

#### **SOCIAL SCIENCES & HUMANITIES**

Journal homepage: http://www.pertanika.upm.edu.my/

### Moderating Effect of Audit Probability on the Relationship between Tax Knowledge and Goods and Services Tax (GST) Compliance in Malaysia

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#### **ABSTRACT**

On 1st April 2017 was the second year Goods and Services Tax (GST) in Malaysia was implemented. Though Royal Malaysian Customs Department (RMCD) has recorded good tax collection, the signs of non-compliance have increased. Using the Responsive Regulation Theory, this study investigates audit probability and tax knowledge determination on GST compliance among businesses in Malaysia. In order to do this, a survey was conducted from April 2016 until the end of August 2016 and the Respondents were business operators registered with RMCD, under the GST System. The results show that both audit probability and tax knowledge contribute significantly to the compliance level among businesses. These findings are important for tax regulators (RMCD specifically) in promoting tax knowledge through continuous programmes and workshops, as GST is still at an early stage of implementation.

*Keywords:* Audit probability, Goods and Services Tax, Goods and Services Tax compliance, moderating effect, tax knowledge

#### ARTICLE INFO

Article history: Received: 20 May 2017 Accepted: 01 October 2017

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#### INTRODUCTION

Goods and Services Tax (GST) has been implemented in Malaysia for about two years. In the first year of its implementation,

the government saw a high compliance rate of more than 90%. However, it slowly declined as the Royal Malaysian Customs Department (RMCD) began to meticulously check transactions and noticed that the 90% compliance rate reported was only based on submissions of tax returns. It did not consider other aspects of GST implementations, such as transaction disclosure, GST payment, input on tax credit refund and so on. Hence, it is important to find out how to achieve compliance among taxable entities, factors contributing to their tax-paying behaviour, and how to improve compliance among them.

Factors that need to be considered include attitude of tax payers, tax rate, cost of living, trust in the government, as well as audit and tax knowledge. Theory of Responsive Regulation has shown that self-regulation and enforced regulation from regulators enhance compliance level but this may not be possible in developing countries which have limited regulatory capacity (Braithwaite, 2006).

Individuals in developed countries have high reading aptitude which means they gain more knowledge than those from emerging countries (Annamalai & Muniandy, 2013). Audit help improves level of compliance in Malaysia. Hence, this study investigates the relationship between GST knowledge and GST compliance with the interaction of audit by RMCD.

### CONCEPTUAL DISCUSSION AND HYPOTHESIS DEVELOPMENT

#### **Goods and Services Tax Compliance**

The GST compliance can be defined as taxpayers' readiness to obey all the rules and regulation with regards to GST, declare an accurate amount of tax, and hand over tax payments to the tax officer before the due dates (Palil & Mustapha, 2011). It is widely used by many tax organisations such as the Internal Revenue Service (IRS) USA, the Australia Tax Office (ATO), and Inland Revenue Board of Malaysia (IRBM). As part of a self-assessment system, GST requires taxable businesses to submit their own tax assessment before the due date as a part of their obligations under the Goods and Services Tax Act (Isa & Pope, 2011).

Non-compliance among taxable persons may lead to tax evasion or tax fraud (Yusof, Ling, & Wah, 2014). Tax evasion may be defined as an intended misrepresentation of material fact created by a person or business with the purposes of avoiding a tax (McLisky, 2011; Ritsatos, 2014). Therefore, tax compliance will always be an area of concern for the government and policy makers (Loo, Evans, & McKerchar, 2010; Mohd Isa, 2012). Tax compliance is important to sustain a high level of tax collection in order to achieve government's fiscal and social development (Sanusi, Noor, Omar, Sanusi, & Alias, 2016). Benk, Budak, Yüzba and Mohdali (2016); Isa (2014);

Palil (2010) highlighted the importance of tax compliance in Malaysia and have noticed that tax compliance is a main concern for the government as it affects revenue collection.

inconsistency in the results. Therefore, it is hypothesised that:

and different measurement used can cause

H1. The impact of tax knowledge on Goods and Services Tax is positive.

#### Goods and Services Tax Knowledge

A taxable person's knowledge is usually positively related to compliance (Muehlbacher, Kirchler, & Schwarzenberger, 2011). Tax knowledge has a negative relationship with tax evasion. A taxable person's behaviour is affected by his or her level of education (Brindusa & Constantin, 2015). Basic education, qualification, and training attended by GST preparers and managers in understanding the GST Act will help improve compliance (Palil, 2010). Several studies have highlighted a positive relationship between knowledge and tax compliance (Nor, Ahmad, & Saleh, 2010; Palil, 2010; Yusof et al., 2014).

Saad (2014) examined 30 taxpayers' views on tax knowledge and perceived complexity of the income tax system in New Zealand. Data was gathered through interviews and analysed using thematic analysis. She found that taxpayers have inadequate technical knowledge and this has led to non-compliance among them.

The results from the abovementioned studies shows a positive relationship between tax knowledge and tax compliance; however, these results are inconsistent with that of Harris (1989) and a current study by Fauziati, Minovia, Muslim and Nasrah (2016). Both studies indicate that there is no relationship between tax knowledge and compliance. Difference in tax jurisdictions

#### **Audit Probability**

An audit is an important activity handled by RMCD to ensure that taxable persons comply with all rules and regulations related to GST, assure that GST collection is accurate, and mitigate occasions of irregularities and GST fraud. Joulfaian (2000); Palil (2010); Yusof et al. (2014) in their studies claimed that tax compliance is positively related to the probability of being audited. Since GST is new in Malaysia, tax auditors should use tax audit as an avenue to educate and assist taxpayers in tax compliance (Yusof et al., 2014). Desk and field audits are regular audits conducted by the customs department. While desk audit is performed at the customs office by referring to a taxpayer's file field audit is an on-site inspection by customs officers who will inspect the taxpayer's office. The compliance level might improve through frequent audits by tax auditors (Gómez & Mironov, 2015). Hence, taxpayers will be more aware of their actions.

Alm and Mckee (2006) using experimental methods with regards to individuals' response to their tax compliance, explain that audit plays an important role in their decision making. They used humans as subjects in a controlled laboratory environment. The subjects have to decide how much income given in the experiment

shall be reported to a tax agency. The design had addressed the varying prior information concerning audit probabilities and by varying the output of the audit to the subjects. Some individuals were informed that their returns would be audited and while some would not be. The researchers found that the announcement of audit increased the compliance rate among those who were told that they would be audited and vice versa. The findings also indicated increased audit effectiveness when the subjects expect to be audited. In this regard, it is hypothesised that:

H2. The impact of audit probability on Goods and Services Tax is positive.

Maciejovsky, Kirchler and Schwarzenberger (2007) believed that an audit would may influence taxpayer's intention to avoid tax. It may happen when an audit fails to detect any non-compliance issues. Or taxpayers assume that auditors will only perform a one-off audit. Therefore, it is hypothesised that:

H3. The association between tax knowledge and GST compliance is more significant when the audit probability from RMCD is high.

#### **METHODS**

This research employed a survey questionnaire method and duration of study was from April 2016 until the end of August 2016. Respondents were business operators who are registered with RMCD, under the GST System. They were required to answer the questions using the Likert scale of 7,

which ranges from 1 for strongly disagree to 7 for strongly agree. The questionnaire items were adapted from Mohd Isa (2012) as well as from the Attitude and Behaviour-Tax and Compliance Ireland for 2013. The actual data was analysed using IBM's Statistical Package for Social Science (SPSS) for a descriptive analysis and Smart PLS for an inferential analysis. The research has performed the bootstrap resampling method with 5000 iterations of resampling and p<0.05 to obtain the results for the hypotheses.

#### **DATA ANALYSIS AND RESULTS**

A total of 404 responses were received from the 1200 surveys distributed. The response rate is about 31.7%. Based on the initial expectation of 384 responses (Sekaran & Bougie, 2011) from the total sample, the number of respondents should be adequate to proceed with the descriptive and inferential analyses. However, only 379 samples were available for further analysis after some cleaning process.

#### **Descriptive Analysis**

More than half (62.8 %) of the companies were medium in size, 29.6% were small, and 7.7% were micro. Most of the companies' yearly income were above RM3 million, 8.7% with income below RM500, 000, and 30.3% within the range of RM500, 000 to RM3.0 million. Almost half of the companies (47%) were in the industry for less than 15 years. About 37.3 % of them were between 16 and 30 years, 14% between 31 and 60 years, and only a handful of

companies (1.3%) have been in operation for more than 60 years (4.3%). Two thirds (60.4%) of the respondents were female. Among them, close to one third were below 30 years old (26.9%), another one third

(37.7%) were aged between 31 to 40 years, and the rest were 41 years and above. Table 1.0 shows details of respondents for the study.

Table 1
Respondents' details

|    |                 |                       | Frequency | Percentage (%) |
|----|-----------------|-----------------------|-----------|----------------|
| 1. | Company period  | Less than 15 years    | 178       | 47             |
|    |                 | 16 to 30 years        | 143       | 37.7           |
|    |                 | 31 to 45 years        | 37        | 9.8            |
|    |                 | 46 to 60 years        | 16        | 4.2            |
|    |                 | More than 60 years    | 5         | 1.3            |
| 2. | Yearly turnover | below RM300k          | 33        | 8.7            |
|    |                 | RM300,001 to RM500k   | 55        | 14.5           |
|    |                 | RM500,001 to RM3M     | 115       | 30.3           |
|    |                 | RM3,000,001 and above | 176       | 46.4           |
| 3. | Gender          | Male                  | 150       | 39.6           |
|    |                 | Female                | 229       | 60.4           |
| 4. | Age             | Below 30              | 102       | 26.9           |
|    |                 | 31to 40               | 143       | 37.7           |
|    |                 | 41 to 50              | 96        | 25.3           |
|    |                 | Above 50              | 38        | 10             |
|    | Total           |                       | 379       | 100            |

#### **Measurement Model**

The measurement model was assessed for convergent validity and discriminant validity (Djajadikerta, Roni, & Trireksani, 2015; Hair, Hult, Ringle, & Sarstedt, 2014). As shown in Table 2.0, all items possess loading above the recommended value of 0.6 (Chin & Newsted, 1999) while each construct's Cronbach's alpha and composite reliability is greater than 0.7. The average variance extracted is also above the minimum acceptable value of 0.5 (Henseler, Ringle, & Sinkovics, 2009), which indicates

sufficient convergent validity that a latent variable is able to explain more than half of the variance of its indicators on average.

The discriminant validity was analysed using Fornell-Lacker criteria. Table 3.0 contains the square roots of the AVE in bold along the diagonal, verifying the condition of being greater than the correlation between constructs (Fornell & Larcker, 1981). The measurement model results indicate that the model has good reliability and validity to proceed with the structural model test.

Table 2 *Convergent validity* 

| Construct         | Item | Loading | Composite<br>Reliability | Average Variance<br>Extracted | Cronbach Alpha |  |
|-------------------|------|---------|--------------------------|-------------------------------|----------------|--|
| Audit probability | AC1  | 0.624   | 0.932                    | 0.634                         | 0.916          |  |
|                   | AC2  | 0.742   |                          |                               |                |  |
|                   | AC3  | 0.819   |                          |                               |                |  |
|                   | AC4  | 0.838   |                          |                               |                |  |
|                   | AI1  | 0.884   |                          |                               |                |  |
|                   | AI2  | 0.839   |                          |                               |                |  |
|                   | AI3  | 0.773   |                          |                               |                |  |
|                   | AI4  | 0.820   |                          |                               |                |  |
| GST Compliance    | CD1  | 0.846   | 0.955                    | 0.640                         | 0.947          |  |
|                   | CD2  | 0.859   |                          |                               |                |  |
|                   | CD3  | 0.900   |                          |                               |                |  |
|                   | CD4  | 0.835   |                          |                               |                |  |
|                   | CR1  | 0.805   |                          |                               |                |  |
|                   | CR2  | 0.878   |                          |                               |                |  |
|                   | CR3  | 0.767   |                          |                               |                |  |
|                   | CS1  | 0.614   |                          |                               |                |  |
|                   | CS2  | 0.771   |                          |                               |                |  |
|                   | CS3  | 0.788   |                          |                               |                |  |
| GST Knowledge     | KK1  | 0.830   | 0.933                    | 0.584                         | 0.92           |  |
|                   | KK2  | 0.857   |                          |                               |                |  |
|                   | KK3  | 0.679   |                          |                               |                |  |
|                   | KK4  | 0.827   |                          |                               |                |  |
|                   | KK5  | 0.841   |                          |                               |                |  |

Table 3

Discriminant validity

| Construct             | 1     | 2     | 3     |
|-----------------------|-------|-------|-------|
|                       | 0.706 |       |       |
| Audit probability (1) | 0.796 |       |       |
| GST Compliance (2)    | 0.414 | 0.800 |       |
| GST Knowledge (3)     | 0.456 | 0.681 | 0.764 |

# Structural Model and Hypothesis Testing

The analysis of constructs relationships was based on the examination of a standardised path. The path's significance level was estimated using the bootstrap resampling method with 5000 iterations of resampling (Becker & Ismail, 2016). The results are summarised in Table 4.0. The result shows no potential of multicollinearity in the model as the variance inflation factor (VIF) value is less than the stringent threshold of 3.3 (Diamantopoulos, 2009). On the other hand, the effect size of the predictor construct indicates f2 value of 0.586 which is considered a large effect size (Cohen,1992).

The model explains 47.5% of variation in GST compliance which indicates a substantial mod. Both tax knowledge and audit probability were found to be statistically significant in explaining GST

compliance with p<0.05, thus supporting hypotheses H1 and H2. The moderating effect of audit probability was also found to be statistically significant with T value of 3.530, thus supporting hypothesis H3.

Table 4
Structural model and hypothesis testing

| Hypothesis | Description                         | Path coefficient | VIF   | T value | P<br>value | R<br>square | F<br>square | Decision  |
|------------|-------------------------------------|------------------|-------|---------|------------|-------------|-------------|-----------|
| H1         | Audit probability -> GST Compliance | 0.158            | 1.323 | 3.751   | 0.000      |             |             | Supported |
| H2         | GST Knowledge -><br>GST Compliance  | 0.578            | 1.405 | 12.115  | 0.000      | 0.475       | 0.586       | Supported |
| Н3         | AP*GTK -> GST<br>Compliance         | -0.091           |       | 3.530   | 0.000      |             |             | Supported |

#### DISCUSSION

The structural model evidences a causal relationship between audit probability and tax knowledge on GST compliance, with an R-squared value of 47.5%. This value explains that there is a 47.5% variation of the two independent variables in GST compliance behaviour. Significant T-values of 3.751, 12.115, and 3.530 for each variable support the hypotheses generated from the study. Hence, the findings support H1, H2 and H3 of the research.

The research model validates two direct relationships of variables on GST compliance, namely audit probability and tax knowledge. The findings of H1 are consistent with those of earlier studies (Bidin & Marimuthu, 2014; Brindusa & Constantin, 2015). On the other hand, the findings of H2 also support those of previous studies on the effects of audit

on tax compliance (Bătrâncea, Nichita, & Bătrâncea, 2012; Yusof et al., 2014), which would increase the compliance level among taxable individuals. The compliance level among low knowledgeable persons may improve by imposing thorough audits on them, which supports H3.

#### **CONCLUSION**

This study focused on factors affecting GST compliance among taxable entities in Malaysia. Generally, the study affirms the applicability of the Responsive Regulation Theory which is widely accepted in developed countries. For example, the Australian Taxation Officers has adopted this theory as a guideline in their compliance programmes. However, this theory was seldom used in developing and third world countries like Malaysia. Hence, audit and tax knowledge are important in

ensuring and increasing level of compliance among taxable businesses. The study also contributes to the literature in terms of analysis used. Previous studies use SPSS software to analysis data. Due to advancement of technology, the present study attempted to extend the use Smart PLS which is seldom applied in this area of research.

The model shows that both factors significantly influence GST compliance among taxable businesses in Malaysia; however, this model only explained 47.5% of the theory, suggesting that other determinants could influence GST compliance.

These findings are important for tax regulators (RMCD specifically) in promoting tax knowledge through continuous programmes and workshops, as GST is still at an early stage of implementation. From the results, audit performed on taxable entities could improve the compliance level with those with low tax knowledge. However, audit activities are not seen as favourable actions in the public's eyes as they are viewed as a part of enforcement by regulators. Cooperation and flexibility between enforcement agencies and taxable businesses are important to achieve high compliance.

#### **ACKNOWLEDGEMENT**

The authors extend their appreciation to the Faculty of Accountancy, Accounting Research Institute (ARI), Universiti Teknologi MARA (UiTM), and the Ministry of Education, Malaysia for facilitating and funding this research project under the Fundamental Research Grant Scheme (FRGS).

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