Inovbiz: Jurnal Inovasi Bisnis 11 (2023) 272-280
INOVBIZ
Website: www.ejournal.polbeng.ac.id/index.php/IBP
Email: inovbiz@polbeng.ac.id

Analysis Of Factors Affecting The Use Of QRIS (Quick *Response Code Indonesian Standart*) As A Payment Tool Among Msme Merchants In Pekanbaru City

Virginia Asoka Puri [1], Any Widayatsari[2], Yusni Maulida[3]
Riau University, Pekanbaru-Riau, Indonesia[1,2,3], 28293.
virginiaasokapuri@gmail.com[1], 082169461925

ARTICLE INFO

Received: (October 2, 2023)
Received in revised: (December 25, 2023)
Accepted: (December 31, 2023)
Published: (December 31, 2023)

Open Access

ABSTRACT

This research aims to identify factors that influence the use of Quick Response Code Indonesia Standard (QRIS) as a payment tool on MSMEs merchants in Pekanbaru City. QRIS has been officialized by Bank Indonesia as a digital payment transaction tool that makes it easier for consumers and merchants to make transactions. In this study, transaction costs and revenue are used as independent variabels, while the use of QRIS as a means of payment becomes dependent variabels. The method used in this research is a quantitative method using a likert scale questionnaire and data converted to an interval scale, respondents in this study amounted to a hundred MSMEs merchants. Data was then analyzed using double linear regression with the help of SPSS version 24. The results show that simultaneously or partially, transaction cost and revenue factors have a significant influence on the use of QRIS as a digital payment transaction tool in MSMEs merchants in Pekanbaru City. The implication of this study is that the cost of MDR transactions and settlements spent on using QRIS is comparable to the benefits obtained, including increased business revenue. This research could provide a clearer insight for MSMEs in considering the use of QRIS as an effective and efficient means of payment.

Keywords: QRIS, Payment Sistem, Operational Costs, Revenue, MSMEs

1. Introduction

Money has a very large function in everyday life. Money serves as a means of payment in economic transactions, money is inseparable from the process of economic transactions in every country. According to A.C Pigo (1994), money is everything that is commonly used as a medium of exchange. Money can also be said to be an important indicator in a country's economy. This is because all economic activities, namely, production, distribution and consumption are closely related to money. Bank Indonesia as the Central Bank has three main pillars of duties, namely according to (Law No. 3 of the year 2004 article 8) :1) determine and implement monetary policy; 2) regulate and maintain the payment system; 3) regulate and supervise banks. In carrying out its duties to regulate and maintain the payment system, Bank Indonesia strives to make the payment system easier, one of which is with *electronic money (e-money).* Technological developments have led to a change in people's needs for a means of payment that can fulfill speed, accuracy and security in every electronic transaction. (Adiyanti, 2015). In the current era of globalization. Technology has provided many benefits in advances in various fields. People today are more likely to use smart phones in everyday life. The development of information technology can drive the growth of the digital economy as it will be more efficient and time-efficient. One form of implementation between information technology and the growth of the digital economy is the presence of a payment system with non-cash transactions.

In a digital era like this, the use of electronic money is a lot happening in business sectors like MSMEs (Micro, Small, Mediaum Entreprises), it is especially with the presence of the Covid-19 pandemic that has occurred making there a tendency to change consumer shopping habits from offline to online shopping. According to (Tambunan, 2013) MSMEs is a unit of productive enterprise that stands alone, carried out by individuals or enterprises in all sectors of the economy. According to the

Virginia Asoka Puri
E-mail addresses: virginia.asoka0098@student.unri.ac.id (Riau University)
2614-6983/ © 2023 P3M Politeknik Negeri Bengkalis. All rights reserved

database report of the ASEAN Investment Report, the number of MSMEs in Indonesia by 2021 reached approximately 65.46 million. In 2022, the Ministry of Cooperation and SMEs recorded, the number of MSMEs that have entered the digital ecosystem reached 20.76 million units. In the province of Riau itself the number of MSMEs also increased, recorded from the data of the UKM in 2022 number of the MSMEs in Riau that was mentioned is 252.574 enterprises.

According to data from the Indonesian Payment Systems Association (ASPI), by January 2020, the volume of QRIS transactions nationally reached only 5 million times with the total transaction value of Rp 365 billion. Then in the following month the trend of QRIS usage continued to increase, until August 2022 reached 91.7 million QRIS transactions with the total transaction value of Rs 9.66 trillion. Even today, Bank Indonesia is continuing to expand the use of QRIS to become a legitimate means of payment in neighbouring countries such as Thailand, Malaysia, Singapore, and the Philippines so that the digitization of payment systems in Indonesia continues to increase.

National QRIS usage, which is increasing year by year, is also driven by the increase in QRIS users in Riau Province. The main subject on the application of QRIS in the payment process is the merchant MSMEs as the perpetrator who operates the digital tool in payment transactions. According to data obtained from the Bank of Indonesia Kpw Riau total (merchant) entrepreneurs who have used QRIS in Riau Province amounted to 488.314 QRIS merchants as of November 2022. Pekanbaru became the city with the largest number of QRIS merchants, reaching 227,655 MSMEs, surpassing dumai as the second most merchant city after Pekanbaru with a total of 82,531 merchant.

From the data obtained, the number of QRIS transaction growth between MSME merchants and consumers shows a significant increase. In this case, it certainly has an impact on increasing the amount of income of MSME merchants in the city of Pekanbaru.

According to research conducted by (Sihaloho and Subarno, 2021) said that payment systems made using QRIS are able to provide more benefits for sellers, such as helping online sales so that revenue increases. Therefore, the income factor in the analysis of QRIS use at MSME *merchants* is interesting to study, because 61% of GDP comes from the MSME sector, because MSMEs are able to support the Indonesian economy.

Table 1 QRIS Transactions in Riau Province as of September 2022

City in Riau Province	Total QRIS Transaction Volume/Frequency	Total QRIS Transaction Nominal
Bengkalis District	18.478	2.526.159.555
Kab. Indragiri Hilir	6.316	892.253.295
Kab. Indragiri Hulu	6.857	860.443.644
Kab. Kampar	21.035	1.159.062.694
Kab. Meranti Islands	6.680	535.932.730
Carb. Kuantan Singingi	4.105	481.202.951
Kab. Pelalawan	8.502	1.822.378.753
Kab. Rokan Hilir	4.827	636.056.795
Kab. Rokan Hulu	6.566	767.150.737
Kab. Siak	33.292	2.463.502.524
Kota Dumai	18.966	3.082.065.044
Pekanbaru City	383.158	45.218.197.921
Total Provinsi Riau	**518.782**	**60.444.406.643**

Source: Bank Indonesia Riau Province, September 2022

In Pekanbaru, there is a location that shows the use of QRIS as a form of digital payment instrument transformation at MSME merchants located in One Street Food (OSF) and Raun-Raun. Here the community and also MSME actors use digital media in transactions. Located on Jalan Pemuda, City Walk Youth Complex, Payung Sekaki District and on Jl.Arifin Achmad Pekanbaru city. As digital street shopping, OSF and Raun-Raun also implement an application-based transaction system in maximizing services. Payment transactions, in addition to cash, can also be done through various digital platforms such as QRIS and e-Wallet. With the increasing trend in the number of merchants *and the* volume of QRIS transactions, it certainly shows that there are factors that affect great interest in merchants.

In the theory of demand for money, Keynes stated that there are 3 motives of society in holding money, namely: transaction motives, precautionary motives and speculation motives (Salvatore, 1992). Keynes argued that people should make decisions about the form of wealth to hold, whether in cash or some other form. If a person chooses to hold cash, then the advantage is that he has wealth in the most liquid form that is ready to be used at any time (Salvatore, 1992). However, the data obtained shows that there is a high interest and upward trend in the decision to use QRIS by MSME merchants, even though the fee is imposed on MSME merchants with MDR (Merchants Discount Rate) of 0.7% per transaction and settlement fees make QRIS as a form of wealth owned less liquidity. In addition, there is also the possibility of merchants experiencing capital loss as a result of other unexpected costs. With the MDR fee charged per transaction and settlement fees to merchants, this does not make a decrease in the use of QRIS as a digital payment instrument but vice versa.

With the existence of QRIS transactions in Indonesia which continue to show an increase from year to year, as well as the large number of merchants of QRIS MSME players in Riau province, especially in Pekanbaru City, it certainly makes an increase in inclusive financial literacy of the community and traders so as to encourage

the growth of electronic money transactions in the country.

2. Literature Review

2.1 Payment Systems

Article 1 of Law No. 23 concerning Bank Indonesia defines the Payment System as an integral part of a set of rules, institutions, and mechanisms to carry out fund transfers to fulfill obligations arising from economic activities.

Payment System Policy Determination, which has been regulated by Bank Indonesia (2020), generally refers to several basic principles. There are four basic principles held by the institution that controls the Payment System, the four things are first, how to minimize risk (Risk Reduction). A well-controlled payment system will be able to reduce various risks that may arise. There are various types of risks that can occur in Payment Systems. Starting from operational risk, liquidity risk, credit risk, and systemic risk.

The second principle that must be held in the implementation of the Payment System is how a Payment System can increase efficiency. In realizing an efficient national economy, support from an efficient financial and banking system is needed. The third principle is equality. Providing equal access both to participants in the Payment System and to the wider community as users. And the fourth principle is the principle of *consumer protection.* The payment system must be able to ensure that the wider community can obtain efficient, fast, secure, and reliable Payment System services.

There are five visions of the Indonesian Payment System (SPI) in 2025 that have been initiated by (Bank Indonesia, 2022), which are as follows:

1. The Indonesia Payment System (SPI) 2025 supports national digital economy and finance integration, thereby ensuring the central bank's function in the money circulation process, monetary policy and financial system stability as well as supporting financial inclusion.
2. The Indonesia Payment System (SPI) 2025 supports banking digitalization as the main institution in the digital financial economy through *open-banking* as well as the use of digital technology and data in the financial business.
3. The Indonesian Payment System (SPI) 2025 guarantees interlink between *fintech* and banks to avoid *shadow-banking* risks through regulation of digital technology (such as APIs), business cooperation, and company ownership.
4. The Indonesian Payment System (SPI) 2025 guarantees a balance between innovation and *consumer protection, integration, and* stability as well as healthy business competition through the implementation of KYC (*Know Your Customer*), as an obligation of disclosure for public business information data and the application of technology in reporting, reglasi, and supervision obligations.
5. The Indonesian Payment System (SPI) 2025 guarantees national interest in the digital financial economy between countries through the obligation to process all domestic transactions within the country and cooperation between foreign and domestic operations, taking into account the principle of reciprocity.

In daily practice, according to Bank Indonesia (2020), there are two types of payment systems, namely cash payments *and non-cash payments.*

2.2 QRIS (Quick Response Code Indonesian Standard)

QR Code is a series of codes that contain data/information, merchant/user identity, payment nominal, and/or currency that can be read with certain tools in the framework of Bank Indonesia payment transactions (2020). *QR Code* technology in its use has expanded to various industries including payments. *QR Code* is a type of two-dimensional barcode that contains more information than barcodes and can be read from various directions horizontally or vertically. While QRIS (*Quick Response Code Indonesian Standard)* is a payment QR Code standard for Indonesian payment systems developed by Bank Indonesia and the Indonesian Payment System Association (ASPI), Bank Indonesia (2020). QRIS is the QR Code standard for all payments through serverbased electronic money applications, electronic wallets, or mobile banking. According to Bank Indonesia (2020), QRIS development carries the spirit of UNGGUL, namely:

1. Universal: Inclusive, for all levels of society and can be used domestically and abroad.
2. GampanG: Transactions are done easily and securely in one hand.
3. Profit: Efficient, one QR code for all apps
4. Direct: Fast and instantaneous transactions support smooth payment systems

2.3 Micro, Small and Medium Enterprises (MSMEs)

According to the Merchant Academy of Finance *and Management, Merchant* is a term that refers to a business entity or individual that sells goods or services to consumers through various channels, especially in the context of electronic commerce and digital payment systems. In general, the term "*merchant"* refers to a party involved in selling goods or services in a business context, including in electronic transactions and digital payments. Meanwhile, MSMEs In accordance with Law Number 20 of 2008 concerning Small, Micro, and Medium Enterprises (MSMEs), the division of business definitions can be carried out as follows:

1.Micro
2.Small Business
3.Medium Enterprises

2.4 Theory of Liquidity Preferences

Based on the opinion of John Manyard Keynes in the theory of *liquidity preference* explains the behavior of people in determining

the form of wealth to be held. Keynes formulated three motives behind the demand for money, namely the transaction motive, precaution, and speculation (Miskhin, 2008).

First, Keynes stated that the demand for cash for transaction purposes depends on income. Where the higher the income level, the greater the desire for cash for transactions. A person or society with a high level of income, usually makes more transactions than a person or society with low income, because of his belief that the transaction is proportional to income. Like classical economists, Salvatore (2019).

Second, the demand for money is based on the emergence of the hope to be able to finance various unexpected needs, and can occur at any time. The tendency is that the higher the income, the greater the money that can be set aside for precautionary purposes. Keynes explained that the demand for money for precautionary motives is influenced by income, because if the income level is high, then one will face the possibility of better opportunities, but with greater risk. This is one of the considerations for someone in holding money for transaction purposes, Salvatore (2019).

Third, the motive for speculation The demand for money for transactions and precautions is an active demand for money. This means that money is always used to finance various needs. Keynes argued that people should make decisions about the form of wealth to hold, whether in cash or other forms of wealth. If a person chooses to hold cash, then the advantage is that he has wealth in the most liquid form, which is ready to be used at any time. But the disadvantage, he cannot obtain various forms of income that might be obtained if wealth is held in other forms of wealth Salvatore (2019).

2.5 Transaction Fees

The Transaction Cost of Coase (1937) is the cost of using a pricing mechanism, meaning the cost of conducting transactions by means of exchange in an open market system. In its explanation, this economic theory analyzes a number of reasons for the existence of firms and their limits in the context that markets and organizations are considered as alternatives to the mechanism of exchange rules. Transaction costs are used to measure whether or not an institution design is efficient. The higher the transaction costs incurred in economic activity (transactions), the more inefficient the institution designed.

The definition of transaction costs according to Williamson (1985) is costs incurred due to determining, negotiating, and monitoring contracts between parties involved in an economic transaction.

For MSME merchants who use QRIS, a fee will be charged in every transaction called MDR *(Merchant Discount Rate)* and *a Settlement* fee or withdrawal fee. QRIS transaction fees in the form of MDR (*Merchant Discount Rate)* will be charged every time you make a transaction using QRIS, a Transaction Fee in processing QRIS transactions. This can be a percentage of the transaction value or fixed costs and may change in accordance with economic conditions and regulations that have been regulated, Bank Indonesia (2020).

QRIS settlement fee in the form of withdrawal of funds will be charged every time you make a transaction using QRIS.

Table 2. *QRIS* Settlement Fee

Transaction Fee	*Settlement Fee*
Accumulated transactions up to IDR 50,000 (IDR 25,000 – IDR 50,000)	Rp2,000 per *settlement*
Accumulated transactions above Rp50,000	Rp3,000 per *settlement*

Source: qris.id,2023

2.6 Income

Revenue is the amount of income received by business owners as a result between the number of units sold and the price per unit (Mankiw, 2006). Operating revenue is also called Total Revenue (TR). Income in Micro, Small and Medium Enterprises (MSMEs) refers to the total receipt of money or value obtained from the sale of products or services offered by MSMEs. This income is the result of economic transactions carried out by MSMEs with customers or other business partners. Revenue is an important factor in evaluating the financial performance of MSMEs and can also affect the ability of MSMEs to survive and thrive (Mankiw, 2006).

3. Framework of Thinking

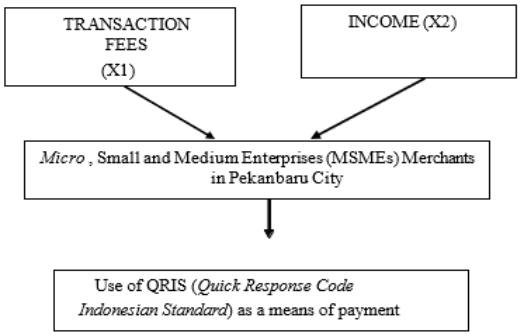

Figure 2.3: Framework of Thought
Source: Researcher

3. Research Hypothesis

1. Transaction fees have a significant positive effect on the use of QRIS as a means of payment at MSME merchants in Pekanbaru City
2. Revenue has a significant positive effect on the use of QRIS as a means of payment at MSME merchants in Pekanbaru City

5. Methods

This research will be conducted in *One Street Food* (OSF) and Raun-Raun Pekanbaru City, Riau Province. This location was chosen because there is a gathering place for MSME merchants who accept cash and digital payments using QRIS. The study time is expected to start in April to June 2023. The population in this study

is all MSME merchants who use QRIS in the city of Pekanbaru, totaling 227,655 *merchants.* Of this population, the sample is the owner/manager of MSME merchants who use QRIS as a means of payment in Pekanbaur City In this study, samples were taken from the population using purposive sampling techniques. Purposive sampling is a data collection technique with certain considerations (Sugiyono, 2011). The consideration in this sampling is that the respondents are owners / managers of MSME merchants who have QRIS barcodes in their payment systems. So in this case sampling will be carried out at One Street Food (OSF) and Raun-Raun in the city of Pekanbaru, Riau which amounts to 100 MSMEs. The criteria used in this study are MSME merchants who use QRIS as a means of payment transactions. This type of research is quantitative research. Quantitative research is a research model that uses a lot of numbers, ranging from data collection, interpretation of data and the appearance of data analysis results. Data sources in this study are divided into primary data sources and secondary data sources, namely primary data and secondary data. Data collection techniques used in questionnaire research, interviews and literature studies.

Data analysis is carried out based on the results of data collection in the field. The research method used is by multiple linear regression analysis whose data sources are taken using questionnaires. Multiple regression analysis according to Sugiyono (2017) was carried out to determine the influence of one or more independent variables on one dependent variable. The stages that need to be done are by validity test, classical assumption test, multiple linear regression analysis test and then Hypothesis test. The data analysis method used is with the help of SPSS (*Statistical Product and Service Solution*) version 24 as a calculation tool for the phenomenon studied. This study will pay attention to variables that affect the use of QRIS as a means of payment, namely the influence of transaction costs and revenue.

6. Result and Dicussion

6.1 Respondents by Age, Gender, and Business Type

From the classification based on age and gender, and type of business of 100 respondents in this study there were 58 respondents who were male and 42 respondents were female. Of the total 58 male respondents, as many as 48 respondents or 70.6% of them are in the age range between 20 to 30 years and undergo a type of business in the culinary sector. While women have a smaller number, amounting to 42 respondents or and of the total, 36 or 38.3% of them run businesses in the culinary sector. Female respondents ranged in age from 20 to 30 years with 20 of them having a type of business in the culinary sector, and 6 businesses in the fashion sector. This shows that most of the ownership of MSME *merchants* in Pekanbaru City who were used as respondents in this study are men with the most age range, namely 20 years to 30 years who have a type of business in the culinary sector.

6.2 Respondents based on Gender, Length of business, and length of use of QRIS

Based on gender, length of business and length of use of QRIS above, it can be seen that out of a total of 58 male respondents, as many as 42 respondents have had a business for 2 to 5 years, of these business durations, 22 respondents have used QRIS for more than 12 months / 1 year, and 19 of them have used QRIS for 7 to 12 months. Meanwhile, out of a total of 42 female respondents, 29 respondents have been running a business for 2 to 5 years, and of these businesses, 18 of them have used QRIS for more than 12 months/1 year and as many as 10 respondents have used QRIS for 7-12 months. So that from the total existing data, where in the span of 2 to 5 years of business the comparison of the length of time using QRIS in male respondents is 72.4% and in female respondents is 69%. From this data, it can be seen that in the business span for 2 to 5 years, the application for the use of QRIS is more and faster carried out by male respondents compared to women, so it can be concluded that men are more sensitive to the adaptation of new technology, especially in terms of digital payment systems using QRIS.

1. Respondents based on the length of time using QRIS, Average QRIS Transactions/day, and QRIS Issuing Institutions

Based on the length of using QRIS, the Average QRIS Transaction/day and the QRIS Issuing Institution, out of a total of 100 respondents, the length of QRIS use that is more than (>12) months/1 year has the highest total average QRIS transactions per day, amounting to 42 or 42% with the average transaction per day which is more than (>20) times the transaction is 20 respondents or 83.3%. Then, in the duration of using QRIS for 7 to 12 months, the total average QRIS transactions per day amounted to 30 or 30% with the highest average transaction of 6 to 10 transactions with a total of 16 respondents or 47.1%.

If the classification of respondents who use QRIS is based on banking and non-banking issuing institutions, then non-banking institutions have more respondents using QRIS than banking institutions, namely 59 and 41 respondents. Where in non-banking institutions, the average QRIS transaction is most widely used in businesses that have used QRIS for more than (>12 months), which is 28 respondents or 47.5%, where the average transaction per day is more than 20 transactions totaling 13 respondents or 86.7%. Meanwhile, in banking institutions, the average QRIS transaction is most widely used in businesses that have used QRIS for 7 to 12 months, which is 17 respondents or 41.5%, where the average transaction per day is more than 6 to 10 transactions totaling 9 respondents or 56.3%.

6.4 Net Operating Income of Respondents

Based on operating net income, it can be concluded that the net income of respondents in this study has changed before and after using QRIS. A significant change is in the income group of Rp.5,005,000 – Rp.10,000,000, which before using QRIS only amounted to 25 respondents, increasing to 39 respondents. This shows that the income of MSMEs in Pekanbaru City has changed and is dominated by micro enterprises. The shift in revenue or sales value that occurs is caused by several other factors, namely with discounts *and cashback* offered by QRIS, where the provision of discounts and *cashback* on goods sold by MSME merchants aims to provide economic incentives to consumers so that they are more interested in making purchases. Changes in prices and profits can influence consumer decisions. In this case it is also related to Keynesian theory of consumption, especially in the context of *Marginal Propensity to Consume* (MPC) or marginal tendency to consume and is in line with the concept of incentives in Keynesian consumption theory.

6.5 Data Analysis Results

6.5.1 Validity Test Results

According to V.Sujarweni (2018) If the calculated value > rtable (0.1966) product moment, the questionnaire question items are declared valid. The results of testing the validity of the research instrument there is a comparison between the calculated value > rtable (0.1966). So it can be concluded that all question items for variable X are valid.where the calculated R value is greater than the R table so that all question items on the questionnaire are said to be valid and research based on questions can be said to be valid.

While testing the validity of the Dependent variable comparison between the comparison value of rcalculate > rtable (0.1966), it can be concluded that all question items for variable Y are valid because rcalculate is greater than the value of r table.

6.5.2 Instrument Reliability Test Results

Based on the results of reliability tests it is known that Cronbach's Alpha coefficient >0.60, From the above results it can be said that the answer of each item statement of the variable is consistent. So that all questions in the questionnaire on question items on research variables are reliable so that research can continue.

6.6 Classical Assumption Test

6.6.1 Kolmogrov Smirnov Normality Test

Kolmogorov Smirnov's *normality* test is part of the classical assumption test. The normality test aims to find out whether the residual value is normal or not. A good regression model is to have normally distributed residual values. Basic Decision making is if the significance value is >0.05 then the residual value is normally distributed. The data from SPSS processing that the value of Asymp. Sig. (2-tailed) is 0.096 > 0.05, which means that it can be concluded that the data is distributed normally.

Table 3. Normality Test Kolmogrov Smirnov

N		**100**
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	2.38321883
Most Extreme Differences	Absolute	.082
	Positive	.056
	Negative	-.082
Test Statistic		**.082**
Asymp. Sig. (2-tailed)		**.096[c]**

Source: Data processing by SPSS,2023

Normality test results with probability plot method. It is known that the pointspreads around the diagonal line and follows the direction of the diagonal line. From these characteristics, it can be stated that the data is distributed normally.

6.6.2 Multicollinearity test

Based on the results of the multicollinearity test, the VIF value and tolerance value can be known as follows:

The transaction cost variable (X1) has a tolerance value of 0.442 > 0.100 and a VIF of 2.261 < 10.00

The Income variable (X2) has a tolerance value of 0.442 > 0.100 and a VIF of 2.261 < 10.00.

It can be seen from the description above that both independent variables Transaction cost (X1) and Revenue (X2) have a tolerance value of more than (>0.100) and VIF less than (<10.00), then conclude that the assumption of multicollinearity has been fulfilled or the data does not occur symptoms of multicollinearity.

6.6.3 Heteroscedasticity Test

Based on the results of the heterokedasticity test, significant values can be known as follows:

1. Variable Transaction Cost (X1) obtained a signification value of 0.457 > 0.05.
2. The Income Variable (X2) obtained a signification value of 0.668 > 0.05.

It can be seen from the description above that all independent variables Transaction Cost (X1) and Revenue (X2) do not have heterokedacity problems because each variable has a significant value of more than (>0.05). So it can be concluded that the data does not occur heteroscedasticity or the assumption of heterokedasticity test has been met.

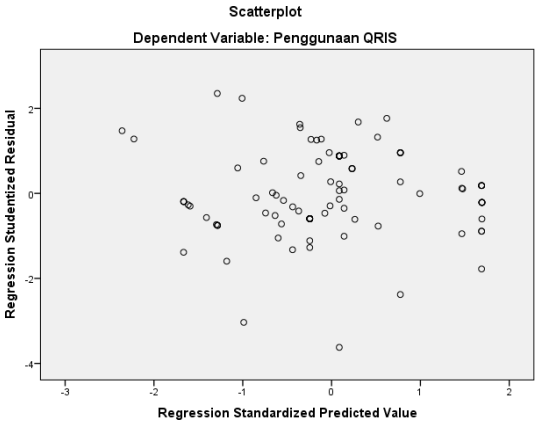

Figure 2.3: Heteroscedasticity test using Scatterplot
Source: Source: Data processing by SPSS,2023

The results of the heterokedacity test with the Scatterplot method are known that the points spread above and below the number 0, the points also do not collect only and the spread of data points does not seem to form a pattern. From these characteristics, it can be concluded that heteroscedasticity does not occur.

6.7 multiple linear regression analysis

The following is the Multiple Liniear Regression test, with results as shown in the following table.

Table 3. Multiple Linear Regression

Coefficients

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	4.316	1.607		2.669	.009
	Transaction Fees	.548	.080	.587	6.819	.000
	Income	.333	.090	.290	3.370	.001

a. Dependent Variable: Use of QRIS
Sourcer: Data Processing by SPSS,2023

Based on the results of the multiple linear regression test between the independent variable and the bound variable according to the number of beta (positive/negative) (Sugiyono, 2017) the regression meanings can be arranged as follows:

Variable X1 Transaction Fee is positive, which means that Transaction Fee affects QRIS usage. In this case, the Transaction Fee charged is MDR (Merchant Discount Rate) worth 0.7%, where even though MSME merchants are charged MDR fees charged to them, merchants will still continue to use QRIS as a non-cash payment instrument because the fees charged are still comparable to the benefits obtained up to the tolerant threshold point, which is up to MDR 2.7%.

The variable X2 income is positive, which means that income also affects the use of QRIS. In this case, revenue tends to increase significantly due to the use of QRIS causing merchants to be reluctant to turn away from using QRIS as a means of payment so they choose to continue using QRIS in the future because QRIS has a positive effect on increasing sales revenue.

6.8 Hypothesis Testing

6.8.1 Uji Simultaneously (Uji F)

Based on the calculated value according to (wiratnani, 2014), if the value (F count > F table) then it means that the independent variable (X) simultaneously affects the dependent variable (Y). The calculated values and table values obtained from the results of data processing by SPSS are, (Fcalculate 104.235 > Ftable 3.09). So it can be concluded that the independent variables (X1) Transaction Costs and (X2) Income simultaneously affect the dependent variable (Y) QRIS Use in MSMEs in Pekanbaru City.

6.8.2 Partial Test (T Test)

Based on the results of the partial test (T test), it can be concluded, as follows:

1. Testing the effect of variable transaction costs (X1) on the use of QRIS payment instruments for MSMEs in the city of Pekanbaru (Y).

H1 : It is suspected that transaction fees have a significant effect on the decision to use QRIS as a means of payment at MSME merchants in Pekanbaru City.

Based on the results of data processing, the value of Sig. for the effect of variables Transaction costs on the use of QRIS as a means of payment in Pekanbaru City are (sig. 0.000 < 0.05) and values (t calculate 6.819 > t table 1.664.) So that it can be concluded based on these criteria, H1 Accepted, which means that the variable Transaction Cost (X1) partially has a significant effect on the variable (Y) decision to use QRIS as a means of payment for MSMEs in Pekanbaru City.

2. Testing the effect of the income variable (X2) on the decision to use QRIS payment instruments for MSMEs in the city of Pekanbaru (Y).

H2 : It is suspected that income has a significant effect on the decision to use QRIS as a means of payment at MSME *merchants* in Pekanbaru City Based on the results of data processing, the Sig. value for the effect of income variables on the use of QRIS as a means of payment in Pekanbaru City is (sig. 0.001 < 0.05) and value (t calculate 3.370 > t table 1.664.)

So that it can be concluded based on these criteria, H2 is accepted, which means that the variable Income (X2) partially has a significant effect on the variable (Y) Decision to Use QRIS as a means of payment for MSMEs in Pekanbaru City.

6.9 Coefficient of Determination (Test R2)

Based on the results of the coefficient of determination (Test R2) above, it is known that the value of the R square coefficient (R2) is 0.682 or 68.2%. So, it can be concluded that the magnitude of the influence of the variables Transaction costs and Income contribute

together by 68.2% on the decision variable of QRIS use in MSMEs in Pekanbaru City, while the remaining 31.8% is influenced by other variables outside the research model.

6.10. Discussion of Research Results

6.10.1 The effect of transaction fees on the decision to use QRIS as a means of payment at MSME merchants in Pekanbaru City.

In the context of using QRIS for MSMEs, the transaction fees charged are the *Merchant* DisCount Rate (MDR) of 0.7% and settlement (withdrawal of funds) of Rp.2,000 – Rp.3,000 per settlement. MDR is a fee charged to *merchants* as compensation for non-cash payment service providers, such as QRIS. Even though MSME merchants are subject to this fee, they are still able to tolerate these costs so they choose to continue using QRIS as a non-cash payment instrument, even to the prediction or probability of an increase in MDR fees by 2% to MDR to 2.7%, in research that has been conducted that *merchants* MSMEs are still able to tolerate or accept these costs as a result of the benefits or benefits (Cost of Benefit) they receive in using QRIS payment instruments. So this shows that even though transaction fees applied affect the reduction of income in each QRIS transaction for MSMEs, the use of QRIS is still considered profitable for MSME *merchants*. There are several factors that influence their decision to continue using QRIS despite the costs they have to incur:

1. Ease and efficiency: QRIS provides convenience in payment processing and efficiency in transactions. With QRIS, payment transactions can be done quickly and without the need to use physical cash so as to avoid the risk of counterfeit money. This can improve the operational efficiency of MSMEs.
2. Consumer trust: The use of QRIS as a cashless payment instrument has become increasingly common in the community, especially those who shop at Raun-Raun and One Street Food as the location of this study because it has become a digital street shopping food in Pekanbaru and also existing visitors are also dominated by millennial young people who are sensitive to technology adoption. Consumers tend to be more trusting and comfortable using QRIS. Therefore, MSME merchants that accept payments through QRIS can attract more customers.
3. Additional benefits and incentives: Although MDR is imposed, MSME merchants can also get additional benefits and incentives from cashless payment service providers. This can be in the form of promotions, *cashback* programs, or more effective financial management through technology solutions integrated with QRIS. Promotional and *cashback programs* that are in great demand by the public certainly have an impact on increasing the transaction volume *of MSME merchants which certainly increases revenue significantly.*
4. Potential increase in sales: By providing cashless payment options through QRIS, MSMEs can reach a wider range of customers, including those who do not carry cash. This can have a positive impact on increasing sales and business growth. Thus, even though transaction fees are charged, the factors above can be an important consideration for MSME merchants to continue using QRIS.

From a microeconomic perspective, in this case in Consumer Preference Theory, the decrease in transaction costs using QRIS, such as relatively low MDR (0.7%), can make QRIS a more attractive choice for MSMEs. Thus, MSMEs can weigh between the costs incurred and the benefits obtained from using QRIS. If the benefits and conveniences provided by QRIS are considered to outweigh the costs incurred, MSMEs are also likely to be more inclined to use QRIS as a non-cash payment instrument.

Then on Production Cost Theory: In this context, transaction costs imposed on MSMEs (MDR 0.7%) are considered as production costs that they must bear. However, if MSME income increases significantly and the income received through the use of QRIS is greater than the transaction costs incurred, MSMEs will still tend to use QRIS as a non-cash payment instrument because of the benefits obtained.

However, another point of consideration is that tolerance for MDR can vary from one MSME merchant to another, depending on the business location, business conditions and profit margins owned. Some *merchants* may be more sensitive to fees and their tolerance limits are lower. Therefore, it is important for payment service providers and relevant stakeholders to continue to pay attention and memperbaiki kebijakan biaya transaksi agar tetap mendukung pertumbuhan dan adopsi QRIS oleh UMKM.

6.10.2. The Effect of Income on the decision to use QRIS as a means of payment at MSME merchants in Pekanbaru City

On the consumer side (demand), there are discounts and cashback offered by QRIS as an easier means of payment, where the provision of discounts and cashback on goods sold by MSME merchants aims to provide economic incentives to consumers so that they are more interested in making purchases and affect the speed of money circulation. Changes in prices and profits can influence consumer decisions. In this case it is also related to Keynesian consumption theory, especially in the context of Marginal Propensity to Consume (MPC) or marginal tendency to consume and is in line with the concept of incentives in Keynesian consumption theory. The provision of discounts and *cashback* can affect consumer MPC. When merchants provide discounts or *cashback*, it gives consumers additional income or higher purchasing power. By providing incentives such as discounts and *cashback*, merchants effectively increase consumers' incomes and encourage them to consume more goods. In this context, the provision of discounts and *cashback*

can influence consumer behavior and encourage them to increase their consumption expenditure. That way, transaction volume increases and MSME merchants can experience an increase in revenue as a result.

In addition, this is in accordance with Keynes's theory which states that where the higher the level of income, the greater the desire for money both in cash and non-cash to be used for transactions. A person or society with a high level of income, usually makes more transactions than a person or society with low income. due to his belief that the transaction is proportional to revenue. In the context of the use of QRIS by MSMEs, an increase in MSME income can affect the use of QRIS as a non-cash payment instrument. When MSME revenues increase, they have a tendency to increase their business transaction activities. QRIS can be a more practical and efficient option in conducting payment transactions, especially since higher revenues allow them to adopt cashless payment technology.

With the increase in MSME income, confidence that transactions are proportional to income strengthened. This may encourage them to use QRIS dalam transaksi, karena QRIS dapat memberikan kemudahan dan efisiensi dalam melakukan pembayaran tanpa harus menggunakan uang tunai secara fisik. Peningkatan pendapatan UMKM dapat memicu peningkatan aktivitas transaksi dan mendorong penggunaan QRIS sebagai alat pembayaran non-tunai yang praktis dan efisien.

This is also supported by research by Dewi Qutrun Nada, Sri Suryaningsum, Hari Kusuma Satria Negara, entitled Digitalization of the Quick Response Indonesian Standard (QRIS) Payment System for MSME Development, which states that the income of MSME merchants has increased by 5-10% per day due to the existence of QRIS. This increase in revenue will increase the financial inclusion of MSME traders and the economy.

7. References

Bank Indonesia. (2020) Quick Response Code Indonesian Standard (QRIS) - Bank SentralRepublikIndonesia.<https://www.bi.go.id/QRIS/Contents/Defult .aspx>.

Bank Indonesia.(2020) "Publish QRIS Implementation Provisions, <https://Www.Bi.Go.Id/Id/Publikasi/Bank-Indonesia Publish- Provisions-Implementation-QRIS Com,>

Banking, M.J.I. (2022), "Mutanaqishah : Journal of Islamic Banking Evaluation of QRIS Use in Islamic Bank m-Banking: Technology Acceptance Model Approach", Vol. 2 No. 2, p. 80–92.

Indonesia, B. (2009), "Bank Indonesia Regulation No. 11/12/PBI/2009 concerning Electronic Money", Bank Indonesia.

Indonesia, B. (2015), "Payment System &; Rupiah Money Management", Www.bi.go.id, available at: https://www.bi.go.id/id/fungsi-utama/sistem-payment /default.aspx.

Indonesia, B. (2019a), "Regulation of Members of the Board of Governors Number 21/18/PADG/2019 concerning the Implementation of National Quick Response Code Standards for Payments.", www.bi.go.i.

Indonesia, P. (2004), Law of the Republic of Indonesia Number 3 of 2004

Indonesia, P. (2008), Law Number 20 of 2008 concerning Small, Micro, and Medium Enterprises (MSMEs).

John Maynard Keynes. (2016), General Theory of Employment , Interest and Money, Atlantic Publishers & Dist.

Mankiw, N .G. (2006), Macroeconomics, Worth Publishers, New York.

Nada, D.Q., Suryaningsum, S., Kusuma, H. dan Negara, S. (2021), “Digitalization of the Quick Response Indonesian Standard (QRIS) Payment System for

MSME Development”, Jpurnal of International Conference Proceedings (JICP), Vol.4 No. 3, hal. 551–558.

Salvatore, D. (1992), Schaum’s Outline of Theory and Problems of Microeconomic Theory, New York Mcgraw-Hill C.

Sugiyono (2018) Quantitative, qualitative and mixed methods research methods / author, Prof. Dr. Sugiyono. Bandung:

Sihaloho, J.E., Ramadani, A. and Rahmayanti, S. (2020), "Implementation of Quick Response Indonesia Standard Payment System, University of North Sumatra (1)(2)(3)", Journal of Business Management, Vol. 17 No. 2, p. 287–297.

QRIS. (2020), “QRIS (Quick Response Code Indonesian Standard) Satu QR Code untuk semua Payment”, Qris.online, available at: https://qris.online/homepage/.

Tambunan,Sincere. (2012), Micro, Small and Medium Enterprises in Indonesia: Key Issues, Jakarta LP3ES.