

## **COMPLIANCE DETERMINANTS IN PAYING MOTORIZED VEHICLE TAX IN BALI PROVINCE, INDONESIA**

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### **Abstract**

*The proportion of tax revenue in Bali Province mostly comes from motorized vehicles tax. Tax revenue will be optimal if the community obeys to pay taxes. This study aims to analyze the influence of demographic factors, tax regulations, tax policies, tax administration and tax morale on public compliance in paying motor vehicle tax in Bali Province. The results of the analysis show that tax compliance is influenced by demographic factors, tax morale, tax regulations, tax policy and tax administration, where the tax morale gives the biggest influence on tax compliance, then tax policies, tax administration, tax regulations and demographics factors respectively. The three mediation factors, namely tax policy, tax administration and tax morale, together provide a large influence and are able to explain 73.5 percent of the influence between tax regulations on tax compliance. Thus, in addition to reform and adjust existing tax regulations, but it is also very important for Bali Provincial Government to increase taxpayer satisfaction, motivate taxpayers through established tax policies, improve services, standardize procedures and always modernize existing taxation services.*

**Keywords:** *Tax Compliance, Tax Regulations, Tax Policies, Tax Administration, Tax Morale*

## INTRODUCTION

Taxes become the main source of revenue for financing. In the 2018 State Budget (APBN) posture, tax revenues are set to reach around 85 percent of total state revenues, the remaining 15 percent from PNPB and Grants. The same conditions also occur in the regions. Regional taxes become the main source of Original Regional Revenue (PAD) and Regional Revenues to finance development. Based on Bali Provincial Regulation Number 12 of 2017 concerning Regional Budget (APBD) for Budget Year 2018, Regional Tax Revenues contribute almost 89 percent in PAD. Regional Tax also accounts for almost half of Total Regional Revenue. Tax compliance is important given the highest proportion of PAD components in Bali Province's 2018 Regional Budget (APBD) in Indonesia, under the DKI Jakarta Province, Banten Province and South Kalimantan Province. This means that the dependence of the Bali Provincial Government on tax revenues is relatively high compared to other regions in Indonesia.

Based on Constitution Number 28 of 2009, the types of Regional Taxes at the Provincial level consist of Motorized Vehicle Tax (PKB), Motorized Vehicle Transfer Ownership Tax (BBNKB), Motorized Vehicle Fuel Tax (PBBKB), Surface Water Tax (PAP) and Cigarette Tax (PR). PKB and BBNKB which have the highest contribution in Regional Taxes in the Province of Bali. During the period from 2011 to 2017, PKB and BBNKB have an average contribution of 43 percent to Regional Revenues, 71 percent of PAD and 82 percent of Regional Taxes, as in Table 1.

Table 1. Contributions of PKB and BBNKB to Regional Taxes, PAD and Regional Revenues

| No | Contributions of PKB and BBNKB | Contributions (%) |      |      |      |      |      |      | Average (%) |
|----|--------------------------------|-------------------|------|------|------|------|------|------|-------------|
|    |                                | 2011              | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |             |
| 1  | to Regional Taxes              | 86                | 88   | 87   | 81   | 76   | 78   | 79   | 82          |
| 2  | to PAD                         | 75                | 78   | 76   | 70   | 64   | 67   | 67   | 71          |
| 3  | to Regional Revenues           | 48                | 44   | 47   | 45   | 39   | 39   | 38   | 43          |

Source: Book Profile of the Regional Revenue Board of Bali Province in 2017, Report on Realization of Bali Province Regional Revenue for the Fiscal Year 2017

Every year, the proportion of vehicle units that pay motor vehicle tax proportionally decreases when compared to the total vehicles registered in Bali Province. The number of vehicle units that pay taxes does increase every year, but the increase is not proportional to the increase in the number of existing vehicle units. As for the comparison between motorized vehicle units that make tax payments and the number of vehicle units during the period from 2011 to 2017 is shown as in Table 2, with a decrease in the number of paying taxes as in Figure 1.

Table 2. Comparison of Payment Units to Vehicle Units

| No       | Regency / City | Comparison of Payment Units to Vehicle Units (in percentage %) |      |      |      |      |      |      |
|----------|----------------|--|------|------|------|------|------|------|
|          |                | 2011   | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| 1        | Denpasar       | 76.4   | 73.0 | 74.4 | 68.0 | 64.6 | 60.2 | 58.2 |
| 2        | Badung         | 73.6   | 68.6 | 60.8 | 69.4 | 66.4 | 61.9 | 60.1 |
| 3        | Tabanan        | 70.9   | 67.4 | 67.0 | 64.6 | 61.6 | 57.9 | 55.8 |
| 4        | Gianyar        | 66.5   | 69.0 | 68.6 | 66.3 | 63.3 | 60.1 | 58.5 |
| 5        | Bangli         | 67.3   | 65.1 | 64.3 | 62.6 | 59.8 | 56.5 | 54.1 |
| 6        | Klungkung      | 74.7   | 72.0 | 70.7 | 70.0 | 66.6 | 63.9 | 61.6 |
| 7        | Karangasem     | 81.6   | 78.6 | 77.1 | 74.7 | 70.8 | 67.7 | 65.9 |
| 8        | Buleleng       | 69.7   | 66.7 | 66.3 | 65.2 | 61.7 | 58.1 | 54.9 |
| 9        | Jembrana       | 57.6   | 67.9 | 67.5 | 66.0 | 62.3 | 58.8 | 55.6 |
| Total    |                | 73.1   | 69.9 | 69.4 | 67.1 | 63.9 | 60.0 | 57.9 |
| Decrease |                | -  | -3.3 | -0.4 | -2.4 | -3.2 | -3.9 | -2.1 |

Source: Bali Province Vehicles Database as per 31 December, during from 2011 to 2017

Table 2 and Figure 1, indicate that the level of compliance with paying motor vehicle tax in Bali Province decreases every year. In 2011, there were around 73 vehicles paying taxes from 100 existing vehicles. The following year in 2012, it declined to around 70 vehicles that pay taxes from every 100 vehicles that exist and continue to decline every year. In 2017, the number of vehicles paying taxes is only around 58 vehicles out of every 100 existing vehicles.

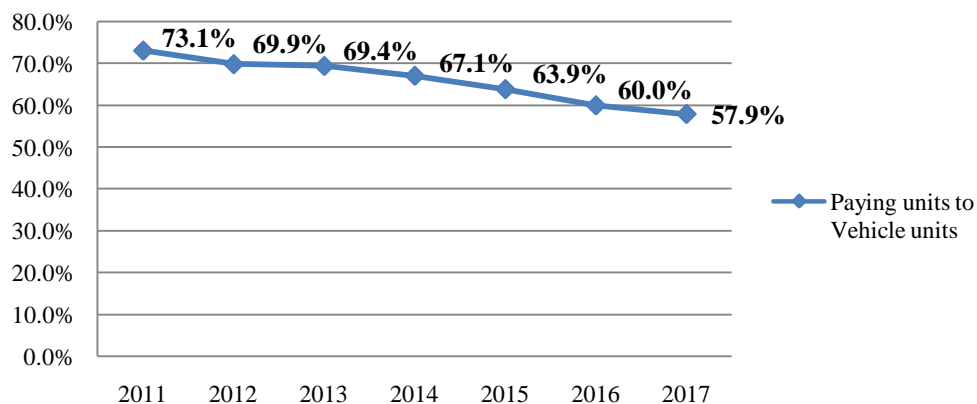


Figure 1. Decreasing Tax Paying Units during from 2011 to 2017

Nearly half of motor vehicle taxpayers in Bali Province do not pay taxes yet. This condition can threaten regional revenues in the future because more and more taxpayers are not paying taxes. The low level of tax compliance can reduce the potential income revenue. Compliance of

taxpayers in carrying out obligations in the field of taxation will encourage an increase in tax revenues (Hardika, 2006: 19).

Tax compliance could be improved if the factors that affect taxpayer's compliance in paying taxes can be better known. Studies on factors that influence tax compliance have been carried out. Among them, Hardika (2006: 12-18) in his dissertation, found that factors that influence the compliance of the community to pay taxes can be divided into two group, namely internal factors that exist within the taxpayer himself and environmental factors. These internal factors include age, sex, education, income level, employment, ethics and honesty. Environmental factors related to regulations and policies in the field of taxation and tax administration. Tax compliance is strongly tied to the characteristics of a taxpayer (Kakunsi, et al, 2017). Personal characteristics of the taxpayer community will influence their perception of tax. Public perceptions of taxes will affect people's attitudes and compliance in the field of taxation (Hardika, 2006: 13). Taxpayer compliance is a complex behavioral problem that requires various methods and data sources to investigate (Septarini, 2015).

Based on the background, this study aims to analyze the influence of demographic factors, tax morale, tax regulations, tax policy and tax administration on tax compliance, both directly and indirectly influencing through several mediating factors.

## LITERATURE REVIEW, CONCEPTUAL RESEARCH AND HYPOTHESES

### Tax Compliance

According to Constitution Number 16 of 2000 concerning General Provisions and Procedures for Taxation, taxpayer compliance includes the delivery of a Letter of Announcement and has no tax arrears. According to Ayuba et. al. (2016), Tax Compliance is the amount of tax paid by taxpayers in accordance with applicable laws and regulations. According to Nurmantu (2005) in Pasaribu (2016), Sarunan (2015) and Puspita et.al. (2016), in principle, defines tax compliance as a condition where taxpayers fulfill all their tax obligations and carry out their taxation rights. In this study, tax compliance is compliance with paying motor vehicle tax in Bali Province, including payment of fines and / or arrears due to late payments.

### Demographics

According to Philip M. Hauser and Duddley Duncan (1972) in the Demographic Method for the Statistical Office, stated the demographics as follows : *"Demography is the study of the size, territorial distribution and composition of population, changes there in and components of a such changes which maybe identified as territorial movement (migration) and social mobility (changes of status)"*.

In a macro definition, demographics pay attention to various individual and group characteristics that include social, cultural and economic levels. Social characteristics can include family status, place of birth, level of education and so on. Cultural aspects are related to perceptions, aspirations and expectations. While economic characteristics include economic activity, type of work and income. In this study, demographics included age, gender, marital status, education level, income level, and type of work.

Chau and Leung (2009) have reviewed and redeveloped a few research models, finding that age, gender, education level, income level and type of work influence tax compliance. In general, younger taxpayers will be more willing to take risks and not so sensitive to tax sanctions. Women tend to be more conservative and obedient than men. In terms of education level and income, it has a positive effect on tax compliance, where the type of work for which the payroll system does not automatically deduct income tax tends to be non-compliant with taxes. Pasaribu and Tjen (2016) research shows that the level of education, type of work and level of income correlate significantly with tax compliance.

### **Tax Morale**

The tax morale in this study refers to the results of the study of Luttmer and Singhal (2014). The tax moral is basically a set of motivations that underlie tax compliance. Identifying the things that shape tax morale plays an important role in understanding individual preferences as a consideration for policy making. There are five factors are interconnected which describe tax morale, namely intrinsic motivation, reciprocity, relations and social, cultural and knowledge influences.

Individuals have some intrinsic motivation to pay taxes or feel guilty or ashamed for not paying taxes. They will pay taxes if they feel the benefits of the tax paid, the extent to which the goods or public facilities have been provided by the state and individual perceptions related to tax justice. Individuals can also be influenced by peer behavior and the possibility of social recognition or sanctions from peers. Culture or social norms can also strengthen motivation and influence the willingness to pay taxes. Information and knowledge related to taxation, including the level of opportunity detected in avoiding taxes also influences tax compliance.

The research from Cahyonowati (2011) found that the tax morale level determines the level of tax compliance. The morale level of taxpayers in Indonesia has not grown from the intrinsic motivation of individuals but is forced from external factors, namely the amount of tax penalties. The greater the tax fine will reduce a person's intrinsic motivation to pay taxes, however, taxpayers are still motivated to pay taxes because they feel heavy to pay tax

penalties. The results of her research show that taxpayer compliance in Indonesia is forced compliance caused by the possibility of high tax audits and threats of fines and not at the stage of voluntary tax compliance. Sani and Habibie (2017) find that morale, attitudes and norms have a positive and significant influence on tax compliance through understanding accounting. Morale aspects here are in the form of feelings for violations of ethics, feelings of guilt, principles of life and feelings for violations of procedures

### **Taxation System**

Tax compliance is also influenced by external factors from the environment beyond the control of the taxpayer, namely the taxation system. According to Mansury in Susanto (2008), a country's taxation system consists of three interrelated elements, namely tax policies, tax regulations, and tax administration. The study conducted by Hardika (2006), provides empirical evidence and confirms the theory which states that tax laws and regulations, as well as tax administration have a significant influence on the attitude of taxpayers and taxpayer compliance. Sarunan's (2015) research results also show that the modernization of the tax administration system has a positive and significant influence on personal and corporate taxpayer compliance. According to Ayuba et. al. (2016), economic factors, namely tax rates, detected opportunities and tax complexity, affect tax compliance.

In this study, the scope of the taxation system mostly refers to the research model Hardika (2006), which includes tax regulations, tax policies and tax administration. Tax regulation factors include the complexity of tax regulations, changes in tax regulations and understanding of tax regulations. Tax policies factors include tax rate policy, progressive policy, tax sanction policy, tax arrears settlement policy. Tax administration factors include tax services, tax procedures and modernization of tax administration.

### **Conceptual Research**

Tax policies and tax administration are set based on tax regulations. The tax morale is influenced by four factors, namely tax regulations, tax policies, tax administration and demography. Tax compliance is influenced by five factors, namely tax regulations, tax policies, tax administration, demographics and tax morale. The exogenous latent variables in this study are demographics and tax regulations. Tax policies, tax administration and tax morale are intervening endogenous variables. The endogenous variable is tax compliance. All factors are interconnected as the research concept in Figure 2.

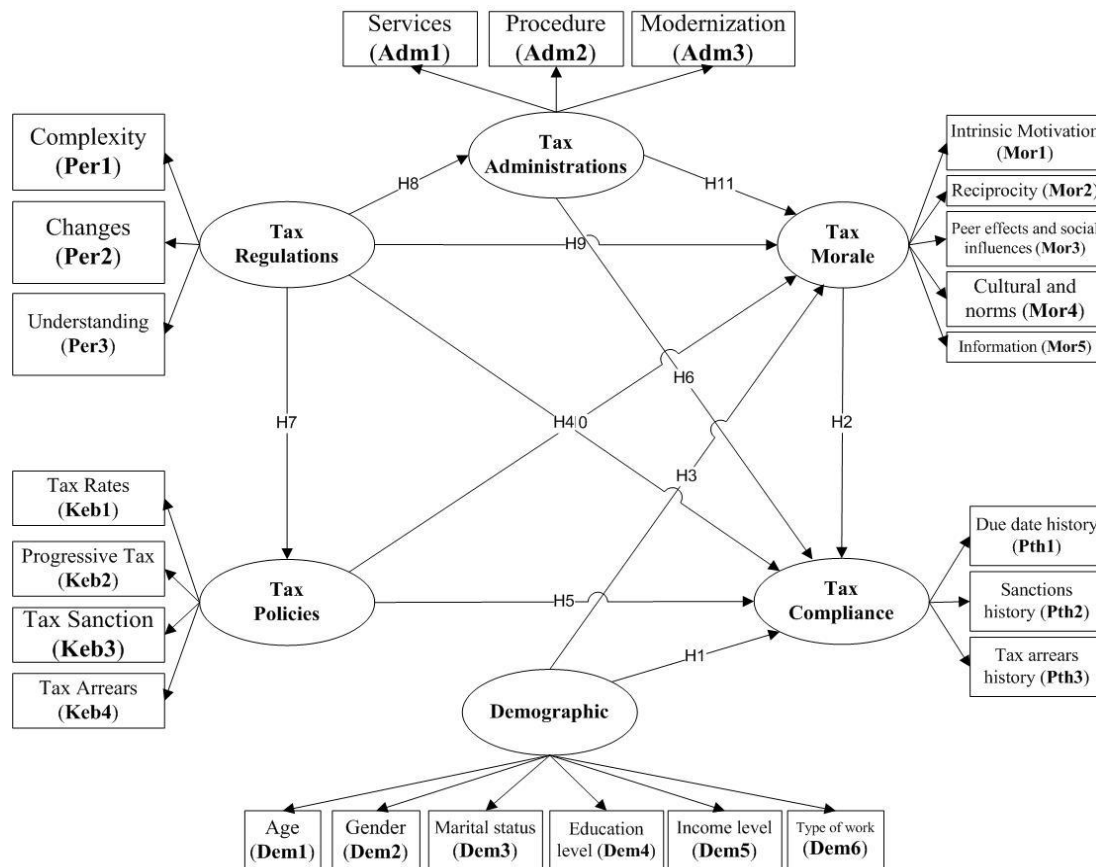


Figure 2. Conceptual Research

## Hypotheses

Based on literature studies and research concepts, there are a few direct effects and indirect effects between variables, with the following hypotheses:

- 1 Demographics have a positive effect on tax compliance in Bali Province
- 2 Tax morale have a positive effect on tax compliance in Bali Province
- 3 Demographics have a positive effect on tax morale in Bali Province
- 4 Tax regulations have a positive effect on tax compliance in Bali Province
- 5 Tax policies have a positive effect on tax compliance in Bali Province
- 6 Tax administrations have a positive effect on tax compliance in Bali Province
- 7 Tax regulations have a positive effect on taxation policies in Bali Province
- 8 Tax regulations have a positive effect on tax administration in Bali Province
- 9 Tax regulations have a positive effect on tax morale in Bali Province
- 10 Tax policies have a positive effect on tax morale in Bali Province
- 11 Tax administrations have a positive effect on tax morale in Bali Province
- 12 Tax administrations have a significant effect on tax compliance in Bali Province through tax morale



- 13 Demographics have a significant effect on tax compliance in Bali Province through tax morale
- 14 Tax policies have a significant effect on tax compliance in Bali Province through tax morale
- 15 Tax regulations have a significant effect on tax compliance in Bali Province through tax policies, tax administration and tax morale
- 16 Tax regulations have a significant effect on tax morale in Bali Province through tax policies and tax administration

## RESEARCH METHOD

Most of this research area is located in all vehicle tax payment services in all regencies or city in Bali Province. The object in this study is a private motor vehicle taxpayer registered from all regions in Bali until December 31, 2017 where taxpayers are still using those motorized vehicle, and a database of motorized vehicle payments in Bali Province during from 2011 to 2017.

Table 3. Composition Sample on Each Strata

| No    | Origin of Vehicle | Population Distribution (%) | Total |
|-------|-------------------|-----------------------------|-------|
| 1     | Denpasar          | 33                          | 53    |
| 2     | Badung            | 20                          | 33    |
| 3     | Tabanan           | 10                          | 16    |
| 4     | Gianyar           | 11                          | 17    |
| 5     | Bangli            | 3                           | 4     |
| 6     | Klungkung         | 3                           | 5     |
| 7     | Karangasem        | 5                           | 7     |
| 8     | Buleleng          | 10                          | 17    |
| 9     | Jembrana          | 5                           | 8     |
| Total |                   | 100                         | 160   |

The population is taxpayers who use private motorized vehicles in Bali Province, registered until December 31, 2017, which is 3,763,672 vehicles. The number of samples is determined based on Kock and Hadaya (2018) at a 5 percent significance level of 160 samples, and has fulfilled the minimum number of samples in Abdillah and Jogiyanto (2015), namely a minimum of 5 samples per indicator and a minimum of 10 times the number of lines constructed. Sampling technique with randomly structured sampling according to the origin of vehicle. The distribution of samples in each stratum is carried out proportionally according to the total population of vehicles in each strata, with the determination of the sample as Table 3.



The research data was obtained through the distribution of questionnaires online and offline, and sourced from the database of vehicle tax payments against 160 data of selected respondents. The preparation of questionnaires is based on the elaboration of operational definitions for each indicator that measures latent variables, as was done by Thongrattana (2010) and Wardhono (2005). Each indicator is then spelled out in a number of dimensions. Each dimension will be described in the form of a question. Testing the validity and reliability of the questionnaire on limited samples in the city of Denpasar was carried out as a mechanism in Nurcahyanto (2013). For this, SPSS was used for analysis based on Pearson correlation and reliability analysis.

Table 4. Parameters of Test Validity and Reliability in the PLS Measurement Model

| Test Type                  | Parameters                                      | Rule of thumbs                                |
|----------------------------|---|---|
| 1. Testing the validity    |   |   |
| Convergent                 | Loading value                                   | More than 0.7*)                               |
|                            | Average Variance Extracted (AVE)                | More than 0.5                                 |
|                            | Communality                                     | More than 0.5                                 |
| Discriminant               | Square root AVE and latent variable correlation | Square root AVE > latent variable correlation |
|                            | Cross loading                                   | More than 0.7 in one variable                 |
| 2. Testing the reliability |   |   |
|                            | Cronbach's alpha                                | More than 0.6                                 |
|                            | Composite reliability                           | More than 0.6                                 |

Source: Abdillah dan Jogiyanto (2015: 196)

Note: \*) Loading value between 0.6 to 0.7 is still acceptable (Santosa, 2018)

Analysis of research data using the SmartPLS application. Evaluating the outer model uses the rule of thumb as in Table 4. The first test is carried out at the indicator level. Validity test begins with a test of convergent validity. Convergent validity shows the extent to which an indicator is positively correlated with other indicators of the same construct. If it is valid convergently, proceed with the test of discriminant validity through cross loading values. The value of cross loading is the value of the outer loading of the indicator of a construct, it must be greater than the value of the outer loading indicator to another construct on the same line. The next test is to test the validity and reliability at the construct level based on the value of Cronbach's alpha, the value of Composite reliability, the value of AVE for each construct.

Evaluate the inner model using the coefficient of determination  $R^2$  and Predictive relevance Q Square ( $Q^2$ ). The coefficient of determination ( $R^2$ ) shows how much variation in

changes in endogenous variables can be explained by exogenous variables. According to Abdillah and Jogiyanto (2015), the value of  $R^2$  or variance described in the dependent variable should be  $\geq 0.10$ . According to Sarwono (2013), the value of  $Q^2 > 0$  shows evidence that the observed values have been well reconstructed, so that the model has predictive relevance. In other words, the pathway model can predict well the original observed value (Santosa, 2018: 96). If you have fulfilled the rule of thumbs evaluation of the outer and inner model, then do the hypothesis test.

There are sixteen hypotheses in this study that describe the relationship between demographic variables, tax regulations, tax policies, tax administration, tax morale on tax compliance, consisting of eleven one-tailed hypotheses for direct effect and five two-tailed hypothesis for indirect effect. The hypothesis is accepted, that is, exogenous variables have a significant effect on endogenous variables, if the p-values are less than 0.05 or t-statistic is more than 1,645 for one-tailed hypothesis. Conversely, the hypothesis is rejected, that is, exogenous variables have no influence on endogenous variables, if the p-values are greater than 0.05 or t-statistic is less than 1.96 for two-tailed hypothesis. Tests are carried out at five percent significance level. Calculation of t-statistic on smartpls through the bootstrapping method.

Determination of the type and strength of mediation based on Sofyani (2016), Kwong and Wong (2016) and Hadi et. al. (2016). The power of mediation can be calculated from the value of Variance Account For (VAF), where VAF is the percentage value of Indirect Effects (original sample on smartpls) on Total Effects. According to Hair et. al. (2013-2014) in Kwong and Wong (2016) and Hadi et. al. (2016), if the value of VAF is less than 20 percent it means that it does not have a mediating effect, the value of VAF is between 20 percent to 80 percent have partial mediation and the VAF value exceeds 80 percent means having fully mediation.

## RESULTS

Primary data collection was carried out four times, namely three times for testing questionnaires and finally for research analysis, with details of questionnaires as in Table 5. The results of testing the questionnaire found that there were 11 items of questions from a total of 59 items that were invalid and deleted from the questionnaire. Thus, the final research questionnaire used to measure respondents' perceptions was 48 questions. Consisting of 9 question items to measure tax regulation factors, 12 item questions to measure each tax policies and tax administration factor, and 15 question items to measure tax morale factor. The total printed version questionnaire that was distributed offline in all vehicle tax payment services in all regencies or city in Bali Province was 350, of which 291 were returned, so the response rate was around 83 percent. The results of cleaning and sorting data, including adjusting to sample

requirements, obtained data to be analyzed in this study as many as 160 samples, which came from the print version questionnaire of 137 pieces and online versions of 23.

Table 5. Questionnaire Distribution

| No | Location                | Printed Version |          |          | Online Version |          | Total Analyzed |
|----|-------------------------|-----------------|----------|----------|----------------|----------|----------------|
|    |                         | Spread out      | Returned | Analyzed | Filled         | Analyzed |                |
| 1  | Denpasar                | 30              | 20       | 15       | 34             | 27       | 42             |
| 2  | Denpasar                | 35              | 25       | 15       | 19             | 17       | 32             |
| 3  | Denpasar                | 50              | 39       | 31       | 6              | 4        | 35             |
| 4  | Kabupaten/ Kota se-Bali | 350             | 291      | 137      | 31             | 23       | 160            |

### Evaluation of Outer Model

The evaluation results of the outer model, there is one indicator with an outer loading value of 0.057, which is the Gender (Dem2) indicator, under rule of thumb as in Table 4. These indicators must be eliminated to obtain a more valid model. Retesting the elimination model shows that the outer loading value of all indicators is valid and the outer loading value of the indicator of a construct is greater than the outer loading value of the indicator to another construct on the same line, so that the construct indicator satisfies discriminant validity. Full model results of elimination as shown in Figure 3.

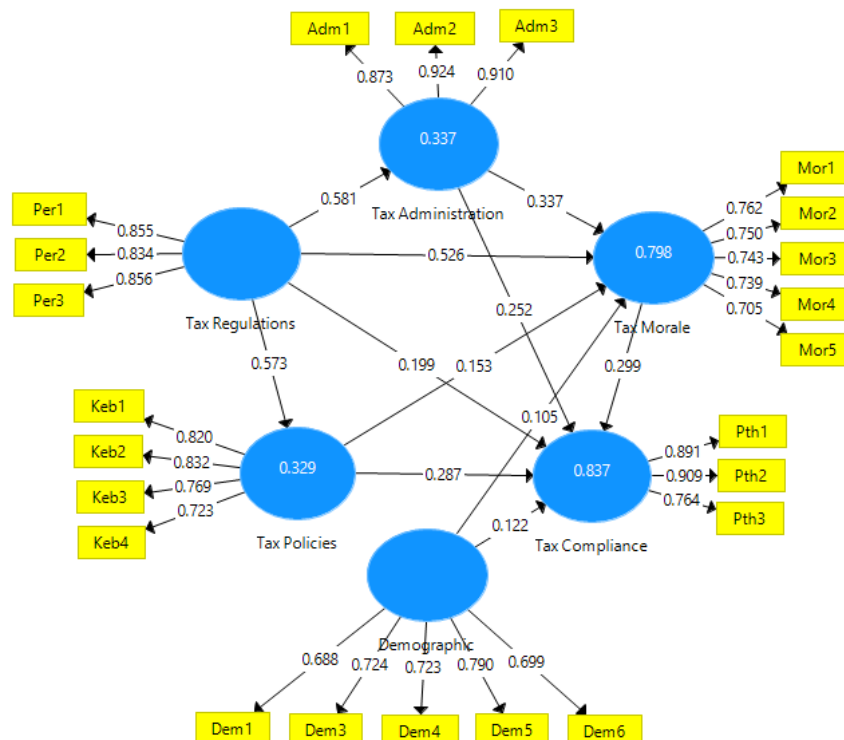


Figure 3. Full Model of Elimination Results

Table 6, shows the value of Cronbach's alpha and the value of Composite reliability all above 0.6 and the value of Average Variance Extracted (AVE) is above 0.5. Thus, all constructs have met the validity and reliability test. This condition shows the construct can explain that more than half of the variance does come from the indicators and the construct can be a valid and consistent measurement tool.

Table 6. Cronbach's alpha, Composite reliability and Average Variance Extracted Value

| Latent Variable         | Test Validity and Reliability on Constructs |                              |            |
|-------------------------|---|------------------------------|------------|
|                         | <i>Cronbach's alpha</i>                     | <i>Composite reliability</i> | <i>AVE</i> |
| Demographic (X1)        | 0.780                                       | 0.847                        | 0.527      |
| Tax Regulations (X2)    | 0.807                                       | 0.885                        | 0.720      |
| Tax Policies (Y1)       | 0.794                                       | 0.867                        | 0.620      |
| Tax Administration (Y2) | 0.887                                       | 0.929                        | 0.815      |
| Tax Morale (Y3)         | 0.794                                       | 0.858                        | 0.548      |
| Tax Compliance (Y4)     | 0.817                                       | 0.892                        | 0.735      |

### Evaluation of Inner Model

The results of the inner model evaluation, as shown in Table 7, show that the value of  $R^2$  for the tax compliance variable is 0.837, meaning that variations in changes in tax compliance variables can be explained by demographic variables, tax regulations, tax policies, tax administration and tax morale of 83.7 percent. The remaining 16.3 percent is influenced by other variables outside the model. The value of  $R^2$  for the tax morale variable of 0.798 shows the ability of demographic variables, tax regulations, tax policies, and tax administration in explaining the tax morale as much as 79.8 percent. The remaining 20.2 percent is influenced by other variables outside the model; and so on for other constructs. Thus, all endogenous latent variables show good predictive strength, namely moderate and strong.

Table 7. R Square Value for Model Predictive Strength Test

| Latent Variable         | Predictive Strength |                   |
|-------------------------|---------------------|-------------------|
|                         | <i>R Square</i>     | Quality of Effect |
| Tax Policies (Y1)       | 0.329               | Moderate          |
| Tax Administration (Y2) | 0.337               | Moderate          |
| Tax Morale (Y3)         | 0.798               | Strong            |
| Tax Compliance (Y4)     | 0.837               | Strong            |

The calculation value of Q2 shows a result of 0.906. Thus, this research pathway model shows the existence of predictive relevance.

$$Q^2 = 1 - \{(1-0.322^2) \times (1-0.330^2) \times (1-0.790^2) \times (1-0.828^2)\}$$

$$Q^2 = 1 - \{0.896 \times 0.891 \times 0.376 \times 0.314\}$$

$$Q^2 = 0.906$$

## Hypothesis testing

### *Direct Effect*

Based on Table 8, all relations have a significant direct effect, so that all independent variables have a positive effect on the dependent variable. Thus, eleven hypotheses that directly influence from hypothesis 1<sup>st</sup> to 11<sup>th</sup> accepted. Tax regulations have the biggest influence on tax morale, with a path coefficient of 0.526. Tax regulations also have a major influence on tax administration and tax policies, with path coefficients of 0.581 and 0.573. Conversely, demographic variables have the smallest influence on tax morale, with a path coefficient of 0.105. Among the five factors that influence on tax compliance, tax morale have the greatest influence on tax compliance, then in a row tax policies, tax administration, tax regulations and demographic, with a path coefficient of 0.299; 0.287; 0.252; 0.199 and 0.122.

Table 8. Level of Significance of Direct Effects

| No | Direct Effect |            | Path<br>Coeff. | Std.<br>Dev | T<br>Values | P<br>Values | Hypothesis |
|----|---------------|------------|----------------|-------------|-------------|-------------|------------|
|    | Exogenous     | Endogenous |                |             |             |             |            |
| 1  | X1            | Y4         | 0.122          | 0.050       | 2.461       | 0.007       | Accepted   |
| 2  | Y3            | Y4         | 0.299          | 0.111       | 2.691       | 0.004       | Accepted   |
| 3  | X1            | Y3         | 0.105          | 0.052       | 2.022       | 0.022       | Accepted   |
| 4  | X2            | Y4         | 0.199          | 0.084       | 2.384       | 0.009       | Accepted   |
| 5  | Y1            | Y4         | 0.287          | 0.062       | 4.605       | 0.000       | Accepted   |
| 6  | Y2            | Y4         | 0.252          | 0.063       | 3.996       | 0.000       | Accepted   |
| 7  | X2            | Y1         | 0.573          | 0.091       | 6.293       | 0.000       | Accepted   |
| 8  | X2            | Y2         | 0.581          | 0.117       | 4.959       | 0.000       | Accepted   |
| 9  | X2            | Y3         | 0.526          | 0.077       | 6.886       | 0.000       | Accepted   |
| 10 | Y1            | Y3         | 0.153          | 0.078       | 1.959       | 0.026       | Accepted   |
| 11 | Y2            | Y3         | 0.337          | 0.076       | 4.412       | 0.000       | Accepted   |

Abbreviation:

X1 : Demographic` Y2 : Tax Administrations  
 X2 : Tax Regulations Y3 : Tax Morale  
 Y1 : Tax Policies Y4 : Tax Compliance

**Indirect Effect**

Based on Table 9, there are three relations of five relations that have a significant indirect effect, namely the indirect influence of tax administration on tax compliance, tax regulations on tax compliance and tax regulations on tax morale through mediating variables. Tax regulations provide the greatest indirect influence on tax compliance through tax policies, tax administration and tax morale with a total path coefficient of 0.553. Tax administration provides the smallest indirect influence on tax compliance through tax morale with a path coefficient of 0.101. Then, tax regulations have an indirect influence on tax morale through tax policies and tax administration with a total path coefficient of 0.283.

Conversely, there are two insignificant relations, namely the indirect effect of demographics on tax compliance and the indirect effect of tax policy on tax compliance through tax morale, with t-statistic values of 1.553 and 1.675, respectively. Thus, tax morale does not affect the relationship between demographics on tax compliance and tax morale also does not affect the relationship between tax policies on tax compliance.

Table 9. Level of Significance of Indirect Effects and Magnitude of Mediation

| No | Indirect Effect |           |            | IE    | TE    | VAF (%)   |       | T Values | Hypothesis | Mediation Type |
|----|-----------------|-----------|------------|-------|-------|-----------|-------|----------|------------|----------------|
|    | Exogenous       | Mediation | Endogenous |       |       | Each Path | Total |          |            |                |
| 12 | Y2              | Y3        | Y4         | 0.101 | 0.353 | 28.6      | 28.6  | 2.403    | Accepted   | Partial        |
| 13 | X1              | Y3        | Y4         | 0.031 | 0.153 | 20.3      | 20.3  | 1.553    | Rejected   | Nil            |
| 14 | Y1              | Y3        | Y4         | 0.046 | 0.333 | 13.8      | 13.8  | 1.675    | Rejected   | Nil            |
| 15 | X2              | Y1        | Y4         | 0.164 | 0.752 | 21.9      |       |          |            |                |
|    | X2              | Y3        | Y4         | 0.157 | 0.752 | 20.9      |       |          |            |                |
|    | X2              | Y2        | Y4         | 0.146 | 0.752 | 19.5      | 73.5  | 7.446    | Accepted   | Partial        |
|    | X2              | Y2,Y3     | Y4         | 0.059 | 0.752 | 7.8       |       |          |            |                |
|    | X2              | Y1,Y3     | Y4         | 0.026 | 0.752 | 3.5       |       |          |            |                |
| 16 | X2              | Y2        | Y3         | 0.196 | 0.809 | 24.2      | 35.0  | 4.802    | Accepted   | Partial        |
|    | X2              | Y1        | Y3         | 0.088 | 0.809 | 10.8      |       |          |            |                |

Abbreviation:

|    |                   |    |                       |
|----|-------------------|----|-----------------------|
| IE | : Indirect Effect | TE | : Total Effect        |
| X1 | : Demographic     | Y2 | : Tax Administrations |
| X2 | : Tax Regulations | Y3 | : Tax Morale          |
| Y1 | : Tax Policies    | Y4 | : Tax Compliance      |

Variables that mediate the effect of tax regulations on tax compliance, the effect of tax administration on tax compliance and the effect of tax regulations on tax morale, have partial mediation magnitude, considering the results of testing for direct effect, indirect effect and total effect, all showing significant results and VAF values are in the range of 20 percent to 80 percent.

Tax morale mediator is able to explain the effect of tax administration on tax compliance by 28.6 percent. Two mediator variables, namely tax policies and tax administrations were able to explain the effect of tax regulations on tax morale by 35 percent, with the composition of tax administration providing magnitude of mediation of 24.2 percent and tax policies providing magnitude of mediation of 10.8 percent.

Three mediator variables, namely tax policies, tax administrations and tax morale are able to explain the effect of tax regulations on tax compliance by 73.5 percent. Among these mediator, the greatest strength of mediator was given by tax policies of 21.9 percent, followed by tax morale of 20.9 percent, tax administration of 19.5 percent and a combination among both of 7.8 percent and 3.5 percent.

## DISCUSSION

### **Direct effect of demographics, tax morale, tax regulations, tax policies and tax administration on tax compliance in paying motorized vehicles tax in Bali Province**

This study found that demographics significantly have a positive effect on tax compliance. This means that the greater the income and the higher the level of education, the higher tax compliance; in line with the results of Pasaribu and Tjen (2016) research, but slightly different from Chau and Leung (2009). Chau and Leung's (2009) study found that tax evasion was mostly carried out by white-collar classes, with higher levels of education and social status. This study found that someone who is married is more obedient to paying taxes. In terms of employment, someone who works in a government environment is more obedient in paying taxes than those who work in the private sector. In terms of age, younger people tend to be less obedient to paying taxes than older ones. The results of this study also found that there was no difference in compliance with paying motor vehicle tax between women and men. This condition is slightly different from the results of the study by Doerrenberg and Peichl (2017), where women tend to have high tax morale and tax morale increases with age.

Tax morale has a significant positive effect on tax compliance, in line with the results of research by Damayanti (2012), Marandu et al (2015), and Kamil (2015). This means that the higher intrinsic motivation, reciprocal perceptions that will be obtained by respondents, the influence of relations, norms and information received by respondents, the higher the level of



tax compliance. Among a number of indicators that explain tax morale, intrinsic motivation mostly contribute in explaining tax morale. Thus, voluntary desires or self-awareness to obey the law, feeling of pride and positive self-image, fulfillment of obligations as citizens, are the things that most encourage respondents to pay taxes. The second biggest influence is related to reciprocity or tax fairness. Dissatisfaction with the fairness of the tax system is a major cause of tax non-compliance. This is in line with the principle of tax fairness from Adam Smith in Kabinga et. al. (2016) and Theory of moral reasoning in Sani and Habibie (2017), where the taxpayer's moral is influenced by the expectations of taxpayers on issues regarding tax fairness.

Tax regulations have a significant positive effect on tax compliance. This means that the more complex tax regulations, the more frequent changes in regulations and the difficulty of understanding tax regulations will have an impact on greater tax non-compliance; or conversely the simpler and easier to understand the tax regulations will increase tax compliance. The results of this study are in line with Basit et. al. (2014) research. Knowledge and understanding of tax regulations is the process by which taxpayers know about taxation and apply that knowledge to pay taxes.

Taxation policies have a significant positive effect on tax compliance. This means that the more positive the taxpayer's response to the tax policy set by the government regarding tax rates, the implementation of progressive taxes, tax sanctions and the mechanism for resolving tax arrears, the more compliant the taxpayer pays tax. The results of this study are in line with the research of Hardika (2006), Kamil (2015), Ayuba et. al. (2016). Kamil (2015) shows that tax penalties have a positive and significant relationship to taxpayer compliance, whereas, on the contrary, according to Septarini (2015), the application of tax sanctions that are too heavy can backfire in the form of more corruption and bribery.

Tax administration have a significant positive effect on tax compliance, in line with the results of research by Hardika (2006), Kamil (2015), Sarunan (2015) and Puspita (2016). This means that the level of taxation services, taxation procedures and modernization taxation services significantly influence the compliance of respondents paying taxes. The higher the level of service and competency of tax officers, the more it will encourage people to pay taxes. The simply procedure and requirements will further encourage people to settle their tax obligations. Sarunan (2015) shows that the modernization of the tax administration system has a positive and significant effect on personal and corporate taxpayer compliance. The tax modernization is the use of new tax facilities and infrastructure by utilizing the development of science and technology.

Among the five factors, tax morale have the most influence on tax compliance, then tax policies, tax administration, taxation regulations and demographics respectively. That means the

Bali Provincial Government should prioritize efforts to increase tax morale by arousing awareness of taxpayers as citizens to fulfill their tax obligations, arousing pride in taxpayers, including guaranteeing the implementation of tax fairness, in case sufficient resources are not available to manage these five areas at the same time.

### **Indirect effect of demographic, tax policies and tax administration on tax compliance in paying motorized vehicles tax through tax morale in Bali Province**

Tax morale can explain the influence of tax administration on tax compliance by 28.6 percent. That means tax morale have a partial mediating power between tax administration on tax compliance. If tax morale of taxpayers decreases, they will not compliance in paying taxes, even if the tax administration has gone well (the quality of service is good, taxation procedures are simple and standardized with modernized taxation services).

On the other hand, tax morale has no mediating power between demographics on tax compliance, considering that demography is a permanent characteristic inherent in individuals. Besides this, tax morale also does not have the power of mediation in the relationship between tax policy on tax compliance. That means that the high or low tax morale does not affect between tax policies set by the government on tax compliance in paying motorized vehicle tax in Bali Province. Thus, taxpayers in Bali have a higher level of moral reasoning, where the morale of taxpayers is more influenced by issues regarding tax fairness, namely the extent to which individual beliefs that taxes can provide benefits and fairness, compared to tax policies. Tax fairness issues are also important, as explained in the exchange theory and equity theory in Hardika (2006) and Basit et al (2014). A sense of tax fairness will lead to motivation for someone to behave obediently.

### **Indirect effect of tax regulations on tax compliance in paying motorized vehicles tax through tax policies, tax administrations, and tax morale in Bali Province**

This research show that tax regulations have a significant effect on tax morale through two mediating variables, namely tax policies and tax administration. These two mediating variables have a partial mediation power and are able to explain the influence of tax regulations on tax morale by 35 percent. If taxpayers are dissatisfied with tax policies (tax rates, progressive taxes, sanctions and arrears settlement) and existing tax administration (service, procedures and modernization level), the taxpayer's morale will decrease, even though the existing tax regulations already simplified and easily understood by taxpayers.

Furthermore, these three mediation factors, namely tax policies, tax administration and tax morale, together provide a major influence on tax compliance. This condition supports the

research by Puspita et al (2016). They stated that someone's insights about the concept of taxation, the level of understanding on taxation, the benefits of taxation, the tax system, the procedure in paying taxes, and tax reporting as well as the consequences of not meeting tax obligations, would influence their decision (tax morale) to pay taxes. This research indicates that the mediating power of these three factors can explain the influence of tax regulations on tax compliance of 73.5 percent. That means that if tax morale of taxpayers is low (lack of awareness, motivation and unfairness taxes perception) and taxpayers feel dissatisfied with existing tax policies, services, procedures and the quality of tax modernization, the taxpayer will not obey paying taxes, even although the existing tax regulations have been simplified and have been easily understood by taxpayers. Thus, in addition to reform and adjust existing tax regulations, but it is also very important for Bali Provincial Government to increase taxpayer satisfaction, motivate taxpayers through established tax policies, improve services, standardize procedures and always modernize existing taxation services.

## CONCLUSION AND SUGGESTIONS

Tax compliance is influenced by a number of factors, both internal and external factors, namely individual demographic characteristics, tax morale, tax regulations, tax policies and tax administration. Among these five factors, tax morale has the biggest influence on tax compliance, then tax policies, tax administration, tax regulations and demographics respectively.

Based on the observations, it seem that Bali Provincial Government still applying normative or conventional efforts to increase public awareness in paying taxes and many people do not comprehend the importance of tax purpose. It is all about tax morale. That means the Bali Provincial Government should prioritize efforts to increase tax morale by arousing awareness of taxpayers as citizens to fulfill their tax obligations, arousing pride in taxpayers, explain the importance of tax purpose, including guaranteeing the implementation of tax fairness, in case sufficient resources are not available to manage these five areas at the same time.

If tax morale of taxpayers is low (lack of awareness, motivation and unfairness taxes perception) and taxpayers feel dissatisfied with existing tax policies, services, procedures and the quality of tax modernization, the taxpayer will not obey paying taxes, even although the existing tax regulations have been simplified and have been easily understood by taxpayers. Thus, in addition to reform and adjust existing tax regulations, but it is also very important for Bali Provincial Government to increase taxpayer satisfaction, motivate taxpayers through

established tax policies, improve services, standardize procedures and always modernize existing taxation services.

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