during financial year 2020–21.

Further, personal income tax payable by individuals contributes 51.48% of total direct taxes and collection cost was 0.76% of total direct tax collections as compared to previous year 0.66% (Central Board of Direct Taxes, Government of India, statistics, 2020–21). Similarly, to bring more user friendly and compliance savvy, Government of India also introduced new e-filing portal 2.0 on 7th of June 2021 that aims to bring more smooth tax administration.

The extent the income tax department is effective enough in sorting out grievances of assesses amicably within reasonable time is also the need of the era. This provides insight into effectiveness and efficiency of entire tax administration procedure. Attempts to establish a fair tax system in emerging countries like India have always proven difficult.

An ideal tax system would raise the government's required revenue in a timely manner without having a significant impact on investment decisions or economic activity. However, establishing an efficient tax system in a growing country like India, where vast numbers of people continue to work in the unorganized or informal sector, where cash transactions still dominate economic activity, is not a simple feat.

As a result, calculating the tax base or deciding on a rate with any objectivity is challenging. Furthermore, the tax administrative structure has flaws in terms of wages and infrastructure, which are part of the total administration system, and the State is limited in its possibilities for building an effective and perfect tax system. As a result, despite numerous reform attempts, we have yet to achieve a flawless ideal system of tax administration, which is critical in identifying a country's real or effective tax domain.

Unfortunately, many countries' tax administrations are unable to work properly, and as a result, the objectives of tax laws are not met. The tax administration must function successfully and efficiently to have the intended effect on resource allocation, income distribution, macroeconomic stability, and growth. In a developing market economy, the basic goal of tax policy is to raise revenue in an equitable manner with minimal unexpected changes in relative prices and resource allocation.

The *primary focus of this paper* is to examine the factors contributing to tax administration and perception of taxpayers towards tax administration specifically income tax in Indian context. After going through a rigorous review of existing literatures, following *hypothesis* have been formulated to achieve our objectives.

H1: The observed variables have significant loadings on the factors of tax administration.

H2: Different factors explaining tax administration are positively correlated.

H3: Tax procedure and tax service significantly influence tax penalty.

The structure of this paper comprises of five sections. At the beginning, present state of research problems is explained. The next section explores the existing literatures relevant to the study and provides a strong theoretical background in identifying the research problems, research gap and formulating research hypotheses. The section "methods" describes the research design, methods, variables, techniques, models, and software adopted in this study. The following section is "results and discussion" that explores the tax administration components and comparative findings with existing studies followed by "conclusion" section.

2. Review of literatures

2.1. Tax Administration and Tax Procedures

Tax administration refers to a set of detailed procedures laid down under different Tax Acts regarding overall management of taxation system with an objective to optimize tax collection by the Government while at the same time maintaining the equity and justice for all taxpayers. Poor administration of tax may lead to non-compliance of tax and there by creates tax penalty.

Cuccia & Carnes [1] showed that it exists is negative relationship between complex tax procedure and the ability to tax payment.

Murphy & Torgler [2] showed that tax administration is generally perceived as the external factor affecting the tax compliance as well as tax management practices. The tax procedure has positive impact on tax morale.

Paleka & Vitezić [3] showed that the more the compatibility of an individual with tax procedure and tax service, the more will be tax compliance and less will be the tax penalty.

Rani & Arora [4] showed that the tax professional play's crucial role for promoting the tax policy which automatically advanced tax administrative functions.

The tax administration function largely depends on assessment of tax (Official Assessment of Tax and Self-Assessment of Tax) system by the taxpayer. It was also observed that, at the state level audit by CAG about value added tax is weaker than other country.

Das-Gupta & Andrade [5] and Smith & Kinsey [6] has recommended that the tax compliance behaviors of individuals are depends upon five factors like: deterrence, social norms, complexity of tax system, and fairness of policy and role of government in the economic environment.

Adefolake & Omodero [7] found that, the lack administrative enforcement policy in Nigeria faces low revenue return from its taxpayers and overall affect the economic growth in the country.

Gale & Samwick [8] tried to make a comparative study in between the reform made in present tax system before and after 1991. The study revealed that there is on an average of twenty percent rise in personal tax revenue in between the periods. The authors tried to highlight that the tax rate in India is comparatively better in comparison to other developed countries.

Gurama & Mansor [9] further emphasized on the simplification of present tax structure by increasing the tax base and it will increase the tax compliance. The tax should also be collected genuinely by the government. Additionally, the tax administration of Gombe state board faces more problems like insufficient public awareness, poor staffing, poor record keeping, poor working conditions, poor conducive

environment and poor incentive system leads to wicked tax compliance system, so it recommended for improve tax administrative policy.

Pogorletskiy & Bashkirova [10] showed that the tax evasion activity can reduce by proper formulation of tax administrative policy at global level for high revenue collection through taxes. This study reveals that the revolution in national tax system and dynamic tax administration reform in Russia have eliminated the tax burden of tax authorities and promoting appropriate fiscal policy for conducting the business.

Das-Gupta et al. [11] suggested that the behavioral intention of taxpayer is highly influenced by tax regulatory and administration policy. Many developed countries introduce integrated reliable system for e-filling of tax return to reduce high perceived risk of taxpayer. Through the external audit of value added tax in the Indian state government, found that the tax administration regulation policy has highly significant impact on collection of tax revenue from the taxpayers.

Jaidi et al. [12] has focused on self-assessment activity of taxpayer for effectively utilization of economic resources in the Indian government.

Keen & Slemrod [13] showed that an optimal tax enforcement policy should be formulated by the tax administrative for fill-up the optimal tax compliance gap and better mobilization of economic resources of the government. This study has found out that the information technology like online tax filling, registration and remittance have significantly enhanced the productivity in tax collectivity and administration.

Olatunji & Aoydele [14] recommended to monitor and control the online systems for eradicate the adverse impact on taxpayer in future.

Basri et al. [15] showed that the tax policy and tax administration are mutually dependent on each other, because improving the tax administration policy can have significant return to the government.

Deepti & Goel [16] showed that in every country the dynamic tax rate changes as per changes in the economic con-

dition of that country, so the government has reformed the tax policies and availed innovative digitalized services for enhancing the voluntary tax compliance system.

In the current era, the ICT have become highly sophisticated system for availed e-services to enhance the tax administration performance. Bassey et al. [17] have developed a theoretical framework for focusing upon fifteen ecosystem themes which influence the digitalized tax administrative structure around four categories: context, technology, stakeholders and demonstrated result to advanced digital taxation system.

H1: The observed variables (tax procedures, penalties, and services) have significant loadings on the factors of tax administration.

2.2. Tax Administration and Taxpayer Perception

Saad [18] analyzed the knowledge and views of taxpayers on the complexities of tax administration. He found that the updated knowledge of using the technology is also the major constraint of tax non-compliance behavior. And all these factors have forced the taxpayers to perceive the present tax system as complicated one.

Adnan et al. [19] conducted a study to examine the effect of some selected factors influencing the perception of taxpayer on tax administration. Better tax compliance can be assured through trust of taxpayer on administration. They found two factors – faith on administration and fairness in tax system were found as the most significant factors amongst all.

Hauptman et al. [20] discussed the struggle of tax authorities to fight against tax avoidance. The economic downturn and financial crisis around the world have put the tax authorities in the problems of tax evasion as non-compliance of tax has been the global issue. The tax department is facing the problem of tax noncompliance and thereby putting extra burden of penalties to the taxpayers. This unnecessary burden in turn creates another form non-compliance in successive year. So, the task of tax evasion has been the challenging task in front of all tax administrators all over the world. The

study identifies that understanding the causes of non-compliance behavior will help the tax administrator in developing the policy to avoid tax evasion.

To measure the behavioral intention of taxpayer about e-government services, Haryani et al. [21] reveals that the factors like perceived ease of use and perceived usefulness have significantly affect the behavior intention of public to adoption of electronic tax filing. This study will develop strategic policy for e-government services of tax administration.

Ufuk [22] conducted a study to assess the perception of tax administrative people about taxpayers. The study resulted that the tax officers are not fully aware of the rights of taxpayers. They have only medium level of knowledge. The female and young tax administrators are more aware about the rights as compared to male participants. It was suggested by the author that tax authority should take steps to develop the knowledge on rights of taxpayers amongst the people of tax offices.

H2: Different factors explaining tax administration are positively correlated.

2.3. Tax Administration and Components

James & Alley [23] described the purpose of tax compliance and the factors that effects the willingness of taxpayers to comply with a tax system. They have used two different approaches- use of penalties and assisting citizens on tax obligations i.e., economic and behavioral approaches. Though both the approaches add as an explanatory behavior in amalgamation of into a single policy for compliances still more or less financial considerations also influences the taxpayers' behaviors.

Alabede et al. [24] showed that self-assessment increases the risk on a revenue service which resort penalty driven compliance policy but with the technology it can curb the revenue collection through tax compliance. A positive relationship has already been established between the quality of tax service and tax penalty as well as compliance behavior.

Alm & Torgler [25] explained the neglected role of individual behaviors in the standard neoclassical paradigm through

ethical dimensions on their decisions compliance using multi-faceted policy approach. They concluded that traditional "enforcement" paradigm is consistent with neoclassical theory where its less traditional in "service" paradigm involving "kinder and friendlier" role in tax administrations in encouraging compliance, adding a "trust" paradigm which is ethics foundation. However, in government administrative approach the "full house" behavior policies to be initiated to ensure compliance.

Paul & Peter [26] examined the issues of all tax authorities as how to motivate all the taxpayers of real estate to comply within framed system of tax regulations in Kenya. The study revealed that, tax compliance level is negatively influenced by its cost. But, knowledge of tax, tax fines and tax education positively influence the compliance attitude of tax. The paper also confirmed that imposition of fines for tax evasion and tax education would increase the rate of tax compliance in near future.

Savić et al. [27] analyzed the performance of tax administration in two phases, first by using DEA technique of analysis and the second by using regression analysis. The study was based on thirteen European countries. DEA analysis revealed that only five out of thirteen tax administrators are efficient. The findings of the study showed that increase in efficiency of tax administration would lower grey economy.

Pogorletskiy & Bashkirova [10] and Labunets & Mayburov [28] showed that tax evasion can be reduced significantly by improving the effectiveness of tax administration. The increase in cost of tax compliance also results in avoidance of tax in the countries. It is also found that the dynamic transformation in the tax system and well reformed of tax administration, will help Russian became competitive ability to face international financial framework for effectively running the business.

Mayburov [29] has found that the symposium act as key driver for exploring the theoretical and practical knowledge about transformation of tax administration and enhancing the tax policies in the digitalized economy.

Newman et al. [30] emphasized on evaluating the extent tax administration is effective in collecting tax revenue. The study found a little evidence for presumptive tax administration (PTA) to act as standalone and that has resulted ZIMRA not fulfilling the targeted tax revenue since last seven years.

Baeli [31] has anticipated that the psychological factors of individuals have negatively influence tax compliance system, but different tax awareness activity like implementation of easy tax services, penalty for delay, focusing financial condition of taxpayer will increase the better tax compliance behavior of taxpayer.

Borshchevskiy & Mossaki [32] have applied both qualitative and quantitative measures to fond that, there is a significant statistical relationship between the tax system indicators with tax administration activity in post-Soviet Russia.

Harkushenko [33] has defined that the digital technology was positively and negatively influence the tax administration procedures. His study found that the e-invoicing and block chain technology not more conscious about VAT administration, wherever, that digital technology helps to reduce cost of VAT administration, develop ICT regulatory framework and transform high tax culture economy.

H3: Tax procedure and tax service significantly influence tax penalty.

3. Methods

The current study employs primary data and is analytical in character. The study only includes income taxpayers in Odisha, one of the Indian states. As the country's tax laws are uniform, it is anticipated that typical taxpayer behavior will be more or less consistent across all States. However, since it is impractical to gather data from all taxpayers, we have chosen nine districts in Odisha with a 2011 census-reported literacy rate of more than 80%.

Cuttack, Balasore, Khordha, Jajpur, Puri, Bhadrak, Kendrapara, Jagatsinghpur, and Nayagarh are the nine districts

that were chosen. Data were gathered for the study using a structured questionnaire and stratified random sampling. The information gained from the pilot study and the conclusions of Torgler & Murphy [2] were considered when designing the questionnaire.

There are two sections to the questionnaire. The demographic makeup of the respondents is covered in the first section, and several facets of tax administration are covered in the second. There were 12 statements in all, covering features of procedures, services, and penalties. The responses were rated on a 5-point Likert scale, with 1 being strongly agreed with and 5 being strongly disagreed with each statement.

Respondents were hesitant to share their opinions because the questionnaire asked about their views on tax administration/government tax system, which resulted in a non-response/incomplete re-

sponse. However, only 1068 of the 1300 respondents who received a complete answer to the questionnaires issued in the sample domain made up our study's sample.

The data gathering time frame is limited to the first six months of 2022. In this work, statistical methods like structural equation modeling (SEM), confirmatory factor analysis (CFA), and exploratory factor analysis (EFA) were applied. To arrive at results and draw inferences, statistical programs like SPSS and AMOS are employed. The model to be used in this study is presented in Figure 1.

Table 1 provides insights into the distribution of respondents across different age groups, education levels, genders, and occupations. It is seen that the largest age group falls within the 30–40 years range, the majority of respondents have a postgraduate education, males outnumber females, and there is a varied distribution among different occupational categories.
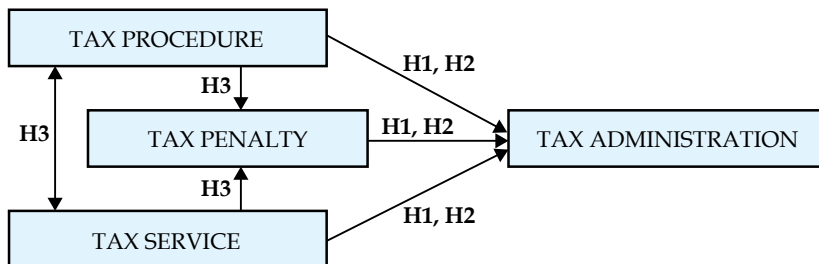

Figure 1. **Proposed Model**

Table 1

Demographic Characteristics of Respondents

	Number	Percentage		Number	Percentage
Age			**Education**		
Below 30 years	235	22	Under graduate	117	11
30–40	406	38	Graduate	299	28
40–50	299	28	Postgraduate	470	44
Above 50	128	12	Professionally /Technically qualified	182	17
Gender			**Occupation**		
Male	844	79	Govt./private employee	438	41
Female	224	21	Business	341	32
			Professional	289	27
Total	**1068**	**100**	**Total**	**1068**	**100**

Source: Primary data collected from questionnaire.

4. Results

4.1. Primary Results

Table 2 witnessed the perception of individual assesses on various aspects of tax administration on 5-point scale. Around 60% of respondents were disagreed on most of the tax procedures components while 30% approx. were either agreed or strongly agreed. Similarly, 55% of assesses expressed their disagreement or strongly disagreement with tax services components whereas 35% were of agreed or strongly agreed. So far tax penalty is concerned, respondents were of inference in their opinions i.e., half of them approx. were either agreed and strongly agreed and other half were of opposite view.

4.2. Exploratory Factor Analysis

Tax administration entails the overall scope of taxation in a country. Further the administration system must convey and develop a sense of trust among all potential taxpayers that encourages them to adopt a culture of timely and justified tax filling. EFA is used to identify the factors explaining the tax administration as perceived

Table 2

Perception of Assesses on various aspects of Tax Administration

Code	Components of Tax Administration	Strongly Disagreed	Disagreed	Neutral	Agreed	Strongly Agreed
	Tax Procedures					
X1	Appealed cases are pending for long period time due to delay in tax procedure	225	448	36	170	189
X2	Further improvement is required to strengthen the functioning of Income tax department	216	436	50	177	189
X3	Information of Income tax administration is not fully known	207	433	51	186	191
X4	IT authorities should be accountable for all tax related issues	259	431	45	173	160
X5	Tax procedure is well explained by the tax administration	201	411	49	207	200
	Tax Service					
X6	Legal enforcement of tax administration is quite appreciated.	252	357	73	208	178
X7	IT officials are empowered to do anything	273	389	69	174	163
X8	The services rendered by tax administration is satisfactory	248	360	76	207	177
X9	Delay in my payment are always reminded by the department	228	355	87	223	175
X10	Tax administrators are cooperative	220	312	66	244	226
	Tax Penalty					
X11	Arbitrary penalties are charged due to discretionary powers of tax authorities	223	328	77	240	200
X12	Tax evaders can easily escape from punishment due to administrative people of IT department	223	302	66	248	229

Source: Primary data collected from questionnaire.

by an individual assesses. The sample respondents were asked to opine their views on twelve statements related to tax administration on 5-point Likert scale.

The scale used to measurement of perception is having high level of internal consistency reliability as evident from table where the value of Alpha (0.757) is more than 0.70. Similarly, construct validity of the construct is demonstrated significantly with the help KMO value of 0.832. and Bartlett's test through a significant "p" value (Table 3).

The number of factors extracted from the analysis is evident from the number of variables getting Eigen values more than one in Table 4. The analysis explored three factors with eigen values more than one. It is evident from above table that only 78.87% of the data are valid and the rest 23% are lost in the analysis.

The analysis explored three important factors "Tax procedure" with 5 significant loadings, "Tax Service" with 5 loadings and "Tax Penalty" with 2 loadings (Table 5). The First factor is accounted for 35.708% of the variance and it emphasizes on filing of Income tax return, accountability of tax administration and improvement in tax administration. The second factor gives importance on services rendered by tax administration and accounts for 30.819% of variance. Similarly, the third factor includes the importance on tax penalties and accounts for 12.343% of variance.

4.3. Structural Equation Model

The factors discovered by factor analysis are further examined using regression analysis and structural equation modeling (SEM) with regard to their interrelationship. The term "SEM" is typically employed when the variables that make up the factor or construct are correlated. The link between the latent and observable variables is conceptualized as a graphic. The constructs are also referred to as latent variables in the context of SEM, while the observable variables that make up each construct are referred to as indicators.

Table 3

Reliability and Validity Test

Test	Statistic Value
Cronbach's Alpha	0.757
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.832
Bartlett's Test of Sphericity (Approx. Chi-Square and P value)	1.212E4 0.000

Table 4

Total Variance Explained: Tax Administration

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 %
x1	4.285	35.708	35.708	4.285	35.708	35.708	4.043	33.693	33.693
x2	3.698	30.819	66.526	3.698	30.819	66.526	3.919	32.656	66.349
x3	1.481	12.343	78.870	1.481	12.343	78.870	1.502	12.521	78.870
x4	0.584	4.865	83.735						
x5	0.496	4.136	87.871						
x6	0.466	3.884	91.755						
x7	0.373	3.112	94.866						
x8	0.285	2.377	97.243						
x9	0.147	1.226	98.469						
x10	0.073	0.610	99.079						
x11	0.058	0.485	99.564						
x12	0.052	0.436	100.000						

Table 5

Rotated Component Matrix: Tax Administration

	Component		
	1	**2**	**3**
x1	**0.930**	–0.037	0.029
x2	**0.963**	–0.057	0.004
x3	**0.945**	–0.023	0.012
x4	**0.803**	–0.011	0.022
x5	**0.838**	–0.020	–0.031
x6	–0.051	**0.943**	–0.004
x7	–0.010	**0.834**	–0.013
x8	–0.059	**0.955**	–0.022
x9	–0.056	**0.940**	–0.016
x10	0.021	**0.722**	–0.114
x11	0.027	–0.002	**0.864**
x12	–0.007	–0.107	**0.860**

Table 6

Reliability Statistics: Tax Administration

Constructs	Cronbach's Alpha	N of Items
Tax procedure	0.811	5
Service	0793	5
Penalty	0.741	2

4.4. Reliability

The reliability and validity of the instruments used in SEM are tested through Cronobach's Alpha. The values of Alpha for all the constructs are more than 0.70 (Table 6), indicating a strong level of internal consistency reliability for the scale used as measuring instrument.

4.5. Convergent validity

Convergent validity is measured through composite reliability (CR) and average variance explained (AVE). It is evident from Table 7 that the calculated values of CR, AVE for all the constructs meet the minimum requirement for the data to be reliable.

4.6. Discriminant Validity

This validity states how different constructs are different from each other and can be confirmed by comparing AVE with MSV and ASV value. From Table 8 it is clear that our data confirms all suggestive range of validity i.e., MSV < AVE, ASV < AVE, $\sqrt{\text{AVE}} > Correlation$ (Hair et al. [34]).

The output of the final SEM models is given in Table 9 where the range of all the indicators of model fit is suggested. Initially, all the model fit indicators are not within their suggestive range as evident from Model-I, II and Model-III.

Table 7

Validity: Tax Administration

			Estimate	AVE	CR
x1	←	Tax_procedure	0.917		
x2	←	Tax_procedure	0.993		
x3	←	Tax_procedure	0.931	0.95	0.9395
x4	←	Tax_procedure	0.728		
x5	←	Tax_procedure	0.756		
x6	←	Service	0.973		
x7	←	Service	0.708		
x8	←	Service	0.945	0.726	0.9275
x9	←	Service	0.966		
x10	←	Service	0.596		
x11	←	Penalty	0.325	1.22	1.1461
x12	←	Penalty	1.527		

Therefore, it is attempted to bring an improvement in the model through modification of indices using the covariance of variables used in the model. The process of modification thus developed four models for a good model fit. The modification index of the Model-I suggests the covariance of error terms e7 and e8 with the maximum index of 154 to develop model-II. Again, the modification index of the Model-II suggests the covariance of error terms e3 and e5 with the maximum index of 68.091 to develop model-III. The modification index of the Model-III suggests the covariance of error terms and e10 with the maximum index of 64.347 to develop model-IV. The fourth model ultimately fits the data well with all the values of the variables of model fit within the suggestive range. Comparative statements of model fit summary of four different models are summarized in Table 9 and path diagram is given in Figure 2.

In Table 10, the regression weights of all the observed variables under the factor/construct "Tax procedure" and "Tax Service" are comparatively high and so all observed variables significantly and highly positively influence the "Tax pro-

cedure" and "Tax Service". But only one observed variable under the construct "Tax Penalty" has less significant load on the construct. Three observed variables under the construct "tax procedure" have high significant loadings of value more than 0.90 and other two have loadings of more than 0.70. Similarly, three observed variables under the construct "Tax Service" have high significant loadings of value more than 0.90 and other two have loadings of more than 0.55. Except x12, all other observed variables have significant loadings on their construct. So, H1 is accepted for all observed variables except x12 at 5% level of significance.

The correlation coefficients between different constructs are negative (Table 11) So, the constructs "Tax procedure", "Tax Service", and "Tax Penalty" are negatively related with each other. So, H2 is rejected at 5% level of significance.

The tax administration factors – "Tax procedure", "Tax Service", and "Tax Penalty" are negatively related as identified from above analysis. Further attempt is made to find out the significance of effects of "Tax procedure", "Tax Service" on "Tax Penalty" by using SEM and to test H3.

Table 8

Factor correlation matrix of tax administration components

	MSV	AVE	ASV	Tax Procedure	Tax Penalty	Tax Service
Tax_Procedure	0.011025	0.9500	0.010413	0.974	–0.099	–0.105
Tax_Penalty	0.1705	0.7260	0.0901	–0.099	0.852	0.413
Tax_Service	0.1705	0.6237	0.0907	–0.105	0.413	0.789

Table 9

Model fit summary of Tax Administration

Variable	Value (Model-I)	Value (Model-II)	Value (Model-III)	Value (Model-IV)	Suggested value
"Chi-square value"	526.285, d.f =51	359.772, d.f = 50	283.460, d.f =49	216.838, d.f = 48	
"P value"	0.000	0.000	0.000	0.000	"P-value > 0.05 [34]"
"CMIN/DF"	10.319	7.195	5.785	4.517	"Less than 5 is reasonable [35]"
"GFI"	0.925	0.949	0.959	0.968	"More than 0.90 [36]"
"AGFI"	0.886	0.920	0.934	0.948	"More than 0.90 [37]"
"CFI"	0.961	0.974	0.981	0.986	"More than 0.90 [38]"
"RMR"	0.059	0.059	0.058	0.047	"Less than 0.08 [36]"
"RMSEA"	0.093	0.076	0.067	0.057	"Less than 0.08 [36]"
"P-CLOSE'	0.000	0.000	0.000	0.055	"More than 0.05 [38]"

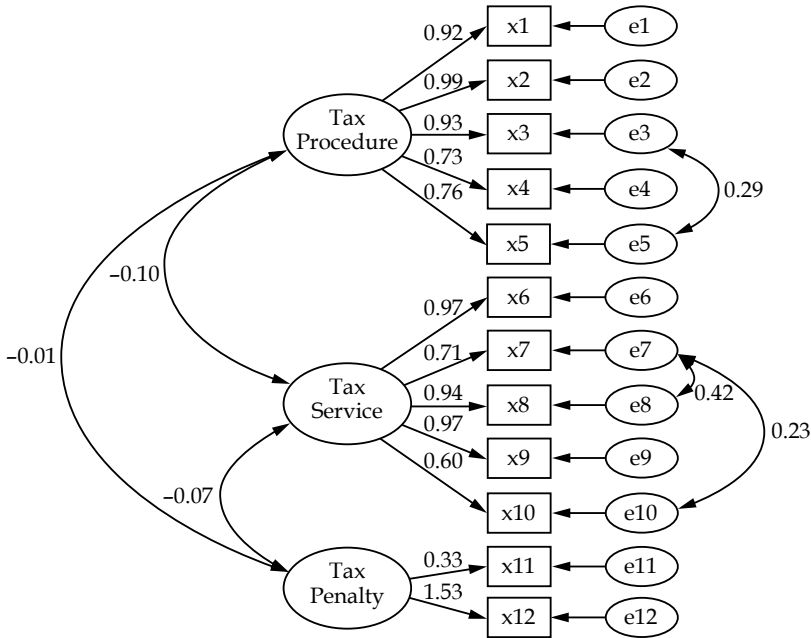*Figure 2.* **Path Diagram of model-IV: Tax Administration**

Table 10
Standardized Regression Weights: Tax Administration

			Estimate
x1	←	Tax_procedure	0.917
x2	←	Tax_procedure	0.993
x3	←	Tax_procedure	0.931
x4	←	Tax_procedure	0.728
x5	←	Tax_procedure	0.756
x6	←	Service	0.973
x7	←	Service	0.708
x8	←	Service	0.945
x9	←	Service	0.966
x10	←	Service	0.596
x11	←	Penalty	0.325
x12	←	Penalty	1.527

Table 11
Correlations: Tax Administration

			Estimate
Tax_procedure	↔	Service	–0.105
Tax_procedure	↔	Penalty	–0.005
Service	↔	Penalty	–0.075
e7	↔	e8	0.420
e3	↔	e5	0.289
e7	↔	e10	0.225

The output of the final SEM models is given in Table 12 where the range of all the indicators of model fit is suggested. Initially, all the model fit indicators are not within their suggestive range as evident from Model-I and II.

Therefore, the modification index of the Model-I suggests the covariance of error terms e7 and e8 with the maximum index of 154.571 to develop model-II while Model-II further suggests the covariance of error terms e7 and e10 with the maximum index of 64.342 and the covariance of error terms e3 and e5 with the index of 67.501 to develop model-III. All the indicators of model fit of the third model lie within the suggestive range and so further improvement is not required and path diagram is given in Figure 3.

In Table 13 the value of critical ratios (C.R) are more than 1.96 and the P-values are also not significant for first two paths. That means the factors "Tax procedure" and "Tax Service" have in-significant loads on "tax penalty". As such, H3 is rejected at 5% level of significance.

Table 12

Model Fit Summary: Influence of Tax procedure and tax service on tax penalty

Variable	Value (Model-I)	Value (Model-II)	Value (Model-III)	Suggested value
"Chi-square value"	536.741, d.f = 52	370.320, d.f = 51	228.154, d.f = 49	
"P value"	0.000	0.000	0.000	"P-value > 0.05 [34]"
"CMIN/DF"	10.322	7.261	4.656	"Less than 5 is reasonable [35]"
"GFI"	0.924	0.947	0.966	"More than 0.90 [36]"
"AGFI"	0.886	0.919	0.946	"More than 0.90 [37]"
"CFI"	0.960	0.974	0.985	"More than 0.90 [38]"
"RMR"	0.088	0.088	0.081	"Less than 0.08 [38]"
"RMSEA"	0.093	0.077	0.059	"Less than 0.08 [36]"
"P-CLOSE"	0.000	0.000	0.052	"More than 0.05 [38]"
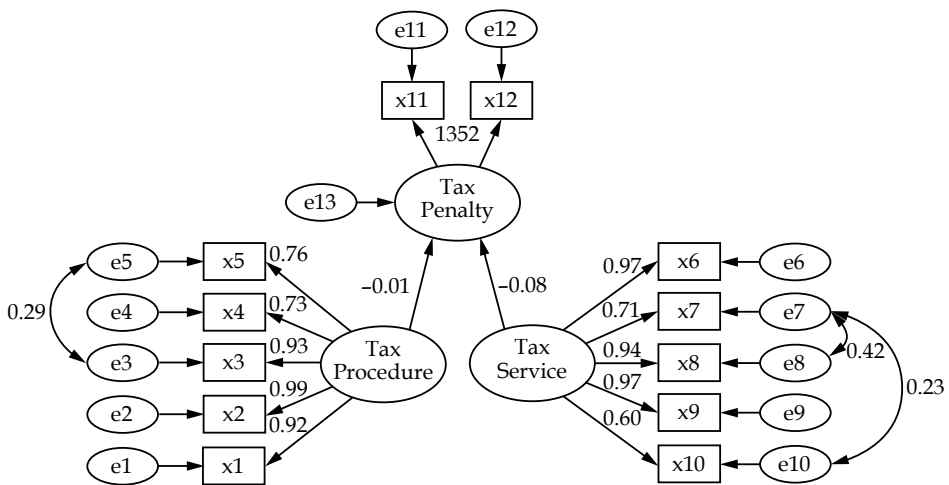
Figure 3. **Path Diagram: Influence of Tax procedure and tax service on tax penalty**

Table 13

Regression Weights: Influence of Tax procedure and tax service on tax penalty

			Estimate	S.E.	C.R.	P
Penalty	←	Tax_procedure	–0.004	0.008	–0.518	0.604
Penalty	←	Service	–0.023	0.028	–0.810	0.418
x1	←	Tax_procedure	1.000			
x2	←	Tax_procedure	1.077	0.016	68.617	***
x3	←	Tax_procedure	1.010	0.018	55.508	***
x4	←	Tax_procedure	0.780	0.025	31.328	***
x5	←	Tax_procedure	0.829	0.025	33.535	***
x6	←	Service	1.000			
x7	←	Service	0.713	0.023	31.286	***
x8	←	Service	0.967	0.013	74.970	***
x9	←	Service	0.978	0.011	86.421	***
x10	←	Service	0.631	0.027	23.544	***
x11	←	Penalty	1.000			
x12	←	Penalty	4.880	5.496	0.888	0.375

5. Discussion

Income tax administration is mostly perceived by individual taxpayer as a complex process and simplification of methods would increase the tax compliance [8; 18]. Tax compliance is negatively influenced by its cost while positively influenced by tax knowledge, fines and education [26]. Faith on tax administration, fairness in tax system, use of advanced technology, rights of taxpayer, respect to tax administration and resistance are few factors there influence by perception of taxpayer towards tax administration [19]. Tax administration plays an important role in maximizing revenue collection for the government and tax compliance by the payers.

With this background, the present study attempts to explore the factors of tax administration as perceived by Indian taxpayers using EFA and further tries to establish their inter relationship with the help of SEM technique. EFA explored three important factors such as tax procedure, tax services and tax penalty that explain tax administration. It is found that all the observed variables have significant and high positive influence on tax procedures, tax services and tax penalty. *H1* is accepted for all observed variables except x12.

This result is also supported by earlier studies i.e., Murphy & Torgler [2] and Alabede et al. [24] while contradicts from the findings of Paleka & Vitezić [3] and Cuccia & Carnes [1].

Tax procedure is negatively correlated with tax penalty and tax services while tax services are positively correlated with tax penalty. So, *H2* is rejected. This finding is in line with conclusion of Paleka & Vitezić [3], Cuccia & Carnes [1] while contradicts from the findings of Murphy & Torgler [2] and Alabede et al. [24].

Further, the factors "Tax procedure" and "Tax Service" have in-significant loads on "tax penalty". As such, *H3* is rejected. This finding is in line with conclusion of Paleka & Vitezić [3], Cuccia & Carnes [1] while contradicts from the findings of Murphy & Torgler [2] and Alabede et al. [24]. It is inferred from the discussion that more the simplification of tax procedures, lesser will be the chance of problems in tax services and chances of imposing penalty.

Introduction of new user-friendly e-filing portal (e-filing 2.0) in the year 2021, quick return processing, Annual Information Statement (AIS, an extended version of 26AS) that shows income from all sources with edit option, E-verification of tax returns, Tax Return preparer scheme (TRP), new tax regime with low tax rates and minimum deductions, faceless assessment procedures, etc. are few exemplary reforms brought in by Government of India to bring more transparency and healthy atmosphere for the tax payers.

6. Conclusion

The primary aim of this paper is to explore the components that explain the tax administration in India as perceived by the individual assesses. It further examines their interrelationship and magnitude of influence on each other. Primary data from 1068 respondents have been collected through structured questionnaire applying random sampling and exploratory factor analysis followed by structural equation model were used to achieve the objectives.

It is found that all the observed variables have significant and high positive influence on tax procedures, tax services and tax penalty. Tax procedure is negatively correlated with tax penalty and tax services while tax services are positively correlated with tax penalty. It is inferred from the discussion that more the simplification of tax procedures, lesser will be the chance of problems in tax services and chances of imposing penalty.

These findings are result of primary data collected from sample respondents over a limited time and region only which may change over a longitudinal study and hence, this result can't be generalized for all spheres.

Further studies could be expanded to include more of districts with additional variables as the present study includes only nine districts of Odisha.

The current study ignores recent changes in technology and new tax regime applicable to individuals on the basis of different sources of income which could help in getting cue regarding the primary types and value economic activities in the state.

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