**International Journal of Scientific Research and Management (IJSRM)** 

||Volume||11||Issue||05||Pages||4855-4863||2023|| |Website: www.ijsrm.in ISSN (e): 2321-3418

DOI: 10.18535/ijsrm/v11i05.em01

# **Reasons to Use Cash Payment**

Lilies Setiartiti\*), Nun Maziyyah Binti Mahsyar\*\*)

\*)Department of Economics, Universitas Muhammadiyah Yogyakarta, Indonesia

## Abstract

This study aims to find out the factors influencing the use of cash-payment in Yogyakarta. The object of this research is Super Indo as one of the biggest markets in Yogyakarta in which people usually used for shopping. It uses the quantitative approach through distributing the questionnaire. The data obtained on 100 samples with the specification of above 17 years old and time frequency more than once a week to purchase in the market. The data processed by using multiple linear regressions. There are four independent variables within this research namely, manageable, flexibility, transaction volume and charge for non-cash payment while the dependent variable is cash usage. As a result, the research shows that all the independent variables have influence simultaneously towards cash usage as the dependent variable, whereas in t test, only two variables affect positive significantly against cash usage, which are transaction volume and no transaction fees. Overall, this research provides important information for the central bank, that although the non-cash payment system has been developed, people-especially in Yogyakarta-still prefer using cash-payment for their daily transaction. The purposed of the methodology is general and can be applied to other region in order to find the differences of transaction payment.

Keywords: Cash Payment, Super Indo, Determinant, Yogyakarta

JEL Classification Code: E40, G40, P23

#### Introduction

Currently, Industry 4.0 becomes the centre of public attention due to the changes that it brings. It was born from the idea of the fourth industrial revolution. European Parliamentary Research Service on Davies (2015) stated that industrial revolution undergoes for four times. Today, the emergence and the spread of technology and innovation increasingly beyond national borders and often is part of the emerging global innovative-technological sphere (Farkah, D.; Alzhanova, F, 2016).

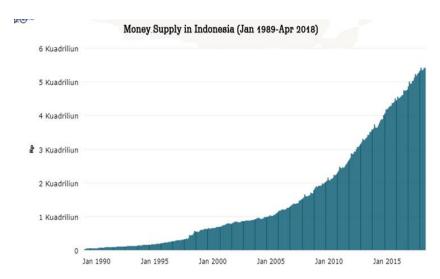
Industrial revolution 4.0 presents technology that can expand the financial inclusive in which during the century is dominated by the bank. Financial industry recently feels the difference from the last moment such as the emergence of financial technology "fin-tech". Today's financial technology revolution is enabling cash and digital to merge in a variety of other innovative ways. According to Dat, D. N.; Dinh, H. C.; Nguyen, D. V (2020) stated that mobile payment become more popular increasingly because of the convenient and security.

Therefore, by the emergence of financial technology, the Indonesian people are faced with two payment system options in every transaction they make, specifically using cash and non-cash, with their own respective advantages and disadvantages. The emergence of system payment has existed besides physical payment, namely digital payment, and Bank Indonesia recognizes the importance of non-cash payment transactions in the economy. It became a driver of the Bank Indonesia's policy to launch a Non-Cash National Movement (GNNT) in 2014, in order to be able to transition from the cash era to the cashless era, which until now continues to intensify its use. The existence of this movement is aimed encouraging people to conduct non-cash transactions for their economic activities so that they gradually form a community or people who prefer to use non-cash instruments. This movement to non-cash can also reduce the level of money circulation in Indonesia. In terms of the high circulation of money will cause inflation in Indonesia. Among ASEAN countries, the use of electronic money in Indonesia is still relatively low referring to (Global Consumer Insight

<sup>\*\*)</sup> Department of Economics, Universitas Muhammadiyah Yogyakarta, Indonesia

Survey, 2019) showing that Indonesia left behind Thailand, Vietnam in the largest growth in mobile payments in 2019. Thailand increased by 67%, Vietnam increased by 61% and Indonesia only reached 47%.

Cash is popular, safer and serves a long list of legitimate social and economic values meanwhile cashless is made for convenience and payment facilitation. This movement is said to be a solution to anticipate higher crime rates with the cash usage. By switching to non-cash transactions, crimes such as money laundering, robbery, theft can be minimized. This movement to non-cash can also reduce the level of money circulation in Indonesia. In terms of the high circulation of money will cause economic inflation in Indonesia. Nevertheless, based on the report, the amount of money circulation in Indonesia is increasing year by year. It shows that although the existence of the feature of digital payment itself, cash usage is still become the society choice.



It shows that even though the government effort to push the society using digital payment through Non-Cash National Movement (GNNT) is still insufficient, cash usage as the payment tools still becomes the main financial transaction in this country. Moreover, reported "The G4S World Cash Report" released by G4S stated that 50 to 55% method of transaction in Indonesia uses cash. This report applies two main instruments to measure increased demand for cash, namely cash circulation ratio (CIC) to gross domestic product and increase in cash withdrawals in countries involving in survey. In Indonesia, during the period 2018 to 2021, CIC grows 53,1% become IDR 528,53 trillion. While the number of cash withdrawals in ATM at the same period enhance as much as 65,6% become IDR 2.353 trillion.

Nonetheless, the emergence of electronic money is thriving away, the Yogyakarta societies still prefer to use cash as the payment transaction in daily life. It can be seen through early observation in four big markets in Yogyakarta

Table 1.Early Observation in Four Big Markets (Yogyakarta)

No.	Location	Observation	Card Usage	Cash Usage
		(people)	(%)	(%)
	Indogrosir	25	6	19
	Hypermart	25	10	15
	Superindo	25	9	16
	Mirota Godean	25	8	17
Total	•	100	33	67

Source: field survey

Based on Table 1, 67% people in Yogyakarta still prefer using cash payment, rather than use digital payment. What happens with the rule and the development of digital payment. It seems like there is something wrong in digital payment. It is in line with the Final Report of Access to Cash Review that launched by Ceeney (2019), across the United Kingdom, supports this observation. Cash is decline but Britain is not ready goes through cashless era, because digital payment does not work for everyone. It is proved in the report, there 97% of UK population carry cash and 85% keep cash in their home.

Therefore, the authors curious what is the most factors influence society of Yogyakarta who purchase goods in Super Indo Jogokariyan using cash payment instead of the existence of digital payment currently. The likelihood factors influencing are manageable, because it is essential for financial in order to manage expenditure, it refers from (Soman, 2018). Flexibility because society will use when it eases to be accessed, It is supported from (Rosano, 2018) through world cash report regarding flexibility in using cash. Transaction volume due to people concern to use cash based on how much their quantity purchases, it refers to Lloyd (2016) and Bagnall (2014). On the other hand, the different result conducted by (Schmidt, 2016) found in Germany 40% of larger purchase or more are made in cash. Then the charge factor for non-cash payments becomes a special consideration for people who purchase at Super Indo, as according to Arango (2017) stated that difference incentive cost of card and ATM withdrawal become a burden for the society. The same result conducted by Alonso (2018) and Shirgaokar & S. Agowall (2019). Charge for non-cash inasmuch as charge is the burden imposed through the card (Arango, 2017)

This research uses flexibility variable as the distinguishing variable that never used from other researches. Flexibility variable is utilized within this research inasmuch as one of the purposes of non-cash national movement in Indonesia since 2014 to ease the society when use digital payment. This research focuses on the Super Market in Yogyakarta, namely Super Indo. Since Super Indo provides cashier both device for digital payment and cashier only for cash users, therefore the authors will see the result obtained from all these variables.

#### **Literature Review**

Based on Bank Indonesia's Law No.23/1999, payment system is a system that includes a set of rules, institutions and mechanisms, which are used to carry out the transfer of funds to fulfil an obligation arising from an economic activity. In Indonesia, the only payment legalized is rupiah. Yet, there are many tools approved by government. Since, we live in millennial era and industry 4.0 so that there are several instrument tools that can be used as a tool of payment, namely cash and non-cash. Money has three purposes in economics, as the medium of exchange, store of value and unit of account.

According to Keynesian Theory, there are three motives of money demand, as transaction motive, precautionary motive, and speculative motive. There are several factors influence the society of Yogyakarta to use cash, vide-licet manageable, flexibility, transaction volume and charge for non-cash payment. Management is the art what you want to do and then it is done in the best and the cheapest way. Organization or could be said as individual or household should be able to pay for required goods/services as the need arise to meet the transaction purpose, make provision for unforeseen circumstances that could arise to be precautious, and be able to take advantage in order to anticipated speculations. Cash to every organization is like blood to every human being because cash is ultimate and is the liquid asset. Effective and efficient management for cash is essential for the survival and growth of organization. Good cash management can reduce the finance cost of the organization and reduce expenses in general because of timely allocation base on precedence items.

Manageable is very important to measure how impactful this into the cash usage. Because through this variable, it can be seen that whether the individual or community will consume as the transaction motive only in order to buy the daily needs or they do not pay attention for cash management to manage their expenditure. At the other hand, the existence of electronic money makes people using it to purchase goods and services. Through e-money society buy the goods and only tap the card and transaction is done. However, e-money usage is risk for the user because they cannot handle how much of their spending. It affects society psychics because it can result dissipation. Thus, handling cash is more comfortable and more manageable for user because they can realize and know their spending.

Flexibility is the characteristic of process that measured how long a process changes to produce different output by using different set of inputs (Garperz,1997). With the non-cash instruments offered by the government, it will test how long the community needs a process to be able to transform from the period of using cash to cashless society. However, to achieve this output, supporting infrastructure is needed. The breakthrough of digital payment is rapidly increasing. It starts from electronic money until financial technology, where people can lend money to the lender though they do not meet each other. However, there were still over 13 billion cash payment, cash is still important as a store of value both in United Kingdom and Overseas (Ceeney,2019). Digital payment system depended entirely on good connectivity where no

connection is no payment. The infrastructure is really becoming barrier for digital payment. Similarly, there are many people are not able to rely on cards and digital as their only way to pay (Ceeney, 2019).

Transaction volume is the total number of transactions processed from, to or through goods and services. Numerous previous papers have shown that transaction size is highly correlated with the choice of payment instruments (Arango, et al, 2011). As the number of transaction volume is part of the total quantity of purchases of goods. Moreover, transaction volume based on Simonson (1990), stated that the amount of purchases have systematic effect on various product that likelihood chosen by consumer, its mean that when transaction volume is lower, consumer prefer to use physical payment compared to transaction volume is higher, digital payment is preferred (Lyold, et al, 2016), and the amount of the purchases affect their propensity to use cash (O'Brien, 2014). When transaction less than \$20 then probability using cash increase 91%, when transaction is greater than \$20 then probability decrease to 57%. It is in line with the result found by (Bagnall, et al, 2014). However, it contrast with the result by Schmidt (2016) found that in Germany, almost 40% or larger purchases with the value equivalent more than \$ 40 US dollars are made in cash. Another research found the result regards charge for non-cash by Arango, et al, (2017), stated that the existence of incentive such as cost of card and differences in ATM withdrawal cost are the key factors explaining why cash is still remaining top of wallet across many developed economies. Machfoeds (1996) stated that charge is the burden on income because the company uses available economic resources, even cost of card and differences in ATM withdrawal cost are the key factors explaining why cash is still remaining top of wallet across many developed economies (Arongo, et al, 2017). Based on A,S.; Patwa, N.; Niranjan, I.; Kavari, S. P (2016) stated that providing credit card acceptance services, the acquiring bank charges a merchant servicing fee to the merchant establishment availing the services.

Fees charged for the use of cards therefore being willing to use cash for everyday transaction rather than using card (Alonso, 2018). However, this empirical finding is contrast with the results of research conducted by Shirgaokar& S. Agowall (2019) who found that the debit card gives a lot of benefits such as a low maintenance charge. Soman (2001) stated that consumers who shop using a credit card will feel a sense of loss "or pain" of spending money will feel smaller than using cash so they find it difficult to control the expenditure. Moreover, it is in line with (Jati, 2015) and (Kresnawati, et al, 2018) stated that electronic money encourages the society to behave consumptively. Related result by (Rosano, 2018) stated that cash is flexible because it is easy to use which does not require about account or device by either party to complete transaction. Several empirical studies suggest that higher cash holdings are correlated with higher use of cash in payments; see Arango, and Schmidt (2011), Eschelbach and Schmidt (2013), Bouhdaoui and Bounie (2012), and Arango, Bouhdaoui, Bounie, Eschelbach, and Hernandez (2013).

## Methodology

This research was done by quantitative approach and primary data through survey and face to face interview. The subject for this research is the society of Yogyakarta. Purposive sampling is used for choosing the study area. Stratified random sampling is used in determining sample size from the customers. Data obtained using survey techniques and in-depth observation to provide answers of the problems faced to explain the phenomenon. Economic model defines the statistical relationship between variables in particular phenomena. This research uses multiple linear regression models below:

 $Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + e$ 

Where:

Y = cash usage X1 = manageable  $b_1, b_2, b_3, b_4 = regression coefficient$  X2 = flexibility

 $b_0$  = intercept X3 = transaction volume  $\mu$  = error term X4 = charge for non-cash

#### **Result And Discussion**

### 1.1. Multiple Linear Regression

The coefficient of determination (R2) is 0,250 or 25 %. The magnitude of the coefficient shows that the independent variables in this study are able to explain the dependent variable by 25 %, while the remaining 75 % is explained by other variables outside this research model.

Table 2.F Test

Model S		Sum of Squares	Df	Mean	F	Sig.
				Square		
	Regression	105.660	4	26.415	7.919	.000
1	Residual	316.900	95	3.336		
	Total	422.560	99			

From the data above, it explains the F significance value of 0,000 <0.05. Thereby, it can be concluded that independent variables, which are manageable, flexibility, transaction volume, and charge for non-cash payments within this model together or simultaneously have a significant effect on the dependent variable that is cash usage.

Table3. T Test

Model		Unstandardized		Standardized	T	Sig.
		Coefficients		Coefficients		
		В	Std. Error	Beta		
	(Constant)	7.444	1.699		4.383	.000
	Manageable	034	.157	022	216	.830
	Flexibility	.121	.132	.105	.916	.362
	Transaction Volume	.432	.212	.216	2.035	.045
	No Transaction Fees	.256	.081	.318	3.160	.002

$$Y = -0.022 X1 + 0.105 X2 + 0.216 X3 + 0.318 X4$$

- a)  $\beta 1 = -0.022$  coefficient for independent variable manageable. It shows coefficient regression for manageable is negative. It means that when manageable level increase then the cash usage will decrease, and vice versa. Moreover, t value reaches -0.216 and a significance value of 0.830 > 0.05. This shows that manageable variable has a negative and insignificant effect on cash usage.
- b)  $\beta 2 = 0.105$  coefficient for independent variable flexibility. It shows coefficient regression for flexibility is positive. It means that when flexibility level increases then the cash usage will increase and vice versa. Moreover, flexibility has a t value of 0.916 and a significance value of 0.362 > 0.05. This shows that the flexibility has a positive and insignificant effect on cash usage.
- c)  $\beta 3 = 0.216$  coefficient for independent variable transaction volume. It shows coefficient regression for transaction volume is positive. It means that when transaction volume level undergoes increment then the cash usage will increase. Moreover, the transaction volume has a t value of 2.035 and a significance value of 0.045 < 0.05. This shows that the transaction volume has a positive and significant effect on cash usage
- d)  $\beta 4 = 0.318$  coefficient for independent variable charge for non-cash. It shows coefficient regression for charge for non-cash is positive. It means that when charge for non-cash level undergoes increment then the cash usage will increase. Furthermore, charge for non-cash has a t value of 3.160 and a significance value of 0.002<0.05. This shows that the charge for non-cash payments, has a positive and significance effect on cash usage.

#### 1.2.Discussion

## a) Manageable has negative and insignificance influence on cash usage

In this case, variable manageable has a negative and insignificant effect on cash usage. It means that manageable is not the main factor why society of Yogyakarta who shop at Super Indo use cash to make transactions. The indicators of manageable within this research model are easy to control expenditure and find out the amount of expenditure.

Manageable variable against factor of cash usage contrasts with non-cash usage in managing or controlling money itself. According to (Jati,2015) found that by using electronic money will encourage the society to behave consumptively. This statement also is supported by (Soman,2018) explained that consumer who pay or use debit card, more likely to obey the will and buy items that are not needed and not planned to be purchased beforehand, because the feeling of lost money will be lower in expenditure and does not affect them, due they do not see it. Moreover, consumer using credit card likelihood underestimates the amount of money they spend so there is a tendency for overspending

However, within this case, the manageable variable does not influence the society of Yogyakarta who shops in super indo to spend their money on shopping, unlike previous research findings. It is because they do not consider regarding managing their money in using cash. Moreover, the result is negative and insignificant because most of the occupation of the respondent within this model is the students reaching 36%, they do not earn money by their own self so that managing their money for shopping in using cash not affect them. Thus, the result of this phenomenon can be concluded that the societies who shop in Super Indo are a category of retail buyer which withdraw their own money from ATM and hold cash in order can purchases goods and services to fulfil their needs without thinking and considering their expenditure management in shopping.

## b) Flexibility has positive and insignificance influence on cash usage

Flexibility does not influence the society significantly. It is insignificant because either the consumer will buy many things or not they will tend to use cash. This result become positive because everyone likes to ease in every action did especially when it is part of transaction tool, in other hand, cash payments are accepted in almost all stalls, shops, and merchants. Most traders in Indonesia will be happy to receive our payment in cash. The society of Yogyakarta who shop in super indo likes to hold cash because they do not have any tackle when they pay using cash. The more flexibility, the more consumers will use cash. Moreover, it is also eased them to pay the park by only using cash rather than they use card to pay.

This phenomenon also supported by Rosana (2018) through world cash report stated that cash is flexible in as much as it is easy to use which does not require account or device by either party to complete transaction so therefore, everyone can use cash and it is very simple. Although they purchase in grocery needs, cash is still needed so therefore, cash is still important in daily life. Moreover, the result of flexibility and transaction volume has consistent itself. When the society wants to get more flexible then they will use cash for buying their daily needs no matter how much their quantity purchases. Transaction volume has positive and significance influence on cash usage.

Thereby, it can be concluded that although one of the purposes of non-cash national movement to make the payment transaction become flexible, in fact society likes to use cash payment, because it does not require device and does not have any tackle therefore it can be accessed anywhere.

# c) Transaction volume has positive and significance influence on cash usage

It indicates that the independent variable for transaction volume is positive and significant towards cash usage. The results obtained between flexible and volume transactions have red thread, which because they want to flexible therefore they use cash. Although the higher volume transaction. This means that transactions using cash provide a lot of convenience for consumers when shopping. It is showed the consistency results between flexible and transaction of volume, which means no matter how much the quantity shopping, they will remain using of cash. This kind of thing also happens at three countries, Austria, Canada, and USA that collected data on consumer perceptions regarding payment instruments, the perceived ease of using cash was highly significant and positive. This shows that consumers who rate cash high with regard to ease of use conduct more cash transactions (John, 2014).

This result matches with the pre-research conducted that indeed the use of cash still dominates; videlicet 67% of people still use cash to transact with an average expenditure of up to 500 thousand rupiah, it includes as higher purchases. It also matches with the result from the respondent answer saying agree regarding still using cash although the transaction volume relatively higher reaches 51%. Thus, the results obtained tell that society of Yogyakarta who shop at Super Indo already have planning beforehand for shopping as a behavior to fulfill their needs. Thereby, transaction volume becomes the reason significantly, why the society of Yogyakarta who shop in Super Indo use cash payment.

This result is in line and supported by the research cash of Germany. According to (Schmidt, 2016) stated that although most of 51% 19% 67 countries, consumers mainly use cash for small transaction amounts of less than 10 euro or 10 dollars, in Germany, almost 40% of larger purchases with values equivalent to more than 40 US Dollar or larger are made in cash. It is in line with the result that gotten within this research. Thus, the results obtained from this phenomenon are that society of Yogyakarta who shop at Super Indo already have

planning beforehand for shopping because as a behaviour to full-fill their needs. Thereby, transaction volume becomes the reason significantly, why the society of Yogyakarta who shop in Super Indo use cash as the system payment

For three countries that collected data on consumer perceptions regarding payment instruments (Austria, Canada, and US), the perceived ease of using cash was highly significant and positive. This shows that consumers who rate cash high with regard to ease of use conduct more cash transactions. The perceptions regarding security were different, positive versus negative, between Austria and Canada. The other perceptions with respect to cost and overall acceptance were not significant. These results are in line with previous research; see Schuh and Stavins (2010), Arango, Huynh, and Sabetti (2011), and von Kalckreuth, Schmidt, and Stix (2014).

# d) Charge for non-cash has positive and significance influence on cash usage

The result of this variable, charge for non-cash is positively and significance influence towards cash usage. It means that within this model, the society of Yogyakarta who purchase in Super Indo decide that the more charge for non-cash, the more they prefer using cash as transaction system. It is because there is additional fee charge when they swept the card, it is kind of burden for them. Consequently, the factor of charge for noncash becomes the reason why societies of Yogyakarta who shop in Super Indo use cash to transact. It is because the burden through additional cost out of the total cost of purchases that actually does not exist in cash usage. It has the red thread with transaction volume variable, in which when the society of Yogyakarta who shop in super indo buy their daily needs by using cash with the number of transaction volume relatively higher, then they do not want to get burden anymore by the additional cost imposed by card, so that they tend to use cash. Especially when they shop with a relatively small amount, then pay using a card that the EDC machine is available does not match their own type of card, then the fee will be charged. The results obtained from this study are supported previous studies conducted by Arango, et al. (2017), found that different incentives such as relative cost of card and ATM withdrawal cost, are the key factors explaining why cash is still remains top of wallet across many developed economies. Furthermore, in any research by Alonso, et al. (2018) conclude that there are two factors classified into four categories: access to cash and banking product, degree of digitalization, macroeconomics environment, and cultural factors. The most relevant variables explaining the prevalence in the use of cash are the share of senior population, the level of digitalization and the average size of card transaction. This latter variable is explained by two effects, which are the decrease in the amount of commissions and fees charged for the use of cards. Consequently, the factor of charge for non-cash becomes the reason why society of Yogyakarta who shop in Super Indo use cash to transact. It is because the burden through additional cost out of the total cost of purchases that actually does not exist in cash usage.

Thereby, the phenomenon result shows that the society of Yogyakarta who shop in Super Indo think holding cash is more important rather than card due to the charge does not give an advantage at all. The fee charge imposes for non-cash actually can use for any good rather than acquiesce their money in vain. Furthermore, the center of Super Indo, headquarters Jogokariyan, serves the customers who pay with cash through provide cashier specific only for cash user. It shows that people who shop at Super Indo avoid additional costs that will be charged when they pay using a card. We know that many e-commerce or banks that burden consumers with transaction costs even if they only buy credit. It is similar when consumers withdraw money from ATM machines in different banks.

## **CONCLUSION**

Based on the results of the analysis and discussion presented in the previous chapter, the conclusions can be taken as follows:

- a. Manageable has negative and insignificant influence towards cash usage, because the society do not consider of money spend when use cash to purchase daily needs.
- b. Flexibility has positive and insignificant influence towards cash usage, they think that using cash ease to be used and does not have any tackle in completing transaction.
- c. Transaction volume has positive and significance influence towards cash usage, because the shopper hold cash to purchase in order to buy the daily needs.
- d. Charge for non-cash payment has positive and significance influence towards cash usage, the shopper think charge as the burden and does not have any advantages to them so that they prefer to use cash.

#### References

#### Journals

- 1. Alvarez, F. Lippi, F. (2017). Cash Burns: An Inventory Model with a Cash-Credit Choice. *Journal of Monetary Economics*, 99-112. <a href="https://doi.org/10.1016/j.jmoneco.2017.07.001">https://doi.org/10.1016/j.jmoneco.2017.07.001</a>
- 2. Ashley D. Lyold, Antonioletti, M. Sloan, T, M. (2016). Able but not Willing? Exploring Divides in Digital Versus Physical Payment Use in China. *Information Technology & People*, pp.250-79.
- 3. https://www.emerald.com/insight/content/doi/10.1108/ITP-10-2014-0243/full/html
- 4. Bouhdaoui, Y., And D. Bounie (2012): "Modelling the Share of Cash Payments in the Economy: An Application to France," *International Journal of Central Banking*, 8(4), 175–195.https://www.ijcb.org/journal/ijcb12q4a5.htm
- 5. Shirgaokar, A. Agarwall, S, L. (2019). Uses of Debit Card over Cash. *Journal of Business Ethics, Ethos & CSR*, pp.16-18.http://mbajournals.in/index.php/JoBEC/article/view/267
- 6. Carlos A. Arangoa, Bouhdaouib, Y. Bouniec, D. Eschelbach, M. (2017). Cash Remains Top of Wallet! International Evidence from Payment Diaries. *Journal of Economic Modelling*. <a href="https://doi.org/10.1016/j.econmod.2017.09.002">https://doi.org/10.1016/j.econmod.2017.09.002</a>
- 7. Dnishev,F. Alzhanova, F. (2016). Globalization of Technological Development and Opportunities for Globalization of Technological Development and Opportunities for. *Journal of Asian Finance*, *Economics and Business*, 67-79. https://doi.org/10.13106/jafeb.2016.vol3.no4.67
- 8. Hirschman, E.C., (1979). Differences in Consumer Purchase Behavior by Credit Card Payment System. *Journal of Consumer Research*, pp.58-66.https://www.jstor.org/stable/2488726?seq=1
- 9. Jati, W.R., (2015). Less Cash Society: Menakar The New Mode of Consumerism in Indonesia's Middle Class. *Jurnal Sosioteknologi*, pp.102-12.
- 10. http://dx.doi.org/10.5614%2Fsostek.itbj.2015.14.2.1
- 11. Soman, D., 2001. The Mental Accounting of Sunk Time Costs: Why Times Is Not Like Money. *Journal of Behavioral Decision Making*, pp.169-85.https://doi.org/10.1002/bdm.370
- 12. Nguyen, D, D. Dinh, H,C. Nguyen, D, V. (2020). Promotion of Fintech Application for the Modernization of Banking-Finance System in Vietnam. *Journal of Asian Finance, Economics and Business*, 127-131.https://doi.org/10.13106/jafeb.2020.vol7.no6.127
- 13. O'Brien, S., 2014. Consumer Preferences and the Use of Cash: Evidence from the Diary of Consumer Payments Choice. *Journal of Economic Literature*, pp.2-25.
- 14. Seetharaman, A. Patwa, N. Niranjan, I. Kavuri, S, P. (2016). The Impact of Increased Credit Card Usage on Costs Incurred by Merchant Establishments in Singapore. *Journal of Asian Finance, Economics and Business*, 43-56. <a href="https://doi.org/10.13106/jafeb.2016.vol3.no4.43">https://doi.org/10.13106/jafeb.2016.vol3.no4.43</a>

#### **Books**

1. Jochumzen, P., (2010). Essentials of Macroeconomics. Ventus Publishing ApS.

# **Conference Proceedings**

- 2. Alonso, J. Ganga, H. Belio, J, L. (2018). The Use of Cash and Its Determinants. *BBVA Research*, pp.1-18
- 3. Arango, C., Y.Bouhdaoui., D.Bounie., M.Eschelbach, and L.Hernandez (2013): "Cash Management and Payment Choise: A Simulation Model with International Comparasion", *Working Paper* 2013-53. Bank of Canada
- 4. Bagnall, J. Bounie, D. Huynh, K, P. Kosse, A. Schmidt T, Schuh, S. Stix, H. (2014). Consumer Cash Usage A Cross-Country Comparison with Payment Diary Survey Data. *Working Paper Series*, (1685), pp.1-51.
- 5. Ben S. C. Fung, Huynh, K, P. Sabetti, L. 2012. The Impact of Retail Payment Innovations on Cash Usage. *Working Paper* 2012-65. Bank of Canada.
- 6. Kresnawati, E. Wahib, A, B. Pertiwi, R. R (2018). Effect of Payment Methods on Shopping Behavior and Consumer Donations: Testers of Mental Accounting Theory with Experimental Design in Pre-

Application of the National Non-Cash Movement in Islamic Boarding Schools. In *Seminar Nasional dan The 5th Call for Syariah Paper Universitas Muhammadiyah Surakarta.*, 2018.

#### **Internet Resources**

- 7. Ceeney, N., (2019). *Access To Cash Review* <a href="https://www.accesstocash.org.uk/media/1087/final-report-final-web.pdf">https://www.accesstocash.org.uk/media/1087/final-report-final-web.pdf</a>
- 8. Databoks, 2018. Katadata.co.id <a href="https://databoks.katadata.co.id/datapublish/2018/06/01/berapa-uang-yang-beredar-indonesia#">https://databoks.katadata.co.id/datapublish/2018/06/01/berapa-uang-yang-beredar-indonesia#</a>
- 9. Eschelbach, M., And T. Schmidt (2013): "Precautionary Motives in Short-Term Cash Management: Evidence from German POS Transactions," *Discussion Papers* 38/2013, Deutsche Bundesbank, Research Centre <a href="https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2796927">https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2796927</a>
- 10. Schmidt, T., 2016.Cash payments more popular in Germany than in Other Countries. *1st Edition*, February. <a href="https://www.bundesbank.de/resource/blob/765692/668ae4049b3b8403cf57bd424b244c81/mL/2016-01-research-brief-data.pdf">https://www.bundesbank.de/resource/blob/765692/668ae4049b3b8403cf57bd424b244c81/mL/2016-01-research-brief-data.pdf</a>
- 11. Rosano, J. (2018). World Cash Report, *G4S Global Cash Solutions*. https://cashessentials.org/app/uploads/2018/07/2018-world-cash-report.pdf
- 12. Global Consumer Insights Survey 2019 https://www.digitalmarketingcommunity.com/researches/global-consumer-insights-survey-2019/