The Effect Of Attitude, Subjective Norms, Perceived Behavioral Control On Tax Compliance In Jordan: The Moderating Effect Of Costums Tax

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Abstract: Tax compliance is one of the most critical issues for all countries. In Jordan, the high-income individual taxpayers such as medical doctors, engineers, and lawyers have low tax compliance rate. Therefore, the purpose of this study is to investigate the factors that affect the tax compliance behavior (TCB) of high-income individual taxpayers in Jordan. This study extends the Theory of Planned Behavior (TPB) with custom tax. The population of this study is the high-income individual taxpayers working as medical doctors, engineers, and lawyers in Jordan. A stratified random sampling technique was used in this study. A total of 485 complete and usable responses were collected using a questionnaire survey. The data was analyzed using Statistical Package for Social Science (SPSS) and Smart Partial Least Square (PLS). The findings showed that attitude, PBC (PBC) and subjective norms (SN) are important predictors of behavioral intention (BI). BI affected positively the TCB. In addition, the BI mediated partially the effect of PBC on TCB. Customs tax moderated negatively the effect of BI on TCB. Tax authorities are suggested to reduce the custom tax and increase the attitude, SN and PBC of the professional taxpayers.

Index Terms: Tax compliance, Theory of Planned Behaviour (TPB), Customs Tax, Structural Equation Modeling (SEM).

1 INTRODUCTION

Tax compliance (TC) has recently become one of the important topics. This is because the budget of countries is highly dependent on the tax that these countries collect from their citizens [1], [2]. Researchers agreed that the problem of tax is old as the tax itself [3]. For this reason, understanding the predictors of tax compliance is critical for the country, government, individuals, and organizations. Duties of governments are in increasing trend and governments are striving to reduce tax evasion and increasing taxpayer compliance to provide more public services to citizens [4]–[7]. Tax researchers have provided various definition of TC. The most cited definition refers to “tax compliance as the act of taxpayer filing all required tax returns at the proper time and the returns accurately report tax liability in accordance with the rules, regulations and court decisions applicable at the time, the return is filed” [8]. Tax non-compliance is existed in almost all countries. For example, the value of tax evasion (non-compliance) in United States exceeded $337.3 billion in 2011. While tax compliance is a problem in many countries in this world, over the years, many studies on tax compliance come from developed countries [9] despite some findings from tax research suggest that tax compliance problem is more prevalent in developing countries [3], [10]. In Jordan for example, it is reported that only 2% Jordanian individual taxpayers are paying their tax [11]. While this is possibly because 90% of the taxpayers are exempted due to low income (lower than JD12, 000 annually), only few studies have been conducted to date to understand the TCB of taxpayers in Jordan. Jordan is a developing country that relies heavily on international aids and tax to fund its budget. A compliance rate of 2% among individual taxpayers resulted in a substantial tax gap at the level of JD600 Millions ($845 million) annually, which indicates a problem in the tax compliance among individual taxpayers [11]. While high income such as medical doctor, engineer, and lawyers are considered as highly paid individuals, only 16% of them are registered as taxpayers and liable to pay the tax. According to a report by Amman Chamber (2014), tax avoidance and evasion among this group are the highest among individual taxpayers in Jordan. Therefore, understanding the factors that affect high income individual taxpayers’ compliance with tax law in Jordan is important to assist in finding the appropriate ways in increasing the tax compliance rate in Jordan among these groups of taxpayers. Researchers indicated that there are other type of tax that can have an influence on the tax compliance. These include the customs tax [12], [13]. In Jordan, the customs tax on certain product is high such as the import of cars and cigarettes. Previously, the country depended on the customs, which was 300% and reduced gradually to 35% [14]. In view of the foregoing, this study examines some selected variables, which influence the high-income individual taxpayers’ behavior in complying with tax law in Jordan, particularly in Amman where majority of the population is centered. To meet this objective, the study extends the Theory of Planned Behavior (TPB) by [15] and include additional variable which is the customs tax. The reminder of this study discusses the literature review and hypotheses development as well as the research methodology, findings, and conclusion.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Tax Compliance

Tax compliance is a complex subject with broad implications. [16] pointed out that there are two main approaches, which are the economic and the behavioral (non-economic), used to encourage taxpayers to comply with the taxation system. Economic approach is related to penalties and it may be needed to enforce the taxpayer to adhere to the tax law. [16] indicated that the behavioral approach is based on voluntary
compliance and focused on behavioral co-operation between taxpayers and tax authorities. Taxpayers in this approach are affected by the attitude, belief, SN, and their perception of the tax and the tax authorities. Moreover, the behavioral approach considers the relationship between tax authorities and taxpayers as a psychological contract, which calls for an equal relationship between tax officials and taxpayers [17]. In addition to that, the success of the tax depends on how much tax officials and taxpayers have adhered to commitments and mutual trust in this psychological contract [18]. Based on these two approaches, it can be seen that in the context of this study, the second approach, which is the behavioral approach, is more appropriate. This is because this study examines the behavior of high-income individual taxpayers in Jordan.

2.2 Theoretical Framework
[15] developed the TPB to encounter the problem of volitional control in the Theory of Reasoned Action. TPB was developed to measure how human actions are guided. The theory predicts how particular behavior occurred with provision that behavior is intentional. TPB has been described by [15] as a BI (BI), which can be predicted through behavioral attitude (A), subjective norm (SN) and PBC (PBC). TPB has been applied in studying different behaviors, which make it one of the best theories adopted by psychologists in prediction of behaviors [19]. Prior literature demonstrated the ability of the TPB to predict a wide range of behaviors (Armitage and Conner, 2001). Despite this fact, previous studies that have used the TPB in tax compliance are few. While there are studies in tax compliance which have used the TPB to understand TCB [20]–[22], the use of TPB in tax studies especially in developing countries such as Jordan is still limited. This is despite, previous studies in tax compliance which included the TPB, support the use of the theory in the context of tax compliance. Therefore, this study examines the applicability of the theory in the context of TCB of high income individual taxpayers in Jordan. Research indicates that there is a lack of motivation for individual to pay tax, due to the fact that there are no real benefits or advantage of paying tax for the authorities. Accordingly, the theory proposed that the perception of taxpayers toward the government is essential in forming their compliance behavior. Thus, when taxpayers find no advantage of paying tax for the government, they will not comply with the tax law [13], [23], [24]. Custom tax is considered high and the government depend on this type of tax to support the funding of activities. In 2007, the government expected 180 million dinar to be received from custom tax [25]. Thus, when custom tax is high, this could lead the taxpayers to refrain from complying with tax law. For this reason, this study incorporate the custom tax as a moderator between the BI and the TCB. This is because it is expected that a high level of custom tax will lead to less compliance and vice versa.

2.4 Conceptual Framework
This study develops the framework based on the TPB, which consists of attitudes toward behavior, SN and PBC and extends the TPB by incorporating custom tax. This study proposes that attitude, subjective norm, and PBC will affect the BI, which is then expected to affect the TCB. In addition, customs tax is expected to moderate the effect of BI on the TCB. Figure 1 presents the conceptual framework for this study.

2.4.1 Attitude and BI
Attitude toward behavior is defined as the positive or negative feeling towards performing an action [15]. Attitude is a core variable of TPB. It is proposed by the TPB that attitude has a direct effect on BI [15]. Previous studies related to tax compliance found that attitude has a significant effect on the BI [20], [21], [26]–[28]. Other researchers derived similar findings [29]–[31] as they found that the attitude affects significantly the intention of individual to comply with the tax law. It is hypothesized that:

H1: Attitude affects positively the BI of high-income individual taxpayers towards complying with the tax law in Jordan.

2.4.2 SN and BI
SN refer to an individual’s perception that people who are important to him or her think he or she should or should not perform the behavior in question [15] [32]–[34]. The explanation to this is that under significant social influence and social pressure, an individual would perform a behavior even though the individual is not in favor of performing the behavior [35], [20] in her study of salaried taxpayers in Malaysia found that subjective norm is the most important factor in tax compliance. Previous studies in tax compliance literature showed that there is direct effect of the SN on BI. For example, [36] pointed out that SN have a positive direct effect on tax compliance. However, [21] found insignificant effect of SN on intention to comply with tax law by tax professionals in Malaysia and New Zealand. Thus, it is hypothesized:

H2: Subjective norm affects positively the BI of high-income individual taxpayers towards complying with the tax law in Jordan.

2.4.3 PBC and BI
PBC is defined as the individuals’ perceptions of their ability to perform a given behavior [15], [37] found that PBC has a significant effect on accountant’s intention. In TCB, many researchers found mix findings related to the effect of PBC on the BI. [20] found that the effect of PBC on BI of tax agent in Malaysia and New Zealand is insignificant. Similarly, the study of [38] on the effect of PBC on BI of individual taxpayers in Malaysia and New Zealand showed that the effect is insignificant. However, the effect of PBC on BI of individual taxpayers was significant in the study of [39]. In this study, it is expected that the effect of PBC on BI of high-income individual taxpayers in Jordan is significant. Accordingly, it is hypothesized:

Fig. 1: Conceptual Framework
H3: PBC affects positively the BI of high-income individual taxpayers towards complying with tax law in Jordan.

2.4.4 BI and TCB
Theory of reasoned actioned and TPB proposed that the BI affect the use behavior [15]. Several researchers in the field of management and technology acceptance also proposed that there is a link between BI and use behavior [6], [40]–[42]. In addition, the Technology Acceptance Model (TAM) also indicated that the effect of BI on actual behavior is direct [43]. Accordingly, it is hypothesized:

H4: BI affects positively the TCB by high income individual taxpayers in Jordan.

2.4.5 BI as a Mediator
According to the theory of TPB, the PBC affects the actual behavior directly and indirectly through the BI [15]. In the tax compliance studies, researchers also supported the direct and indirect effect of PBC on TCB. For example, researchers [44], [45] referred to the fact that the effect of PBC on TCB could be direct or indirect via the mediating variable of BI. BI mediate the effect of attitude, SN, and PBC on the tax compliance in Indonesia [46]. Accordingly, the following is hypothesized:

H5: The positive effect of PBC on TCB is mediated by the BI.

2.4.6 Moderating Role of Custom tax
[47] proposed a Slippery Slope Framework that suggests, compliance of taxpayers depends on the perception of the taxpayer towards the government. When government impose high indirect tax, taxpayers tend to be less complying with tax law and vice versa. In this study, the custom tax is considered as a moderator. Thus, the lower the level of custom tax, the higher the level of compliance. Based on the discussions, the following is hypothesized:

H6: Customs tax moderates the effect of BI on TCB of high-income individual taxpayers in Jordan.

3. METHODOLOGY
This study is a quantitative in nature. The population is the high income individual taxpayers in Jordan. However, due to time and cost consideration, the population is limited to Amman; because it is the capital of Jordan and largest number of high income individuals are living in the city. Accordingly, the population of this study is 127,958 high income individual in Jordan. This study investigates the tax compliance among three different groups in term of numbers, profession, and income, thus, the use of stratified random sampling is justifiable move. This technique helps researchers to gather the required data from sizeable number of respondents in a relatively short span of time [48]. According, the sample size of this study is 383 respondents. However, to avoid low response rate, researcher suggested to distribute more questionnaire additional 100% were added making the sample size 766 divided into three groups that include doctor, engineering and lawyers. Measurement of the variables were adopted from previous studies. The measurement of attitude, SN, PBC, and BI were adopted from [39]. The measurement of customs tax was self-developed, while the measurement of tax compliance was adopted from [49]. A total of 678 questionnaires were collected from the respondents. The data was analyzed using SPSS and Smart Partial Least Square version 3.2.8. The analysis of missing value showed that 122 response missing more than 15% of the answers and they were deleted. In addition, a total of 71 responses were deleted due to outliers issues. This made the complete responses 485. These responses are sufficient for the use of Smart PLS [24], [50]–[52]. Data is normally distributed and no multicollinearity issues. In addition, non-response bias was examined and it was found that the data has no bias.

4. FINDINGS

4.1 Profile of respondents
A total of 485 respondents have participated in this study. Majority of the respondents (75.5%) are males with bachelor degree (96.3%) and in age group between 36 and 49 years old (53.6%). The majority of respondents (88.5%) enjoy monthly income in average between 1200-1600 Jordanian dinar (JD) and has working experience of more than 10 years.

4.2 Measurement Model
In assessing the measurement model, [48] suggested that researchers must examines five criteria that are the factor loading (FL) >0.70 as well as the reliabilities (Cronbach’s Alpha (CA) and Composite reliability (CR) both >0.70). In addition, the validities such as the convergent validity which is achieved if the average variance extracted (AVE) is greater than 0.50 and the discriminant validity which is achieved if the root square of AVE is greater than the cross loading. In Table 1, it can be seen that all the criteria has been achieved indicating that the measurement of this study is reliable as well as valid. Some of the items were removed due to low factor loading.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach’s Alpha (CA) &gt;0.70</th>
<th>Composite Reliability (CR) &gt;0.70</th>
<th>AVE &gt;0.50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>0.918</td>
<td>0.938</td>
<td>0.752</td>
</tr>
<tr>
<td>BI</td>
<td>0.924</td>
<td>0.940</td>
<td>0.725</td>
</tr>
<tr>
<td>PBC</td>
<td>0.922</td>
<td>0.939</td>
<td>0.720</td>
</tr>
<tr>
<td>SN</td>
<td>0.941</td>
<td>0.955</td>
<td>0.810</td>
</tr>
<tr>
<td>TCB</td>
<td>0.949</td>
<td>0.957</td>
<td>0.736</td>
</tr>
<tr>
<td>CT</td>
<td>0.928</td>
<td>0.933</td>
<td>0.777</td>
</tr>
</tbody>
</table>

4.3 Structural Model and hypotheses testing
The evaluation of structural model was conducted by assessing the r-square, q-square, and F-square. The r-square value accounted to 0.55 indicating that 55% of the variation in BI can be explained using the variables of this study. Further, the q-square showed value greater than zero indicating that there is a predictivity of the variables toward BI. Effect size of all the variable is acceptable. This study developed seven direct effect hypotheses. Table 2 presents the result of direct effect hypotheses. The table shows the path of the hypothesis, path coefficient (β), standard deviation (STDEV), T-values, and P-values.
In the first hypothesis, attitude is expected to have a significant effect on BI of individual taxpayers in Jordan. The effect of attitude on BI is positive and significant ($\beta=0.28$, $T$-value $= 7.69$, $P$-value <0.01) as shown in Table 2. The increase in attitude of Jordanian high-income individual taxpayers will lead to an increase in the BI of these taxpayers toward complying with tax law. The second hypothesis of this study proposed that the SN has a significant effect on BI of Jordanian high-income individual taxpayers. The findings in Table 2 showed that the effect is positive and significant ($\beta=0.15$, $T$-value $= 4.00$, $P$-value <0.01). Thus, H2 is supported. The increase in SN will lead to an increase in the BI of Jordanian high-income individual taxpayers toward tax law. The third hypothesis predicted that the effect of PBC on BI is significant. The findings indicated that the effect is positive and significant ($\beta=0.23$, $T$-value $= 5.66$, $P$-value <0.01). Thus, H3 is supported. For the fourth hypothesis, the findings in Table 2 showed that the effect is positive and significant ($\beta=0.51$, $T$-value $= 12.47$, $P$-value <0.01). This indicates that BI affects significantly and positively the TCB of high income individual taxpayers in Jordan. The increase in BI will lead to a positive increase in TCB by high income individual taxpayers in Jordan.

### 4.4 Mediating Role of BI

The fifth hypothesis of this study proposed that BI mediates the effect of PBC on TCB. To explain the hypotheses, first the direct effect of PBC on TCB without the mediator (BI) was tested. It was found that the effect is positive and significant ($\beta=0.49$, $T$-value $= 11.16$, $P$-value <0.01). After entering the mediator into the relationship, the direct effect of PBC on TCB was reduced ($\beta=0.31$, $T$-value $= 6.58$, $P$-value <0.01). Table 3.36 shows that the direct effect when the mediator included reduced but stayed significant. It shows also that the indirect effect (PBC $\rightarrow$ BI $\rightarrow$ TCB) is significant ($\beta=0.08$, $T$-value $= 5.21$, $P$-value <0.01). Since both effects (direct and indirect) are significant, this leads to a conclusion that the mediating effect existed and it shows a partial effect.

### 4.5 Moderating Effect of Customs tax

The sixth hypothesis of this study proposed that customs tax moderates the effect of BI on TCB. Table 4 shows the result of moderating effect of customs tax. The moderating effect (Customs tax$^*$BI $\rightarrow$ TCB) is negative and significant ($\beta=-0.09$, $T$-value $= 2.43$, $P$-value <0.01). This showed that H6 is supported.

### Table 3: Mediating Effect of BI

<table>
<thead>
<tr>
<th>Path</th>
<th>$\beta$</th>
<th>STDEV</th>
<th>T-values</th>
<th>P Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBC $\rightarrow$ TCB</td>
<td>0.49</td>
<td>0.04</td>
<td>11.16</td>
<td>0.00</td>
</tr>
<tr>
<td>Direct effect with the mediator included</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BI $\rightarrow$ TCB</td>
<td>0.35</td>
<td>0.05</td>
<td>7.36</td>
<td>0.00</td>
</tr>
<tr>
<td>PBC $\rightarrow$ BI</td>
<td>0.22</td>
<td>0.04</td>
<td>5.49</td>
<td>0.00</td>
</tr>
<tr>
<td>PBC $\rightarrow$ TCB</td>
<td>0.31</td>
<td>0.05</td>
<td>6.58</td>
<td>0.00</td>
</tr>
<tr>
<td>Indirect effect</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PBC $\rightarrow$ BI $\rightarrow$ TCB</td>
<td>0.08</td>
<td>0.02</td>
<td>5.21</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Table 4 shows that an interaction occurred, and this indicates that there is a moderating effect of customs tax. This means that the increase in the level of customs tax as a moderator, will lead to an increase in the positive effect of BI on TCB of high-income individual taxpayers in Jordan.

### Table 4: Moderating Effect of Customs tax

<table>
<thead>
<tr>
<th>Path</th>
<th>$\beta$</th>
<th>STDEV</th>
<th>T-values</th>
<th>P Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI $\rightarrow$ TCB</td>
<td>-0.08</td>
<td>0.03</td>
<td>-2.43</td>
<td>0.02</td>
</tr>
<tr>
<td>Custom tax $^*$ BI $\rightarrow$ TCB</td>
<td>-0.09</td>
<td>0.03</td>
<td>-1.15</td>
<td>0.23</td>
</tr>
</tbody>
</table>

### 5. DISCUSSION

This study found that the effect of attitude, SN, and PBC on BI is positive and significant. Accordingly, the attitude of high-income individual taxpayers in Jordan is important predictor of their BI toward tax compliance. SN have essential positive and significant effect on BI. This indicates that the SN of high-income individual taxpayers in Jordan can lead them to have favorable BI toward tax compliance. PBC is important predictor of BI and its effect on BI is positive and significant. Several previous studies agreed with the findings of this study. [37] found that the effect of the variable of TPB on the BI ofaccountant is positive and significant. Findings regarding the positive effect of attitude and SN on BI can be found in the study of [36], [44], [53]. Nevertheless, some researchers found that there is insignificant effect of some variables of TPB on the behavioral intention. This can be seen in the study of [21] [20], [54]. However, in the context of high-income individual taxpayers in Jordan, the study found that the effects of attitude, SN, and PBC on BI are positive and significant. The fourth hypothesis predicted that the effect of BI on TCB is positive and significant. The findings indicated that the effect of BI on TCB of high-income individual taxpayers in Jordan is positive and significant. This indicates that the increase of the BI will lead to an increase in the TCB of high-income individual taxpayers in Jordan. High income individual taxpayers in Jordan have the intention and the desire to comply with tax law and they are determined to pay the tax and declare their earnings and income in the future. They also will not over claim their expense to reduce the payable tax. This could be the reason that the BI has a significant and positive effect on the TCB in Jordan. The fifth hypothesis predicted that BI will mediate the effect of PBC on TCB. The findings showed that BI partially mediated the effect of PBC on TCB of Jordanian high-income individual taxpayers. This indicates that part of the effect of PBC on TCB can be explained through the mediator; BI [15]. The theory of TPB indicated that the effect of PBC on actual behaviour (TCB in this context) is indirect through the BI [15]. From the finding in this study, it can be concluded that the BI could explain part of the effect of PBC on TCB of high-income individual taxpayers in Jordan. The sixth hypothesis proposed that the customs tax will moderate the effect of BI on TCB. The findings showed that customs tax moderated negatively the effect of BI on TCB of high-income individual taxpayers in Jordan. This indicates that when the level of customs tax as a moderator decreases, the
positive effect of BI on TCB will increase. The negative effect could be due to the fact that high income individual taxpayers in Jordan believe that if the collected tax will be used to provide services and infrastructure for the country, their willingness to comply with tax law will increase. Researchers suggested that the level of customs tax is linked to the benefits that the taxpayers obtained from complying with tax law.

6. CONCLUSION
This study has examined the applicability of the TPB in the context of TCB of Jordanian high income individuals. The findings confirmed that the theory is able to explain important percentage of the compliance. The study also confirmed that customs tax is essential for TCB. As a way forward, further studies are need to examine additional variables such as the religiosity and moral intensity. Decision makers in tax department in Jordan have to focus on attitude toward tax as well as on SN and PBC. Transparency must be applied in all the process of tax collection and tax expenditure to increase the trust between tax authorities and taxpayers.

REFERENCES


