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Determinants of Behavior of Payers of Personal Income Tax: An Empirical Study from Indian Context

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ABSTRACT

Tax can be imagined as a contribution by citizens to the elected government to carry out its functioning smoothly. Tax compliance is a problem that has existed for as long as taxes. Paying taxes is always a difficult process because it has a direct impact on the taxpayer's residual income. As a result, everyone tries to avoid tax by tax management and tax evasion which is against the law. Tax evasion is among the main issues that the developing nations have been facing. Broader empirical research regarding individual income tax compliance behavior is scant in India. The present study aimed at exploring the determinants of taxpayer's behavior in meeting personal tax obligation and examining the interrelationship between the factors and their contribution towards tax compliance from Indian context. The study is based on primary data collected through structure questionnaire from 1068 sample respondents covering nine districts of Odisha, a State of India by following stratified random sampling method. The exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) identify three major factors i.e., economic, institutional, and social factors of tax compliance. Structural equation model has been adopted to achieve our objectives. It is evident from the results that variables under economic and institutional factors have a significant carry compared to variables under social factors. This also indicates about concern of individuals regarding their disposable income. Therefore, government should think of lowering tax rates and simultaneously keep on simplifying the tax compliance procedures and strengthen and expedite tax audit system.

KEYWORDS

tax compliance, individual taxpayer, income tax, individual behavior, India

JEL C38, G41, H24

УДК 336.228

Детерминанты поведения плательщиков налога на доходы физических лиц: эмпирическое исследование в индийском контексте

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АННОТАЦИЯ

Налог можно представить как вклад граждан в избранное правительство, чтобы оно бесперебойно функционировало. Соблюдение налогового законодательства – это проблема, которая существует столько же, сколько и налоги. Уплата налогов всегда является сложным процессом, поскольку напрямую влияет на

остаточный доход налогоплательщика. В результате все пытаются избежать уплаты налогов путем управления налогами и уклонения от уплаты налогов, что противоречит закону. Уклонение от уплаты налогов является одной из основных проблем, с которыми сталкиваются развивающиеся страны. Более широкие эмпирические исследования в отношении соблюдения налогового законодательства отдельными лицами в Индии скудны. Данное исследование направлено на изучение факторов, определяющих поведение налогоплательщика при выполнении личных налоговых обязательств, а также на изучение взаимосвязи между факторами и их вкладом в соблюдение налогового законодательства в индийском контексте. Исследование основано на первичных данных, собранных с помощью структурного вопросника от 1068 респондентов, охватывающих девять районов Одиши (штат Индии), с использованием метода стратифицированной случайной выборки. Исследовательский факторный анализ (EFA) и подтверждающий факторный анализ (CFA) определяют три основных фактора, т.е. экономические, институциональные и социальные факторы соблюдения налогового законодательства. Для достижения наших целей была принята модель структурного уравнения. Из результатов видно, что переменные, относящиеся к экономическим и институциональным факторам, имеют значительный перекоп по сравнению с переменными, связанными с социальными факторами. Это также свидетельствует об озабоченности граждан своими располагаемыми доходами. Поэтому правительству следует задуматься о снижении налоговых ставок и одновременно продолжить упрощение процедур соблюдения налогового законодательства, а также укрепить и усовершенствовать систему налогового контроля в Индии.

КЛЮЧЕВЫЕ СЛОВА

соблюдение налогового законодательства, индивидуальный налогоплательщик, подоходный налог, индивидуальное поведение, Индия

1. Introduction

Government's ability in effective and efficient policy formulation and its implementation is key to socio-economic development. Over a period, especially since economic liberalization in 1991, role of Indian government has increased in this regard. Apart from government's traditional role in providing basic amenities such as health, education, rural development and strategic developments in defense, maintenance of law and order etc., it has increasingly percolated into other non-strategic areas.

For undertaking such activities, it requires the support of a considerable finance. This is mostly funded by way of public finance. Inability of the government to achieve the desired growth in key core areas such as education and public health that prompted it to privatize to attract capital is one of the reasons. Though there are so many areas to work upon, tax policy is one area that needs immediate attention which may turnaround the funding availability with the government.

An effective tax policy directly helps the Government in bridging the socio-economic distances or gap those exist. In fact, Article 246 of the Indian Constitution gives power to both the Union and State governments to impose tax for socio-economic development. A simple tax structure is most desirable for faster development of any economy. Tax structure must not be too high or too low and must be suiting the need of taxpayers. In this context, income tax suits all the paraphernalia of principle of taxation and thus facilitates government to achieve its socio-economic goals.

Further, imposition of tax on income helps in reducing the gap between the rich and the poor since income tax is imposed under progressive rate system in India. Reducing gap between rich and the poor makes distribution of wealth equitably across all the people.

Tax can be imagined as a contribution by citizens to the elected government to carry out its functioning smoothly. Over the years there has been a constant wrangle

between the government and the citizens regarding tax rate. The government urges citizens to pay tax honestly to increase the tax compliance level. Every government derives most of its revenue from taxes, which are a mandatory levy imposed by the government without providing any direct benefit to the taxpaying public. Paying taxes is one of the constitutional obligations in exchange for fundamental privileges.

However, paying taxes is always a difficult process because it has a direct impact on the taxpayer's residual income. As a result, everyone tries to avoid tax by tax management and tax evasion which is against the law.

Evading taxes leads to economic costs, slowing down the growth of the economy and mitigating the ability of the government to furnish sufficient goods and services to the public. In other words, tax evasion is among the main issues that the developing nations have been facing.

Therefore, policy makers need to determine the causes behind tax non-compliance to carry out reforms and minimize the negative effects of evasion all around the globe. Income tax constitutes a major part of the total revenue, and the non-compliance behavior of Individual taxpayers hampers the progress of both the state and the nation. Broader empirical research regarding individual income tax compliance behavior is scant in India.

The present study focuses on exploring the determinants of income tax compliance by individual taxpayer in India and examining the interrelationship between the factors and their contribution towards tax compliance.

The following *hypotheses* have been formulated:

H_1 : Economic factor significantly predicts the determinants of tax compliance.

H_2 : Institutional factor significantly predicts the determinants of tax compliance.

H_3 : Social factor significantly predicts the determinants of tax compliance.

H_4 : Different factors of tax compliance determinants are positively correlated.

The structure of this paper is as follows. The next section explores the existing lite-

ratures relevant to the study and provides a strong theoretical background in identifying the research problems, research gap and formulating research hypotheses. The section "methodology" 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 compliance determinants and comparative findings with existing studies followed by 'conclusion' section.

2. Review of literature

2.1. Economic Factors Studies

Tax compliance is a problem that has existed for as long as taxes. State governments all around the world are clearly characterized by their ability to identify, describe, and ultimately reduce the patterns of tax noncompliance. The concepts of tax compliance have been discussed in literature in a variety of contexts.

Smith & Stalans [1] viewed economic factors centered on the notion that tax rate should be optimum to leave a justifiable amount of disposable income in the hands of taxpayers and at the same time providing the required finance to Government.

James [2] tried to find out the relationship of tax evasion with tax compliance and how the financial condition of taxpayer and preference to risk moderate this relationship in Nigeria. His study revealed that tax evasion had a positive and significant relation with tax compliance.

Helhel & Ahmed [3] showed that low tax compliance is the result of both unfair system of tax and high tax rate as opined by the taxpayers of Yemen. Unsystematic tax auditing, restrictions on penalties and official relaxation of tax have the direct effect on decision on paying tax in time. They also found that rate of tax compliance is comparatively high for female.

Banele [4] conducted a study to analyze the noncompliance behavior of tax among SME in Zimbabwe. This non-compliance attitude of SME has created hindrances in true development of Zimbabwe economy. The use of regression technique revealed that weak follow-up

plan, unplanned tax audits, increased tax rates, proper education on tax and misuse of public fund are the major causes of such non-compliance attitude of SMEs.

H₁: Economic factor significantly predicts the determinants of tax compliance.

2.2. Institutional Factors Studies

According to Azmi et al. [5] there is a negative impact of ease of use on risk of e-filing system in Malaysia.

Saravanan & Muthulakshmi [6] revealed that e-filing is an easy and time saving method of filing the return and the users of Trichy (India) are highly satisfied with this system.

Linda et al. [7] concluded that knowledge in tax and income of taxpayers have a significant impact on tax compliance.

After going through a systematic review, Mohammed et al. [8], found government should give more emphasis on non-enforcement tools to improve the taxpayers' willingness by changing the economic and social conditions and to create transparency and vertical trust within the system to increase tax compliance level.

The optimal choice of a taxpayer depends on changes in social norms and institutional environment concluded by Molodykh [9].

Kushwah et al. [10] found that while tax knowledge did not have a statistically significant relationship with tax compliance, tax penalties and electronic filing had a statistically significant impact on the corporate taxpayers' tax compliance in India.

On the contrary, Kireenko et al. [11] found in their study increase in education and awareness level among the citizen will results in favorable tax compliance as compared to tax audit. Trust to the governments and tax system will induce the citizen to comply with tax laws in Russia and Belarus.

Dey & Varma [12] examined the tax planning practices commonly adopted by the people of Twin cities of Odisha along with their awareness level and concluded that only twenty-three percentage of the sample individuals have good knowledge on tax and able to manage their own tax planning. But. Thirty four percent of the

total people surveyed were found with lowest level of awareness about various investment schemes for tax planning.

Bani-Khalid [13] showed that the intentions of the SMEs in Jordan to comply with the sales tax were significantly influenced by attitude toward behavior, subjective norms, perceived behavioral control, and patriotism.

Neni & Nurul [14] revealed that tax compliance is not affected at all by tax knowledge and tax sanction, but it is affected by low awareness level. Lack of complete information has created the low level of tax compliance in the city.

Farhan et al. [15] described tax compliance as the component of theory of economies as well as sociology & psychology. The socio-psychological aspects of taxpayers need to be addressed to understand the attitudes of individuals in paying tax in time. The influence of peer group, service quality and tax moral were identified as the social and psychological factors having significant weight on tax compliance of SMEs in Jordan.

H₂: Institutional factor significantly predicts the determinants of tax compliance.

2.3. Social Factors Studies

Nicoleta [16] analyzed the factors of tax compliance with evidence collected from various countries and tried to create a model for the inclusion of tax compliance related decision variables in the scenario of Romanian country. She found that the consequence of tax incompliance is necessarily influenced by various components; broadly categorized into social, economic, and institutional.

Kamleitner et al. [17] showed that small business owners' perspectives of their tax status appear to be differentiated by three important factors. First, compared to employed taxpayers, small company owners are more likely to see possibilities to break the law. Second, they are more likely to lack relevant tax information, and third, they are more likely to encounter decision-making frameworks that treat taxes as excruciating losses.

Mascagni & Nell [18] conducted a study to investigate various issues

relating to tax compliance. His study revealed that the economic factors like income level, cost of compliance, and rate of penalty are influencing the tax compliance behavior. Similarly, the social condition, attitude of taxpayer and the fairness in tax system as perceived by the taxpayer are the non-economic factors affecting tax compliance. On the contrary, high tax rate is found to be a non-significant factor influencing the tax compliance behavior. But government spending behavior as perceived by the common man and the attitude of taxpayers have the significant influence on compliance.

Excessive taxation, relaxation in punishment, complexity of legislation, lack of transparency in taxation system were the major reasons for tax evasion or low degree of tax compliance in Greece as evidence from the study of Diakomihalis [19].

Kiow et al. [20] arrived at conclusion that the individual taxpayers' compliance behavior is influenced by the transparent government mechanism that leads to ethical judgements and increases trust in tax authorities.

Jayawardane [21] looked at how psychological factors affected tax compliance choices and found that taxpayers' attitude was a key element that had a significant impact on tax compliance behavior.

Fauziati [22] discussed the issue of tax compliance in Padang of Indonesia and concluded that the tax compliance is not affected by tax knowledge. They suggested that the government should give maximum effort for tax compliance by imposing new rules of collection.

Yuniarta & Purnamawati [23] showed that business taxpayers' compliance in Bali is positively and significantly affected by karma phala (spiritual dimension) while money ethics (psychological dimension) and tax socialization (social dimension) had no significant influence on tax compliance.

Sharma & Sharma [24] found a significant relationship between tax practitioners ethics and three postulated frameworks, i.e., professional commitment, compliance cost and personality traits in north India.

H₃: Social factor significantly predicts the determinants of tax compliance.

2.4. Different Factors Studies

Deyganto [25] tried to find out the determinants of tax compliance and examined 9 selected determinants-government spending habit, fairness in taxation, tax audit, financial obstructions, changed policy, influence of peer group, tax authority and knowledge. Tax compliance was found to be affected significantly by tax audit frequency, financial obstructions and changes in government rules. All other variables have insignificant effect on tax compliance.

Damayanti [26] studied the tax compliance attitude of three hundred twenty-three taxpayers selected purposefully from Central Sava. The study showed that the desire of tax compliance is a subjective norm, and it is influenced by the perception of taxpayer on government. The intention to comply to tax takes the form of tax compliance and it originates from social obligations that is affected by the taxpayers' opinion about the government and its fairness.

Marandu et al. [27] provide thematic review of papers on tax and its compliance from the eighteen selected literatures across the world spreading over a time period of 1958 to 2012. A number of factors have been suggested by various authors affecting the tax compliance without any theoretical relevance and there by rejected by the authors for further discussion. Amongst all such factors, tax attitude, tax knowledge and tax awareness were found as the important factors affecting the compliance in general.

Rantelangi & Majid [28] discussed about the factors influencing tax evasion practice of taxpayers in East Kalimantan with one hundred participants selected with purposive sampling. The results indicated positive effect of cost of compliance on perception of tax evasion and the variables fairness in tax, knowledge of tax and tax morality have negative effect on the perception of tax avoidance practice.

Bijiga [29] described the way taxpayers have perceived about tax evasion in Bale Robe Town of Ethiopia. The study revealed that tax evasion is the result of low level of tax knowledge, and they

are completely ignorant about the heavy penalty of tax evasion.

Hassan et al. [30] found that tax compliance simplicity, rather than perceptions of government spending and tax morale, has a greater impact on tax filing. Additionally, there is a strong correlation between compliance behavior, government spending, and perceptions of justice.

H₄: Different factors of tax compliance determinants are positively correlated.

3. Research Methodology

The present study is analytical in nature and uses primary data. The study is confined to the income taxpayer of Odisha, one of the states in India. Since tax rules are uniform throughout the country and the behaviour of average taxpayer is assumed to be more or less similar irrespective of States. However, since it is not feasible to collect information from all the taxpayers, we have selected nine districts of Odisha with literacy rate of more than 80% as per census 2011.

The selected nine districts are Cuttack, Balasore, Khordha, Jajpur, Puri, Bhadrak, Kendrapara, Jagatsinghpur, and Nayagarh. The research used a structured Questionnaire for collecting the data by following stratified random sampling.

The questionnaire was designed considering the information gathered from pilot study and findings of Ameyaw & Dzaka [31].

The questionnaire consists of two parts. The first part includes the demographic components of respondents while

the second part includes various aspects of tax compliance. A total of 12 statements were asked covering economic, institutional, and social aspects and respondents were opined on 5-point Likert scale ranging from 1 to 5, indicating strongly agree to strongly disagree attitude.

Since the questionnaire relates to income and tax of the individual, respondents were reluctant to give their opinion resulting in non-response/incomplete response. However, a total of 1300 questionnaire were distributed in the sample domain out of which only 1068 respondents were found with complete response and constituted our sample for the study. The details of demographic components and fragment of tax compliance aspects are disclosed in Table 1 and Table 2 respectively.

The time period of data collection is confined to six months period of 2022. Statistical techniques like exploratory factor analysis (EFA), confirmatory factor analysis (CFA) and structural equation modelling (SEM) are used in this study. Statistical software like SPSS and AMOS are used to reach at conclusions and draw inferences. The model to be used in this study is presented in Figure 1.

It is evident from Table 1 that 22% of the respondents are of age less than 30, 38% are of the age 30–40, 28% belong to 40–50 and only 12% of the sample respondents are of age more than 50 years. A majority, 79% are male and only 21% are female. Of the respondents, 41% are employees of Govt./private organizations, 32% are into business and 27% are professionals.

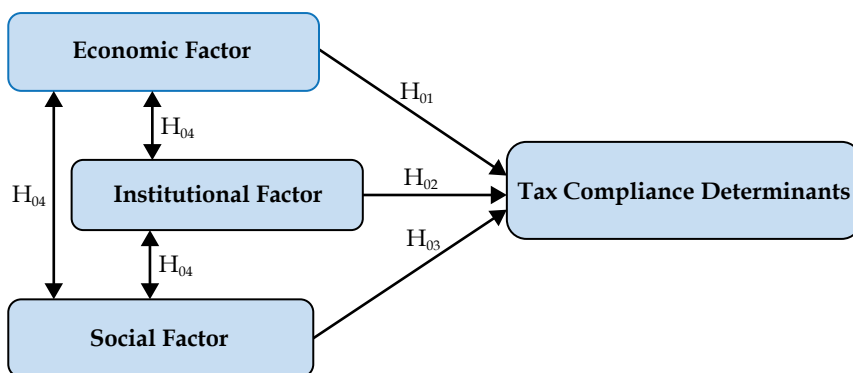


Figure 1. Proposed Model

Table 1

Respondents' Profile			
	Characteristics	Number	Percentage, %
Age	Below 30 Years	235	22
	30–40	406	38
	40–50	299	28
	Above 50	128	12
Gender	Male	844	79
	Female	224	21
Occupation	Govt./private employee	438	41
	Business	341	32
	Professional	289	27
Education	Undergraduate	117	11
	Graduate	299	28
	Postgraduate	470	44
	Professionally/Technically qualified	182	17
Income	₹ 2.50 Lakh – ₹ 5 Lakh	331	31
	₹ 5 Lakh – ₹ 7.50 Lakh	449	42
	₹ 7.50 Lakh – ₹ 10 Lakh	256	24
	₹ 10 Lakh – ₹ 12.50 Lakh	21	2
	More than ₹ 12.50 Lakh	11	1
	Total	1068	100

Source: Collected data

Only 11% are undergraduate, 28% of them are graduates, 44% are postgraduates and 17% are technically/professionally qualified. A majority (42%) of the respondents belong to the income group (₹5 Lakhs – ₹7.50 Lakhs) followed by 32% of the income group (₹2.50 Lakh – ₹5 Lakh) and 24% belonging to the income group (₹7.50 Lakh – ₹10 Lakh) and only 3% with income more than ₹10 Lakh.

4. Results

4.1. Primary Results

Table 2 illustrates the raw responses of the respondents on various determinants of tax compliance. Economic factors are coded with 'E', Institutional factors are coded with 'I' and social factors are coded with 'S'. It is prominent from the table that respondents were clear and confident in their response as Neutral responses were below 8%.

As Figure 2 illustrates, the majority respondents were either disagree or strongly disagree with the economic and institutional statements ranging between 53% to 64%. To the contrary, around 73% respondents were either agree or strongly agree with the social aspect statements.

4.2. Structural Equation Model

Laws related to income tax are amended by the Parliament when felt necessary, through Finance Act presented every year with Union Budget. This is done to keep pace with dynamicity of socio-economic parameters and changing preferences of successive Governments to allocate resources efficiently. Even though it is easier for industries and businessmen to comply with tax laws who employ professionals in the area of accounting and taxation, however it is very difficult for common men (individual taxpayer) to file return.

Table 2

Response Outline

Code	Determinants of Tax Compliance	SDA	D	N	A	SA
<i>Economic factors</i>						
E1	Tax rate is too high in India	252	357	73	208	178
E2	Tax audit is not adequately carried out	273	389	69	174	163
E3	The government allocates revenue wisely	248	360	76	207	177
E4	Excess tax paid is timely refunded	228	355	87	223	175
<i>Institutional factors</i>						
I1	Income tax compliance has been simplified over the period of time	225	448	36	170	189
I2	Income Tax officers should act as tax facilitators and not as tax enforcers	216	436	50	177	189
I3	Authorities have Excessive discretionary powers	207	433	51	186	191
I4	Corruption still exists in Income tax department	259	431	45	173	160
<i>Social factors</i>						
S1	Income tax provisions are in favour of rich people only	83	138	62	375	410
S2	Tax payment at right time indicates the loyalty to the nation	101	140	48	364	415
S3	Tax evaders are protected by political people	96	144	63	381	384
S4	Tax evasion is a serious crime	87	155	50	355	421

Source: Collected and compiled data.

Note: SDA: Strongly Disagreed; D: Disagreed; N: Neutral; A: Agreed; SA: Strongly Agreed.

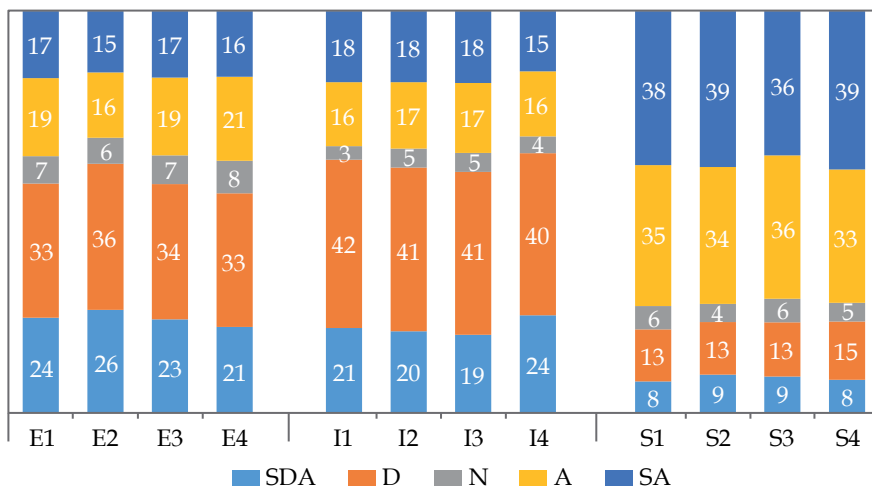


Figure 2. Responses to tax determinants aspects (%), where SDA - Strongly Disagreed; D - Disagreed; N - Neutral; A - Agreed; SA - Strongly Agreed

Tax compliance is further analyzed regarding determinants of tax compliance and the aspects of tax compliance. The determinants of tax compliance are analyzed to find out their interrelationship if any by performing regression analysis using structural equation modeling (SEM). The determinants of tax compliance are further analyzed with respect to three factors-economic factor, institutional factor and social factor.

The notion of "SEM" is primarily used when the variables constituting the factor/constructs are related with each other. It is conceptualized as the graphic representation of the relationship between the latent and observed variables. In the language of SEM, the constructs are otherwise known as latent variables and the observed variables under each construct are known as the indicators.

All total twelve statements have been considered to explain three constructs of determinants of tax compliance of an individual taxpayer. Further, four observed variables relating to each latent variable have been considered to explain

the construct more clearly. The observed variables symbolize various facets of latent variables-"Economic factor", "Institutional factor" and "Social factor".

4.3. Reliability and validity

Cronbach’s alpha, composite reliability (CR) and convergent validity have been used to test the reliability and validity (Table 3).

The values of Alpha calculated for the constructs-"Economic factor", "Institutional factor" and "Social factor" are more than 0.60, and so there is an acceptance level of internal consistency reliability for the scale used as measuring instrument.

4.4. Convergent validity

Convergent validity is established through composite reliability (CR) and average variance explained (AVE). The value of (CR) should be more than 0.7, the value of AVE should be more than 0.50 and CR needs to be more than AVE for the data to be reliable. All values of CR, AVE meet the minimum requirement for the data to be reliable (Table 4).

Table 3

Reliability Statistics: Tax Compliance Determinants

Constructs	Reliability Statistics	
	Cronbach’s Alpha	N of Items
Economic factor	0.947	4
Institutional factor	0.940	4
Social factor	0.813	4

Table 4

Validity: Tax Compliance Determinants

			Estimate	AVE	CR
X1	←	Economic_Factor	0.974	0.8167	0.915
X2	←	Economic_Factor	0.704		
X3	←	Economic_Factor	0.944		
X4	←	Economic_Factor	0.965		
X5	←	Institutional_Factor	0.918	0.8067	0.9085
X6	←	Institutional_Factor	0.993		
X7	←	Institutional_Factor	0.931		
X8	←	Institutional_Factor	0.729		
X9	←	Social_Factor	0.662	0.524	0.7435
X10	←	Social_Factor	0.779		
X11	←	Social_Factor	0.663		
X12	←	Social_Factor	0.782		

4.5. 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 5 it is clear that our data confirms all suggestive range of validity i.e., $MSV < AVE$, $ASV < AVE$, (Hair et al. [34]).

The output of the final SEM models is given in Table 6 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 Model-II.

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 three models for a good model fit. The modification index suggests the covariance of error terms e2 and e3 with the maximum index of 169.379 in first phase and the covariance of error terms e3 and e5 with the maximum index of 37.073 in second phase.

Finally, all the model fit indices are within the suggestive range in Model-III and path diagram is given below Figure 3.

In Table 7 the value of critical ratios (C.R) getting more than 1.96 is an indication of the significance of the path with 95% confidence level. Similarly, the p-value with (***) indicates that the regression weights are significant. As such, the effect of all the observed variables has significant loading on their constructs. Hence, H1, H2 and H3 are accepted. And so “Economic factor”, “Institutional factor” and “Social factor” significantly predict the tax compliance determinant.

In Table 8, the higher value of regression weight indicates a higher degree of positive impact on the variable. The regression weights of all the observed variables under the factor/construct are high and so all observed variables significantly and highly positively influence the constructs “Economic factor”, “Institutional factor”, and “Social Factor”.

Table 5

Factor correlation matrix of tax compliance determinants

	MSV	AVE	ASV	Eco. Factor	Inst. Factor	Soc. Factor
Economic_Factor	0.005	0.8167	0.0081	0.904	-0.106	-0.071
Economic_Factor	0.0014	0.8067	0.0063	-0.106	0.898	0.037
Institutional_Factor	0.0014	0.524	0.264	-0.071	0.037	0.724

Table 6

Model Fit Summary of Models: Tax Compliance Determinants

Variable	Value (Model-I)	Value (Model-II)	Value (Model-III)	Suggested value
Chi-square value	412.713, d.f = 51	231.209, d.f = 50	193.185, d.f = 49	
P value	0.000	0.000	0.000	“P-value > 0.05 [32]”
CMIN/DF	8.092	4.624	3.943	“Less than 5 is reasonable [33]”
GFI	0.941	0.966	0.971	“More than 0.90 [34]”
AGFI	0.910	0.947	0.954	“More than 0.90 [35]”
CFI	0.969	0.984	0.988	“More than 0.90 [36]”
RMR	0.056	0.053	0.053	“Less than 0.08 [34]”
RMSEA	0.082	0.058	0.053	“Less than 0.08 [34]”
P-CLOSE	0.000	0.035	0.285	“More than 0.05 [36]”

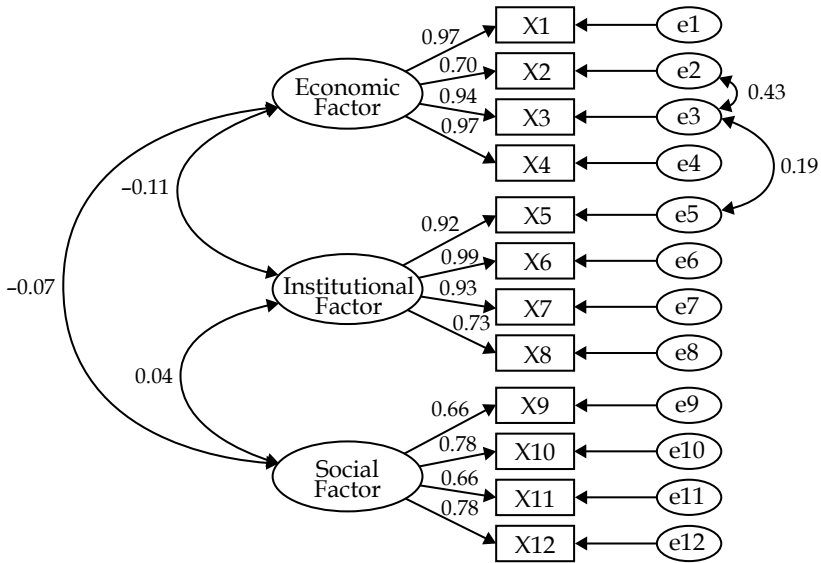


Figure 3. Path Diagram of Model: Tax Compliance Determinants

Table 7

Regression Weights: Tax compliance Determinants

			Estimate	S.E.	C.R.	P
X1	←	Economic_Factor	1.000			
X2	←	Economic_Factor	0.710	0.023	30.933	***
X3	←	Economic_Factor	0.964	0.013	75.919	***
X4	←	Economic_Factor	0.976	0.011	86.617	***
X5	←	Institutional_Factor	1.000			
X6	←	Institutional_Factor	1.072	0.015	70.028	***
X7	←	Institutional_Factor	1.005	0.018	56.191	***
X8	←	Institutional_Factor	0.777	0.025	31.479	***
X9	←	Social_Factor	1.000			
X10	←	Social_Factor	1.226	0.062	19.803	***
X11	←	Social_Factor	1.026	0.058	17.767	***
X12	←	Social_Factor	1.213	0.061	19.831	***

Table 8

Standardized Regression Weights: Tax Compliance Determinants

			Estimate
X1	←	Economic_Factor	0.974
X2	←	Economic_Factor	0.704
X3	←	Economic_Factor	0.944
X4	←	Economic_Factor	0.965
X5	←	Institutional_Factor	0.918
X6	←	Institutional_Factor	0.993
X7	←	Institutional_Factor	0.931
X8	←	Institutional_Factor	0.729
X9	←	Social_Factor	0.662
X10	←	Social_Factor	0.779
X11	←	Social_Factor	0.663
X12	←	Social_Factor	0.782

Three observed variables under the construct Economic factor” have high significant loadings of value more than 0.90 and other one has loadings of more than 0.70. Similarly, three observed variables under the construct “Institutional factor” have high significant loadings of value more than 0.90 and other one has loadings of more than 0.60. The observed variables explaining the construct “Social factor” have loadings more than 0.60. “Economic factor” and “Institutional factor” carry more weightage in comparison to “Social Factor”.

The covariance (Table 9) between “economic factor & institutional factor” is negative and significant as C.R is more than 1.96. The covariance between “economic factor & social factor” is negative but not significant. Similarly, the covariance between “economic factor & institutional factor” is negative and significant as C.R is more than 1.96.

The negative covariance values indicate negative correlation between the constructs “economic factor & institutional factor” and “economic factor & social factor”. So, H4 is accepted for the constructs “Institutional factor and Social factor” and rejected for the relation between “economic factor & institutional factor” and “economic factor & social factor” (Table 10).

The correlation coefficient between different constructs is negative for “economic factor & institutional factor” and “economic factor & social factor” (Table 10) and positive for “institutional factor & social factor”.

5. Discussion

From the above analysis, it is seen that economic factors, institutional factors, and social factors significantly predict the determinants of tax compliance. Tax rates, tax audit, timely refund of excess tax, simplification compliance procedures, tax official attitude and tax authorities power significantly predict the individual behavior while discharging the personal tax obligation. Our findings in this regard are consistent with earlier studies [1; 3; 4; 7].

The constructs institutional factor and social factor are positively related. But the constructs economic factor and institutional factor and economic factor and social factor are negatively related. The results also shows that different factors of tax compliance determinants are positively correlated.

This research is in line with research [37] that proves compliance cost negative effects level of tax compliance, while fines/penalties have positive effect.

Table 9

Covariances: Tax Compliance Determinants

			Estimate	S.E.	C.R.	P
Economic_Factor	↔	Institutional_Factor	-0.194	0.058	-3.380	***
Economic_Factor	↔	Social_Factor	-0.084	0.041	-2.069	0.039
Institutional_Factor	↔	Social_Factor	0.042	0.038	1.103	0.270
e2	↔	e3	0.206	0.018	11.410	***
e3	↔	e5	0.052	0.009	6.029	***

Table 10

Correlations: Tax Compliance Determinants

			Estimate
Economic_Factor	↔	Institutional_Factor	-0.106
Economic_Factor	↔	Social_Factor	-0.071
Institutional_Factor	↔	Social_Factor	0.037
e2	↔	e3	0.435
e3	↔	e5	0.193

Our findings are also supported by the recent initiatives undertaken by Government of India regarding direct tax reforms.

Based on the results of structural equation model, three of our hypotheses i.e., H1, H2 and H3 have been found to be statistically significant and hence all Null hypotheses have been accepted at 5% level of significance. Thus, we may infer that economical, institutional and social factors significantly predict the determinants of personal income tax compliance. However, we couldn't find enough evidence to accept H4 at 5% level of significance i.e., economic factors have negative relation with institutional and social factors while institutional factors have positive relation with social factors.

Simplification of return forms (ITR-1 also known as Sahaj, ITR-4 also known as Suvidha), introduction of new user friendly e-filing portal (e-filing 2.0), Annual Information Statement (AIS, an extended version of 26AS), E-verification of tax returns, Tax Return preparer scheme (TRP), income declaration schemes (IDS, 2016), 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 easy tax compliance.

6. Conclusion

The present study aimed at exploring the determinants of tax compliance by individual taxpayer and examining the interrelationship between the factors and their contribution towards tax compliance.

It is evident from the results of tax compliance determinants that variables under economic and institutional factors have a significant carry compared to variables under social factors.

In other way, this can be understood as selected variables under institutional and economic factor seem to reflect the concerned factor significantly than variables under social factor. This implies that some loopholes exist in management of taxation affairs. This also indicates about concern of individuals regarding their disposable income. Therefore, government should think of lowering tax rates and simultaneously keep on simplifying the tax compliance procedures and strengthen and expedite tax audit system.

Our 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 analysis of tax aspects of 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.

Also, study of income tax benefits and their relationship with consumption and investment decision of an individual could be one potential area that helps to determine the change in pattern of standard of living over a period of time in the state.

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