



Mediating Effects of Tax Awareness on Mental Accounting and Tax Knowledge on Tax Compliance of MSME Taxpayers in Bukittinggi

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KEYWORDS	ABSTRACT
Tax Compliance, Mental Accounting, Tax Knowledge, Tax Awareness, MSMEs, Bukittinggi	The growth of MSMEs in Indonesia, especially in Bukittinggi, has made a significant contribution to the Gross Domestic Product (GDP), but the level of tax compliance is still low. This study aims to analyze the influence of mental accounting and tax knowledge on MSME tax compliance, with tax awareness as a mediating variable. The research method used is quantitative, with data collection techniques in the form of questionnaires distributed to MSMEs in Bukittinggi. Data analysis was carried out using Structural Equation Modeling (SEM). The results of the study show that mental accounting and tax knowledge have a significant influence on MSME tax compliance, both directly and through tax awareness as mediation. The conclusion of this study is the importance of increasing tax awareness to increase MSME compliance in carrying out tax obligations so that it can support an increase in tax revenue from the MSME sector.

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INTRODUCTION

High economic growth is the expectation of all the leaders of countries around the world. Economic growth is considered important in the context of a country's economy because it is related to the success of development and the welfare of the people. Therefore, many country leaders, especially developing countries, have made high economic growth the main target of development (DPR, 2017). However, realizing high economic growth has its own challenges, especially for developing countries such as Indonesia, because there are many factors that affect the country's economic growth, such as capital accumulation, population number, unemployment, inflation, poverty, and technological advances. In response to this, every state leader must certainly have the right development strategies so that high economic growth can be achieved (Levy, 2014).

The large role of the trade sector in supporting the economy makes the direction of the formulation of economic development policies by the government directed to increase business activities, namely by developing and strengthening Micro, Small and Medium Enterprises (MSMEs). This is because MSMEs have great potential in realizing economic growth, equitable distribution and increase of people's income, job creation, and poverty alleviation as stated in Law Number 2 of 2008. In addition, looking at the contribution of MSMEs to GDP, it is known that MSMEs make a greater contribution to GDP than large-scale businesses, as can be seen in Figure 1.

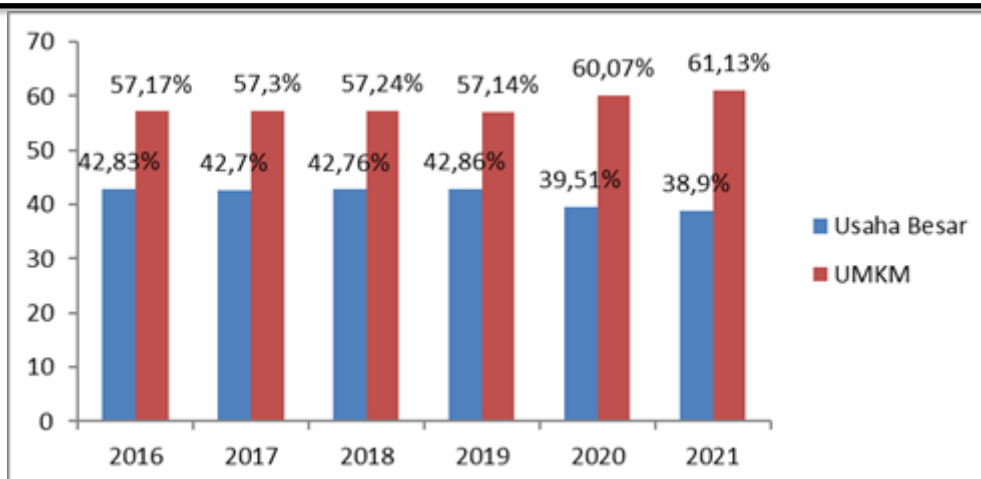


Figure 1. MSMEs' contribution to GDP

Source: Ministry of Cooperatives and SMEs (2022)

In Figure 1, it can be seen that the contribution of MSMEs to GDP continues to increase every year, which in 2020 alone, for example, when the world was hit by the Covid-19 virus, MSMEs were able to make a large contribution to GDP compared to the previous year, which was 60.07%. The same thing also happened in 2021 where the contribution of MSMEs to GDP also increased compared to the previous year, which was 61.13%.

The low tax compliance of MSMEs is not only seen in the number of MSMEs that carry out their tax obligations but also in the number of MSMEs that register as taxpayers (Lestary et al., 2021). For example, in Bukittinggi City, the number of MSMEs in Bukittinggi City, according to data from the Ministry of Cooperatives and SMEs in 2021, is 7,454 MSMEs. Meanwhile, according to data from KPP Pratama Bukittinggi, the number of MSMEs registered as taxpayers in 2021 is 3,355, as seen in Table 1.

Table 1.

Recapitulation of the Number of MSME Taxpayers and Annual Tax Return Reporting As well as MSME Tax Payment at KPP Pratama Bukittinggi

Tax Year	Number of Registered and Required Taxpayers	Number of Incoming Tax Returns	Compliance Ratio	Payment Amount
2017	1753	1150	65,60%	4.521.367.331
2018	1868	1240	66,38%	4.173.987.448
2019	2272	1068	47,01%	3.440.879.074
2020	2822	1226	43,44%	2.510.519.510
2021	3355	1362	40,60%	3.087.938.997

Source: KPP Pratama Bukittinggi (2022)

Based on Table 1, it can be seen that the number of taxpayers to be referred to as taxpayers in Bukittinggi City has increased every year. However, the compliance ratio of taxpayers has decreased every year, and the amount of tax payments has decreased in 2020 and 2021. This indicates that the tax compliance of Bukittinggi MSME taxpayers is low because the number of MSMEs that carry out their tax obligations is not directly proportional to the number of MSMEs that continue to increase. Supposedly, MSMEs that continue to increase every year make a great contribution to tax revenue.

In the context of previous research on tax compliance of Bukittinggi MSME taxpayers, various findings have been made in relation to the factors that affect compliance (Afriadi, 2018). Some studies have shown a link between tax awareness, mental accounting, and tax knowledge and tax compliance rates, while other studies have found conflicting results. First, the research of Fuad and Khusfiah (2019) shows that there is no significant influence between tax awareness and tax compliance. This suggests the complexity and variation in the impact of tax awareness on tax compliance behaviour, which certain contextual and conditional factors can influence (Vincent, 2023). Despite conflicting results in the literature, tax awareness can still be considered a potential mediating factor (Appiah et al., 2024). Therefore, further research can focus on exploring the role of tax awareness as a mediator between independent factors, such as tax knowledge, and dependent variables, namely the level of tax compliance of Bukittinggi MSME taxpayers.

Previous research, such as those conducted by Twum et al. (2020), has examined the influence of tax knowledge on tax compliance. On the other hand, research conducted by Pakuan and Daito (2022) adds a new dimension by considering tax awareness as a mediator in the relationship between tax knowledge and tax compliance. An important gap has not been explored, namely the role of mental accounting in the context of tax compliance. Tax awareness can act as an adhesive that connects an individual's mental accounting mindset and strategy with a higher level of tax compliance (Dolan & Galizzi, 2015).

Looking at the background of the above problems, the problem that can be identified is that the compliance ratio of MSME taxpayers in Bukittinggi City is decreasing every year. The purpose and objectives of the research to be achieved from this study are to analyze the influence of mental accounting on the awareness of MSME taxpayers in Bukittinggi City (Sastika & Secapramana, 2022).

This research is expected to provide theoretical benefits and additional knowledge about tax compliance and the variables that affect it.

METHOD

This study adopts a quantitative method with a causality approach, utilizing the SEM (Structural Equation Model) technique with the assistance of the PLS program. The population targeted in this study consists of all MSMEs registered as taxpayers at KPP Pratama Bukittinggi, totaling 3,355 taxpayers. Therefore, the population size for this study is 3,355 taxpayers. The sampling technique employed is purposive sampling, where the selection of samples is based on specific criteria or considerations, allowing the researcher to select respondents according to relevant research objectives.

The primary data used in this study is collected directly from the original source. In this case, the primary data is gathered through questionnaires, which serve as the raw data to be further analyzed. The questionnaires are designed to collect relevant data from the respondents, and they consist of a set of structured questions aimed at obtaining information pertinent to the research objectives (Aithal & Aithal, 2020). These questionnaires are distributed to the selected respondents to gather their responses.

RESULT AND DISCUSSION

Characteristics of Respondents

Respondent Description by Gender

Table 2.

Characteristics by Gender

It	Gender	Sum	Percentage
1	Man	81	54.0%
2	Woman	69	46.0%

Total	150	100%
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Source: Primary Data processed (2023)

Based on Table 2, out of 150 respondents, most of the research respondents were dominated by male respondents, namely 54.0% of the total research respondents, while the remaining 46.0% of the research respondents were female respondents. So, it can be concluded that the research respondents are dominated by the compliance of MSME taxpayers with a male gender with a percentage of 54.0%.

Respondent Description By Age

Table 3.
Respondent Description By Age

It	Age	Sum	Percentage
1	18 - 30 years old	40	26.7%
2	31 - 40 years	69	46.0%
3	41 - 50 years old	32	21.3%
4	> 50 years	9	6.0%
	Total	150	100%

Source: Primary Data processed (2023)

Based on Table 3 above, it can be seen that the majority of respondents are dominated by respondents with an age range of 31-40 years, which is 46.0% of the total research respondents. Meanwhile, there are 26.7% of respondents with an age range of 18-30 years, there are 21.3% of respondents with an age range of 41-50 years, and there are 6.0% of respondents with an age range of > 50 years. Based on the data on the characteristics of the respondents, it can be seen that the majority of respondents are dominated by the compliance of MSME taxpayers with an age range of 31-40 years.

Respondent Description Based on Last Education

Table 4.
Respondent Description Based on Last Education

It	Last Education	Sum	Percentage
1	SMA	64	42.7%
2	Diploma	20	13.3%
3	Bachelor	48	32.0%
4	Master	18	12.0%
	Total	150	100%

Source: Primary Data processed (2023)

Based on Table 4 above, it can be seen that the majority of respondents are dominated by respondents with high school education/equivalent, which is 42.7% of the total research respondents. Meanwhile, there are 32.0% of respondents with bachelor's education, 13.3% of respondents with diploma education, and the remaining 12.0% of respondents with the last master's education. Based on the data on the characteristics of the respondents, it can be seen that the majority of respondents are dominated by the compliance of MSME taxpayers with high school education, which is 42.7%.

Respondent Description Based on Length of Business**Table 5.****Respondent Description Based on Length of Business**

It	Length of Business	Sum	Percentage
1	2 - 5 years	72	48.0%
2	6 - 10 years	61	40.7%
3	> 10 years	17	11.3%
	Total	150	100%

Source: Primary Data processed (2023)

Based on Table 5 above, it can be seen that the majority of respondents are dominated by respondents with a business duration of 2-5 years, which is 48.0% of the total research respondents. While the remaining 40.7% of respondents had a business period of 6-10 years, there were 11.3% of respondents with a diploma business period of > 10 years. Based on the data on the characteristics of the respondents, it can be seen that the majority of respondents are dominated by the compliance of MSME taxpayers with a business period of 2-5 years, which is 48.0%.

Respondent Description Based on Monthly Income**Table 6.****Respondent Description Based on Monthly Income**

It	Revenue per Month	Sum	Percentage
1	< IDR 15,000,000	30	20.0%
2	IDR 15,000,001 – IDR 25,000,000	46	30.7%
3	IDR 25,000,001 – IDR 35,000,000	42	28.0%
4	> IDR 35,000,000	32	21.3%
	Total	150	100%

Source: Primary Data processed (2023)

Based on Table 6 above, it can be seen that the majority of respondents are dominated by respondents with a monthly income of Rp 15,000,001 – Rp 25,000,000, which is 30.7% of the total research respondents. Meanwhile, there are 28.0% of respondents with a monthly income of Rp 25,000,001 – Rp 35,000,000, there are 21.3% of respondents with a monthly income of > Rp 35,000,000, and the remaining 20.0% of respondents with a monthly income of < Rp 15,000,000. Based on the data on the characteristics of the respondents, it can be seen that the majority of respondents are dominated by the compliance of MSME taxpayers with a monthly income of IDR 15,000,001 – IDR 25,000,000, which is 30.7%.

Evaluation of Measurement Model (Outer Model)

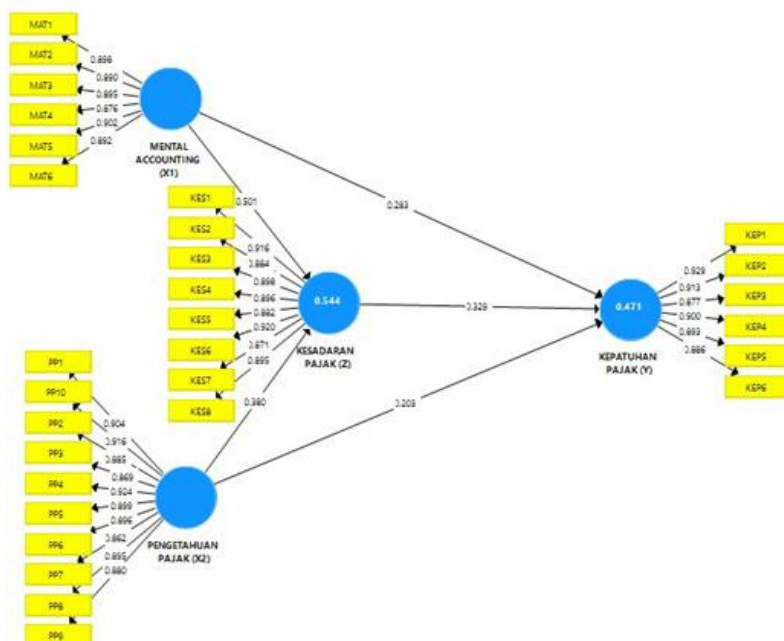


Figure 2. Outer model Measurement Research

a. Convergent Validity

Table 7.
Outer Loading Value of Research Indicators

	TAX COMPLIANCE (Y)	TAX AWARENESS (Z)	MENTAL ACCOUNTING (X1)	TAX KNOWLEDGE (X2)
KEP1	0.929			
KEP2	0.913			
KEP3	0.877			
KEP4	0.900			
KEP5	0.893			
KEP6	0.886			
KES1		0.916		
KES2		0.884		
KES3		0.898		
KES4		0.896		
KES5		0.882		
KES6		0.920		
KES7		0.871		
KES8		0.895		
MAT1			0.898	
MAT2			0.890	
MAT3			0.895	
MAT4			0.876	
MAT5			0.902	
MAT6			0.892	

PP1	0.904
PP10	0.916
PP2	0.885
PP3	0.869
PP4	0.924
PP5	0.899
PP6	0.896
PP7	0.862
PP8	0.895
PP9	0.880

Source: Primary Data processed (2023)

Based on the data presentation in table 7 above, it can be seen that each indicator in the research variable has the largest outer loading value in the variable it forms compared to the outer loading value in other variables. Based on the results obtained, it can be stated that the indicators used in this study have good convergent validity in compiling their respective variables.

b. Discriminant Validity

Table 8.
Average Variance Extract (AVE), Composite Reliability and Cronbach Alpha

Average Variance Extracted (AVE)	
TAX COMPLIANCE (Y)	0.810
TAX AWARENESS (Z)	0.802
MENTAL ACCOUNTING (X1)	0.796
TAX KNOWLEDGE (X2)	0.798
Composite Reliability	
TAX COMPLIANCE (Y)	0.962
TAX AWARENESS (Z)	0.970
MENTAL ACCOUNTING (X1)	0.959
TAX KNOWLEDGE (X2)	0.975
Cronbach's Alpha	
TAX COMPLIANCE (Y)	0.953
TAX AWARENESS (Z)	0.965
MENTAL ACCOUNTING (X1)	0.949
TAX KNOWLEDGE (X2)	0.972

Source: Primary Data processed (2023)

Based on Table 8, it is known that all research variables have met the standard value of AVE above 0.5 (AVE > 0.5). Mental Accounting (X1) has an AVE value of 0.796, the Tax Knowledge variable (X2) has an AVE value of 0.798, the Tax Awareness variable (Z) has an AVE value of 0.802, the Tax Compliance variable (Y) has an AVE value of 0.810. Based on the consideration of the AVE value owned by each variable, it can be concluded that all variables meet the Discriminant Validity

value because they have an AVE value greater than 0.5. Thus, it can be stated that each variable has good discriminant validity.

Path Coefficient Test

Coefficient of Determination (R²)

Table 9.
Determination Coefficient Value (R²)

	R Square	R Square Adjusted
TAX COMPLIANCE (Y)	0.471	0.461
TAX AWARENESS (Z)	0.544	0.538

Based on the data presentation in table 9 above, it can be seen that the R-Square value for the tax awareness variable is 0.544. The acquisition of this score explained that tax awareness can be explained by Mental Accounting and Tax Knowledge by 54.4%. While the remaining 45.6% is explained by other factors that are outside this research model.

Hypothesis Test

Table 10.
T-Statistics and P-Values

Hypothesis	Path Coefficient	T Statistics (O/STDEV)	P Values	Information
MENTAL ACCOUNTING (X1) -> TAX AWARENESS (Z)	0.501	9.213	0.000	Significant
TAX KNOWLEDGE (X2) -> TAX AWARENESS (Z)	0.380	5.814	0.000	Significant
TAX AWARENESS (Z) -> TAX COMPLIANCE (Y)	0.329	3.398	0.001	Significant
MENTAL ACCOUNTING (X1) -> TAX COMPLIANCE (Y)	0.283	2.954	0.003	Significant
TAX KNOWLEDGE (X2) -> TAX COMPLIANCE (Y)	0.203	3.159	0.002	Significant
MENTAL ACCOUNTING (X1) -> TAX AWARENESS (Z) -> TAX COMPLIANCE (Y)	0.165	3.198	0.001	Significant
TAX KNOWLEDGE (X2) -> TAX AWARENESS (Z) -> TAX COMPLIANCE (Y)	0.125	2.892	0.004	Significant

Source: Primary Data processed (2023)

The results of the hypothesis test show that the influence of mental accounting (X1) on tax awareness (Z) has a statistical T value of 9.213 and a P-value of 0.000. The statistical T value is greater than the T table (9,213>1.96), and the P value is 0.000 or less than the alpha standard of 5% (0,000<0.05), shows that there is a significant influence of Mental accounting (X1) on tax awareness (Y). The value of the positive value path coefficient shows the influence of mental accounting (X1) on tax awareness (Z) with a positive value. So it can be concluded that there is a positive and significant influence of mental accounting (X1) on tax awareness (Z). In other words, a high mental accounting (X1) can increase tax awareness (Z) or the first hypothesis (H1) is accepted.

The Effect of Mental Accounting on Tax Awareness

The study of the concept of mental accounting in the context of tax compliance can be related to the Theory of Planned Behavior (Muehlbacher & Kirchler, 2019). The CPD, developed by Ajzen in

1991, states that a person's behaviour is influenced by his or her intentions, which are further determined by three main factors: attitudes towards behaviour, subjective norms, and behavioural control.

The Effect of Tax Knowledge on Tax Awareness

In order to increase tax awareness, the government can use prospect theory as a basis to design a socialization program that focuses on improving taxpayers' tax knowledge (Parwati et al., 2021). By increasing knowledge, the government can effectively build higher tax awareness.

The Effect of Mental Accounting on Tax Compliance

The relationship between mental accounting and tax compliance can be analyzed through the perspective of how business owners attribute the causes of their compliance behaviour or non-tax compliance. Attribution theory emphasizes that individuals tend to seek causes or attributions for their behaviour, which in turn influences attitudes and subsequent actions (Graham, 2020).

The Effect of Tax Knowledge on Tax Compliance

The importance of tax knowledge in shaping taxpayers' attitudes and behaviours can also be linked to attribution theory through the concept of positive perception of taxes. Adequate knowledge can create a positive perception of tax obligations, and this can be attributed as an internal factor that supports high tax compliance (Bornman & Ramutumbu, 2019). In attribution theory, this positive perception can be considered as the result of internal knowledge that creates a positive attitude so that it has obedient behaviour.

The Effect of Tax Awareness on Tax Compliance

Taxpayer awareness, as revealed by various studies such as Oktaviani et al. (2020), Al-Maghrebi et al. (2016), can be considered a key element in the formation of individual prospects towards paying taxes. This awareness creates the perception that paying taxes is not a loss but an obligation that is positively correlated with the financing of state development and the provision of public services.

The Effect of Mental Accounting on Tax Compliance with Tax Awareness as a Mediation Variable

From the perspective of the SDGs, entrepreneurs who have a high accounting mentality and strong tax awareness tend to have a more positive intention to comply with their tax obligations (Kouam & Asongu, 2022). They realize the importance of complying with tax regulations and planning their financial actions by considering tax payments as a priority. Duggan (2016) supports this view by showing that the act of filling out forms and paying taxes by compliant taxpayers is usually related to high mental accounting.

The Effect of Tax Knowledge on Tax Compliance with Tax Awareness as a Mediation Variable

Tax knowledge, as revealed by Oktaviani et al. (2020), provides a deeper understanding of the aspects of taxation. Through this knowledge, taxpayers become aware of their rights, obligations, and legal and financial consequences related to taxes. With this understanding, individuals can develop stronger tax awareness, in line with prospect theory that emphasizes the importance of individual perceptions of risks and benefits (Nar, 2015).

CONCLUSION

The conclusion that can be drawn is that mental accounting has a positive and significant effect on tax awareness. Tax knowledge has a positive and significant effect on tax awareness. In other words, Supervision of better tax knowledge is able to increase tax awareness or the second hypothesis (H2) is accepted. Mental accounting has a positive and significant effect on tax compliance. In other words, a better accounting mentality is able to increase tax compliance, or the third hypothesis (H3) is accepted. Tax knowledge has a positive and significant effect on tax compliance. In other words, better tax knowledge is able to increase tax compliance, or the fourth hypothesis (H4) is accepted. Tax awareness

has a positive and significant effect on tax compliance. Mental accounting has a positive and significant effect on tax compliance through tax awareness. Tax knowledge has a positive and significant effect on tax compliance through tax awareness

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