Government Trust as a Significant Determinant of Tax Compliance: A Study of Pakistan

Nabila Sadaf¹, Muhammad Tariq Mehmood², Adnan Pitafi³ & Shabbaz Husain⁴
¹ PhD Scholar, Federal Urdu University of Arts, Science and Technology, Islamabad
² HOD, Department of Economics, Federal Urdu University of Arts, Science and Technology, Islamabad
³ Assistant Professor, Mehran University of Engineering and Technology, Jamshoro
⁴ National University of Science and Technology, Islamabad

ABSTRACT

Tax compliance behavior of individuals is ascertained in this research. Among the variables which affect the tax compliance behavior, government trust and tax justice perception are studied. 300 individuals were taken as sample from Pakistan to study the relationship between variables of government trust, tax compliance and tax justice perception. Data is obtained through questionnaire and analyzed using reliability test, correlation and regression analysis. The results of the study showed that tax justice perception and government trust are the major determinants of tax compliance behavior in Pakistan. Tax justice perception plays the role of mediator through government trust to enhance tax compliance. Study implicates some useful suggestion that government should always put efforts in gaining public trust by increasing public services, making tax system understandable for everyone by making documentation easier so that more and more people can obey the rules which can increase compliance level.

1. Introduction

Taxes are the major components of public expenditure in any economy either it is developing or developed. Tax revenues constitute the highest part in public revenues. Tax revenue of Pakistan in 2021 was 5.7% (Tax report by FBR 2021). For the execution of public services tax revenues are very important in a country like Pakistan.
Government and tax authorities collect taxes from individuals according to rules and regulations for use in different public services. This cause decrease in income of individuals owing to which some obey the rules as a duty but some try to evade and do not fulfill the duty as a responsible citizen. Tax compliance is the fulfillment of responsibilities and duties as a taxpayer. Compliance towards tax is basically the obedience of taxpayers towards the taxation authorities and laws. Tax compliance can also be termed as the voluntary compliance behavior of tax payers towards the laws and duties. Taxpayers trust towards laws and government shows that their contribution will be used appropriately in public and state services which will increase their obedience towards the system and increase their compliance behavior. If individuals believe that the government will work for public interests, that their trust in the others and state is common and there is fair system for all then individuals comply and cooperate even when they can choose evasion (Levi, 1998). When taxpayers believe that tax or the tax system is unfair even there is no change in tax rate then they will evade tax. Unfair system will enhance tax evasion more than the increase in tax rate (Etzioni, 1986). For understanding tax compliance behavior, relation between government/tax authorities and taxpayers is very important (Torgler, 2012 and Smith, 1992).

Government and tax authorities impose different type of penalties, audits and fine to ensure that every citizen is compliant enough. These strategies always may not work so authorities should have to consider non-economic variables along with economic variables to bridge the gap between compliance and noncompliance behavior of individuals. Non-economic variables such as ethics, demographic factors, tax awareness, government trust, perception of tax justice, effective use of tax revenues etc. play dominant role in tax compliance (Andreoni et al., 1998 and Alm et al., 2012).

Many studies claim that noneconomic variables are important in determining tax compliance such as tax justice perception (Saad, 2011) and taxpayers’ trust in authorities (Scholz and Lubell, 1998; Van Dijke and Verboon, 2010 and Feld and Frey, 2002). Still there is need of research to study the direct and indirect effects of tax justice perception and government trust on tax compliance.

Tax justice perception is an important psychological determinant of tax compliance. Opinions and thoughts of taxpayers show the taxpayers feelings regarding tax system and regulations. If government makes efforts to improve public services then taxpayers perception of fairness can be improved which leads towards tax compliance. Adam Smith was also of the view that major principle of better tax collection is justice in the taxation system. Is perception towards justice will increase then compliance will automatically enhance. There should be certainty in economy’s taxation system so that there is less and less tax evasion.
Government trust and tax justice perception is different for different societies depending on their culture. Tax justice perception increases with the trust in government, which directly influence tax compliance behavior positively. This study basically will ascertain that government trust helps in increasing tax justice perception which will affects the tax compliance of individuals.

Tax compliance behavior of individuals is studied in this study and variables like government trust and tax justice perception, affecting this behavior will be examined.

2. Literature Review

Karakostas and Zizzo (2016) suggested that capability of an organization depends on compliance which is the fundamental part of the way in which organizations operate. They conducted an experiment that shows that compliance towards the sign or indication is powerful instrument. In their experiment sixty to seventy percent of the people comply with the indications given to them. Compliance to authority is essential either it is public policy or the managerial system. Even in the absence of any incentives, individuals comply with the indications given. Alm et al., (2010) conducted lab experiments to test the efficiency of service programs for improving compliance of tax. Subjects of the experiment earn income and decide to report or underreport it to the specific authority. Their results showed that filing income and compliance of tax depends upon uncertainty. If liability is uncertain then subjects will report low tax. Tax systems need to be improved for proper compliance and if proper services to taxpayers are provided then compliance rate can be increased.

Zeng (2014) studied the compliance behavior of tax payers. He surveyed students of economics and business from Canada who are taxpayers and know about tax. He found that system of tax is the most important factor of behavior regarding tax compliance. His study investigated that members of the survey are dependent upon their experience of filing and gender. He found that penalty and audit does not affect the behavior of reporting tax. But the existing literature gave three factors that affect the compliance behavior that are expenditures of Government, tax system and execution system. Helhel and Ahmed (2014) surveyed tax payers through likert scale questionnaire from capital city of Yemen, Sana. Results of the survey showed that compliance rate is low because of unfair tax system and high tax rates. Results showed the low compliance rate because of no return as services or public goods. Age is not an important factor of compliance but gender is because females from the survey are more compliant than males but on the other hand old age group was more compliant than the young age group.

Alm et al., (1992) explained the reason of paying taxes. They questioned the statement that why people pay taxes even they can evade and have opportunity in the form of incentives.
Then they tested their question and gave the reason of paying taxes. They conducted an experiment from the undergraduate students of Colorado University. The results of the experiment show that individuals comply to taxes not because they know that evasion is wrong or they have incentive to evade. Tax compliance depends upon the behavior of individual. Some pay taxes because they value the public good which they have from taxes finance, some pay because of the probability of audit. Ullah et al., (2018) examined the impact of tax fairness system on behaviors regarding compliance in Pakistan. They carried primary study to find the impact of compliance behaviors on tax. Their study showed that individuals pay unfair amount of tax or evade tax due to tax system. Individuals are of the view that if tax system will be transparent and fair enough then there will be fair amount of increase in tax revenue.

Tax justice is one of the main psychological determinants of tax compliance (Andreoni et al. 1998). When taxpayers cannot get services according to what they pay as taxes is because according to them the system is unfair. Tax payer’s perception regarding justice is directly affected by the increase in public services (Roberts, 1994). Tax compliance can be increased by a fair tax system (Spicer and Becker, 1980). Justice is a perception which can enhance compliant behavior by fairer and unbiased tax system (Reuben and Winden, 2010). As a fair tax system would propose compliance so taxpayer perception about the system is important. The government's taxation policy is defined by the perception of taxpayers (Gerbing, 1988). If the system is unfair then taxpayers will avoid and evade taxes (Spicer and Becker, 1980). An increase in the tax justice perception leads to an increase in the tax compliance (Forest and Sheffrin, 2002).

3. Data analysis Technique

3.1 Data Collection and Variable Scales

Data of the research is calculated through questionnaire from major cities of Pakistan in 2021. Population of the study includes students and tax payers. 500 individuals were selected for the sample but 350 questionnaires were received with complete information so sample of the study reduced to 350. 71% of the population in the survey is male and 29% are female. 55% of the sample is married and 45% is unmarried. Qualification wise 36% are having bachelors, 39% are of masters and 25% are having post graduates qualification. 46% are of age 31 to 40, 54% are above 40.

The variables used in the study were created from different scales. Main variables of the study were tax compliance, government trust, tax justice perception and demographic characteristics. Questionnaire form includes questions regarding these variables. Likert scale
was used for measuring the questions of the survey.

4. Results and Discussions

4.1 Internal Consistency and Reliability Test

Answers about the variables in the study were used and exploratory factor analysis (EFA) was conducted with variance maximization analysis. Variance maximization analysis is shown in Table 1. Tax justice perception is factor 1 which accounts for 68.380% accumulating large part of the whole variance. Government trust is the second factor which accounts for 22.611% of total variance. 3rd factor that is tax compliance, variance explaining percentage was 9.009%

Cronbach’s Alpha test was conducted to evaluate the reliability of scales. The coefficient of reliability value is higher than the acceptance value which shows that all the variables of the study have internal consistency.

The Kaiser-Meyer-Olkin (KMO) was used to measure the sample size adequacy for factor analysis by comparing the magnitude of observed and partial correlation coefficients (Norusis, 1993). The KMO value obtained with EFA was 0.688 which shows that variables included in the scale are suitable for EFA (Sharma, 1996). The results of Bartlett test show chi-square value of 290.613 and p value is less than 0.000 showing relation in the variables.

Table 1: Reliability Results

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cronbach α</th>
<th>Variance explanation ratio (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax justice perception</td>
<td>0.753</td>
<td>68.380</td>
</tr>
<tr>
<td>Government trust</td>
<td></td>
<td>22.611</td>
</tr>
<tr>
<td>Tax Compliance</td>
<td></td>
<td>9.009</td>
</tr>
<tr>
<td>Total variance explanation rate</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>KMO criteria value = 0.688</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barlett test: Chi square = 290.613 and p value &lt; 0.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 below gives the descriptive stats and correlation results of the variables of the study. There seems decomposition validity among the variables because Cronbach Alpha value is bigger than the correlation values (Gaski, 1984). Variables are having significantly positive relation with one another and tax compliance also at 1% significance level.

Table 2: Descriptive stats and correlation matrix

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Tax justice perception</th>
<th>Government trust</th>
<th>Tax compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax justice perception</td>
<td>0.588</td>
<td>0.328</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Government trust</td>
<td>0.37</td>
<td>0.484</td>
<td>0.334*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Tax compliance</td>
<td>0.538</td>
<td>0.371</td>
<td>0.539*</td>
<td>0.684*</td>
<td>1</td>
</tr>
</tbody>
</table>

Correlation values are significant at 0.01 levels.
4.2 Regression Analysis

In regression analysis we had defined the variable as independent, dependent and mediator variable. In our analysis tax compliance is the dependent variable, Government trust is independent and tax justice perception is the mediator which has direct and indirect effect on the dependent variable tax compliance. We will test two hypotheses from the regression analysis.

H1: trust in government of individuals is associated to their tax compliance behaviour.

H2: trust in government of individuals is associated to their tax justice perception.

Regression analyses are in Table 3. According to model 1 results model is statistically significant showing ANOVA p value .000. Tax justice perception and government trust are statistically significant. R square is showing 0.858 value which shows the power of explanation of the model 1 studied. Demographic variables; marital status, gender and age are showing insignificant results which is according to the theory.

Results of model 2 show that model is statistically significant as p value of ANOVA is .000. R square is also showing good fit result with value of 0.751. Government trust, marital status and gender are showing positive and statistically significant results with tax compliance. Model results reveal that trust in government is the main determinant of tax compliance which is why hypothesis 1 of the study is accepted.

Results of model 3 shows R square of 0.631 which is considered as good fit and model is also statistically significant with ANOVA p value of .000. This model shows that government trust, marital status and gender are statistically significant and had positive effect on perception of tax justice. Trust in government is related to tax justice perception so our second hypothesis is also accepted.

Table 3: Regression Analysis

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Model 1 Tax compliance B</th>
<th>Model 2 Tax compliance B</th>
<th>Model 3 Tax justice perception B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax justice perception</td>
<td>0.523</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Government trust</td>
<td>0.445</td>
<td>.000</td>
<td>.700</td>
</tr>
<tr>
<td>Marital status</td>
<td>0.057</td>
<td>.121</td>
<td>.198</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.020</td>
<td>.502</td>
<td>.119</td>
</tr>
<tr>
<td>Age</td>
<td>0.019</td>
<td>.390</td>
<td>.044</td>
</tr>
<tr>
<td>R²</td>
<td>0.858</td>
<td>0.751</td>
<td>0.631</td>
</tr>
</tbody>
</table>

100
The mediation analysis is done in SPSS by linear regression analysis and to test the significance of indirect effect we had used online Sobel Test calculator. The mediation analysis results are in Table 4.

**Table 4: Tax justice perception as a mediator**

<table>
<thead>
<tr>
<th>Effect</th>
<th>b</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>0.867</td>
<td>.000</td>
</tr>
<tr>
<td>Direct</td>
<td>0.730</td>
<td>.000</td>
</tr>
<tr>
<td>Indirect</td>
<td>0.418</td>
<td>.000</td>
</tr>
</tbody>
</table>

Tax compliance behavior of individuals is analysed in the study and variables affecting tax compliance; trust in government and tax justice perception are examined. Hypotheses are tested through 300 sample population. Findings from the analysis reveal that government trust has positively significant relationship on tax justice perception and tax compliance. Another finding shows that tax justice perception plays a mediator role in the relationship between tax compliance and government trust.

Findings from the analysis have some theoretical implications. Findings of the study reveal that demographic variable age has no effect on the tax compliance. This result of the study is consistent with Song and Yarbrough, (1978). Marital status is related to the gender in the data so we consider just gender for the effect. Gender has positive and significant effect on tax justice perception because tax justice perception is a behavior which varies from person to person. This result is consistent with D’attoma et al., (2017) and Kaslunger et al., (2010).

Another finding of the analysis revealed that tax justice perception has statistically positive relationship with tax compliance. This shows that as tax justice perception will increase, the tax compliance level will be increased. This result of the study is consistent with Spicer and Becker, (1980); Harris, (1989); Roberts, (1994); Saad, (2011). On the other hand research finding of the study also shows that tax justice perception arbitrate on the relationship between trust in government and tax compliance. The indirect effect of trust in government on tax compliance is positively significant and this effect is through the tax justice perception. The result is in line with the results of Jimenez and Iyer (2016).

Another finding of the analysis showed that government trust has statistically significant and positive relation with tax compliance which shows that as the trust in government of the individuals will increase, there will be positive increase in tax compliance. This finding of the study is in line with Hammer et al., (2009); Kogler et al., (2013); Gangl et al., (2013).

Study analyses reveal that government trust has significant and positive relation with the tax justice perception which shows that as the government trust of individuals will be increased, the level of perception regarding tax justice will be enhanced as well. This
consequence of the study is consistent with Jimenez and Iyer (2016), Brashear et al, (2005) and Holtz and Harrod (2008).

Most of the literature review showed that justice affects trust like Kogler et al., (2013) but present study according to Pakistan reveal that trust makes the justice. This is due to the structure of the society of Pakistan because studies already revealed in literature that behaviors of individuals are associated with cultural aspects (Rozin, 2003). Any society’s relationship with government is according to the values of society and it varies across societies. Expectations from the government vary across societies depending upon the cultural differences. In the societies where there is trust in government, tax justice perception is higher and positive in those societies. So tax justice perception and government trust vary across societies.

5. Conclusion

The important source of revenues for any government is the tax revenue. If the tax compliance will increase then it will lead to an increase in government’s income. Therefore the variables which help government in affecting tax compliance should be considered while making strategies and tax policies. Present study results are helpful for the governments like Pakistan in improving tax compliance. Government trust has significantly positive relation with tax compliance which can be used for taking measures which will improve the trust level of citizens. When government trust level is enhanced then tax justice perception will be increased which leads to higher tax revenues by increased compliance. Decision of taxpayers depends upon the perception about government and tax authorities (Alm et al., 2012). So if the tax laws and tax system is unbiased and fair then the compliance level can be increased in an economy. Government should always put efforts in gaining public trust by increasing public services, making tax system understandable for everyone by making documentation easier so that more and more people can obey the rules.

References
Brashear, T.G., Manolis, C., Brooks, C.M., 2005. The effects of control, trust, and justice on


Van Dijke, M., Verboon, P., 2010. Trust in authorities as a boundary condition to procedural fairness effects on tax compliance. J. Econ. Psychol. 31 (1), 80–91.