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REDUCING CASH WITHDRAWAL AMONG CARDHOLDERS FOR A CASHLESS SOCIETY

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ABSTRACT

Nowadays, developing a cashless society is the common aim of most countries. This study answers a crucial but mostly neglected question regarding determinants of debit cardholders' intention to withdraw cash. Upon the adaption of transaction cost economics theory, this study examines cash withdrawal as a switching decision from using a debit card with money transferring services provided by banks to withdraw and use cash for payment transactions on one's own. This study used both in-depth interview and qualitative method to develop measurement scales and hypotheses and quantitative survey on 379 Vietnamese debit cardholders to assess the model. The results indicated that cash withdrawal can be significantly discouraged by reducing perceived adaptation costs related to debit card usage and enhancing the perceived usefulness of debit cards. The study findings not only suggest valuable practical implication for banks and policymakers in heavily cash-based countries but also open up a new research stream regarding the switching decision between different governance modes as an expansion of transaction cost economics theory.

Keywords: *Debit card, Cashless society, Cash withdrawal, Transaction cost, Perceived usefulness.*

INTRODUCTION

Debit card also referred to as plastic money, is one of the most important achievements of banks in modernizing the payment system and develop cashless economies. Although credit card is also another form of plastic money, debit card is more widely used in most countries, especially developing economies (Patil, 2014; Sultana & Hasan, 2016; Fiin Group, 2017; Charles & Simolini, 2018). In practice, a debit card is also called "pay now" card since it requires the cardholders to deposit some money in their accounts before making payments (Foscht *et al.*, 2010). As a substitute to cash, the penetration of debit card in the economy has long been advocated by most governments due to its crucial contribution in facilitating payment process, thereby, fostering more economic activities and creating more jobs (Daniel *et al.*, 2004). Moreover, the popularity of debit card helps governments save costs and time related to printing and controlling cash while supporting commercial banks in calling for short-term deposits (Ramola *et al.*, 2017).

Although debit card has been increasingly popular thanks to the efforts of governments and banks in accelerating debit card penetration as a part of financial inclusion schemes, many

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countries are still heavily cash-based. One of the reasons is that cardholders always have choices to withdraw cash at any time from their debit card accounts. Cash withdrawal, a usual practice among debit card holders, is directly slowing down the journey to cashless economy and hindering the potential benefits of debit card in many countries. Given the crucial role and increasing popularity of debit card in the economy, there is another issue need to be addressed regarding "How to reduce cash withdrawal once customers have already opened debit cards?"

The literature regarding the usage of debit card in particular and plastic money reveals some researches, which have investigated the customer willingness determinants to use plastic cards (Hanudin, 2012; Khare *et al.*, 2012; Ali *et al.*, 2017; Kissi *et al.*, 2017; Charles & Simolini, 2018; Oanh & Cassidy, 2018). Switching behavior and customer loyalty to service providers have also been widely examined (Bansal & Taylor, 1999; Jones *et al.*, 2002; Bansal *et al.*, 2004; Edward & Sahadev, 2011; Zaki *et al.*, 2020). However, cash withdrawal is somewhat a different behavior since a customer may withdraw cash and use debit card for making payment at the same time. In addition, although they withdraw cash, they may still be loyal to their current debit card issuing banks and even if they switch to use debit cards issued by other banks, they still withdraw cash. To our knowledge, few studies, have investigated determinants of customer intention to withdraw cash that leaves an interesting knowledge gap to this research to explore.

The present study takes the transaction cost (TC) economics perspective proposed by Williamson (1981) in evaluating customer choices over using debit card or for financial management and cash making payment. Although this theory has been frequently considered to explain organizational choice between "make" (production of a specific service or goods in-house) or "buy" (purchasing the service or goods in the marketplace) (Williamson, 1981; Walker & Weber, 1984), its adaptation in explaining consumer behaviour is well-documented in the literature (Grønhaug & Gilly, 1991; Cannon & Schwaiger, 2005; Teo & Yu, 2005; Yeh *et al.*, 2012; Cannon *et al.*, 2014). Specifically, consumers, like firms, also face questions regarding "should I do or make something myself?" that is similar to the "make" governance or "should I purchase goods or services from suppliers which offer the same value or utility" that is parallel to the "buy" governance (Grønhaug & Gilly, 1991). Similar to firms, customers also seek to maximize utilities within their limited resources (i.e. time, effort, money) by minimizing costs (Zaltman & Wallendorf, 1983). Accordingly, when facing such "make" or "buy" decisions, consumers also tend to act in a way that minimizes TCs (Grønhaug & Gilly, 1991). In this research context, an individual customer even after opened a debit card, always face the choice of whether using debit card services provided by banks (i.e. similar to the "buy" decision or market governance mode) or withdrawing cash and processing payment transactions on his or her own (i.e. similar to the "make" decision or hierarchical governance mode). Therefore, cash withdrawal can be examined as a customer's switching behavior from the market governance to hierarchical governance mode, in other words, from "buy" to "make" decision. However, since the TC economics theory only explains the customer choice over "make" or "buy" instead of their switching from "make" to "buy" and vice versa, besides the theoretical underpinnings of TC perspective, this study firstly employed in-depth interviews with thirty Vietnamese debit card holders to evaluate the costs related to switching from debit card usage to cash withdrawal and management. Findings from the in-depth interviews were then used to develop the conceptual model and hypotheses as well as measurement scales adapted for this study. The proposed model was then tested upon a quantitative survey with 312 Vietnamese cardholders.

In recent years, thanks to Vietnamese government and commercial banks' great efforts to foster debit card penetration, especially their collaboration with both private and state-own organizations to open debit card accounts for employees to receive salaries, the debit card number in the economy has rapidly increased. However, debit cards in Vietnam are mostly utilized for the withdrawal of cash (Euromonitor International, 2018). As a result, 46 % of citizens who live in urban regions still use cash for all transactions (FT Confidential Research, 2019), while since 2017, debit card penetration rate among Vietnamese people living in urban areas has reached 90% (Fiin Group, 2017).

Although debit card is not a really modern means of making payment, given the popularity of debit card that co-exists with strong cash culture especially in developing economies like Vietnam, how to reduce cash withdrawal remains an important research question. This paper has both theoretical and practical contributions in several ways. Firstly, the study filled the research gap regarding cash withdrawal behavior. Secondly, it expanded the TC economics theory by studying the factors affecting customers' intention to switch from "buy" to "make" governance mode in individual debit card usage that may open up new interesting perspectives and directions for future research. Thirdly, the findings of this study will supports governments and commercial banks to design effective strategies to reduce cash withdrawal, thereby, accelerating the journey to cashless economies.

Literature Review

Conceptual Framework

Human exchange has long been positioned as the core of marketing discipline (Bagozzi, 1975). Further, transaction enables the division of labor and specialization which form fundamental basis of economic wealth. The classic economic theory posits that when information is symmetric, the market works perfectly, and accordingly, transactions will occur without cost. However, information asymmetry is widely affirmed as an important market failure in practice. Therefore, in securing a favorable deal, market players should search for information, and search costs incur. Moreover, a transaction involves an agreement between the "buyer" and the "seller" regarding the object to be transacted between them as well as their contractual obligations and rights. However, such contract is usually incomplete because of disturbances that can occur with uncertainty as well as difficulties in contractual performance measurement (Klein, 1980). Resolving problems arising from these disturbances requires not only cooperation between the seller and the buyer but also the adaptation of each party, therefore, is costly (Williamson, 1981).

Although these TCs are not reflected in the product prices, given the significance of TCs, the TC economics theory was developed to explain the impact of these costs on organizational and individual decision making and gained widespread interest among scholars and practitioners (Williamson, 1975). This theory has "transaction" as its unit of analysis and was developed based on two primary assumptions regarding "possibility of opportunism" and "bounded rationality" of actors in a transaction. Although they aim to maximize economic utility, due to limited cognitive processing memories and capabilities, they cannot properly absorb and process all information for accurate understanding and perfect anticipation of the related implications and consequences (Williamson, 1981). So, their decisions are not always really rational as

intended. Second, it is always likely that actors in a transaction are not entirely honest; instead, they may take advantage of unexpected disturbances for self-interest while letting the counterparty down (Williamson, 1981). The core proposition of the theory of TC economics is that actors in a transaction always seek the maximum profit. Accordingly, they seek to minimize TCs. In some circumstances, TCs may be lower when actors internalize the transaction and do it by themselves, while in other conditions, TCs can be saved if the transaction takes place in an open market. The choice between "buy" or "make", therefore, depends on the actors' perception of the magnitude of TCs involved.

Rooted in law, economics and organization theory, the TC economics perspective has been widely used to explain organizational behavior and decision making (Russo, 1992; John & Weitz, 1998), relationship marketing (Rokkan *et al.*, 2003; Velavan & Natarajan, 2020) and supplier-buyer collaboration (Sriram *et al.*, 1992). Similar to organizations, individuals also rationally maximize economic utility through economizing their scarce resources (Zaltman & Wallendorf, 1983). Some previous studies have adopted the TC economics theory to explain consumer behavior when they face the recurring make-or-buy decisions regarding whether a transaction should be handled internally or through markets (Parkhe, 1993; Benjamin & Wigand, 1995; Liang & Huang, 1998; Teo & Yu, 2005). Regarding the choice between use debit card or withdraw cash to make payment, while "using debit card" is similar to "market" governance, "holding and using cash for making payment on one's own" is parallel to "hierarchical" one. Accordingly, cash withdrawal can be viewed as a behavior of switching governance modes from "market" to "hierarchical" mode.

Since the TC economics theory only mentions the choice over "make" or "buy" instead of fully explaining determinants that make an actor who use "market" government decide to switch to "hierarchical" one, we performed in-depth interviews with thirty Vietnamese debit cardholders to study the determinants of such switching intention. Data collected were merged and conceptualized with the TC economics theory as well as the literature in switching behavior to formulate hypotheses and design measurement scales for the variables used in the conceptual model. The attributes were the most significant factors that affect directly cardholder's intention to withdraw cash.

Hypothesis Development

Perceived TCs and Intention to Withdraw Cash

During the in-depth interviews, when asking "Are you willing to use debit card instead of cash for all payment transactions?", most respondents showed their hesitance to solely rely on debit card, instead, they frequently withdraw cash for some reasons. Their reasons for their cash withdrawal included effort and time they must spend to check the security before conducting transactions through debit cards and accuracy of transactions after the transactions were done while if using cash they paid directly and felt more controllable over the whole payment transaction process. In addition, during their debit card usage, there may be many unexpected problems arising such as debit cards are unusable, lost, or not accepted at purchase points; history of transactions may be recorded wrongly or the transactions are mistakenly processed due to faults of either the bank or the card holder. Accordingly, these raise adaptation costs which can be mitigated by using cash.

Switching governance mode can also be viewed as making a new decision over the "old" and "new" one, therefore, the higher cardholders perceive towards TCs associated with the use of debit card, the higher probability that the cardholders will withdraw cash. According to the TC economics theory, consumers will favor governance modes that economize on perceived TCs (Wigand, 1996; Jana & Mondal, 2020). Therefore, switching to a new governance mode, which incurs less TCs is also a way to economize scarce resources and achieve higher utility. According to the above discussion, we hypothesize that:

H1: Perceived monitoring costs related to debit card usage positively affect cardholders' intention to withdraw cash

H2: Perceived adaption costs related to debit card usage positively affect cardholders' intention to withdraw cash

Perceived Usefulness of Debit Card Usage and Intention to Withdraw Cash

Literature has revealed a range of costs faced by consumers when switching providers in which benefit-loss costs or costs relating to the benefits foregone switching to a new supplier contribute significantly to switching costs which in turn, discourage switching intention (Duijmelinck *et al.*, 2015). According to Dyer (1997), each governance mode may result in different transaction values.

During the in-depth interviews, when asking "Are you willing to withdraw all money in the debit card account?", some respondents expressed their regrets about benefits they may receive from debit card usage. For example, debit card is perceived useful when they make payment transactions of a huge amount of money and help them save time when the payment receiver is located far away. Accordingly, they are hesitant to switch totally to cash usage. The following hypothesis is, therefore, proposed:

H3: Perceived usefulness of debit card usage negatively affects cardholders' intention to withdraw cash

Transaction Cost Associated with Cash Withdrawal and Intention to Withdraw Cash

Switching is a transaction with specific costs involved. According to Duijmelinck *et al.* (2015), TC relates to the time and effort involved in switching service provider is a crucial component of switching costs, thereby, negatively affects switching intention. When facing the question that "For those who are not willing to withdraw all cash in your debit card account at once, do you withdraw money whenever you want to make payment", some respondents mentioned their hassle experience associated with time and effort spent for traveling, finding and queuing at ATM points when they withdraw cash. In addition, the banking charge for each withdrawing transaction is another factor that discourages their intention to withdraw cash with high frequency. According to the above discussion, we hypothesize that:

H4: Transaction cost associated with cash withdrawal negatively affects cardholders' intention to withdraw cash

The conceptual model is, therefore, proposed as in **Figure 1**.

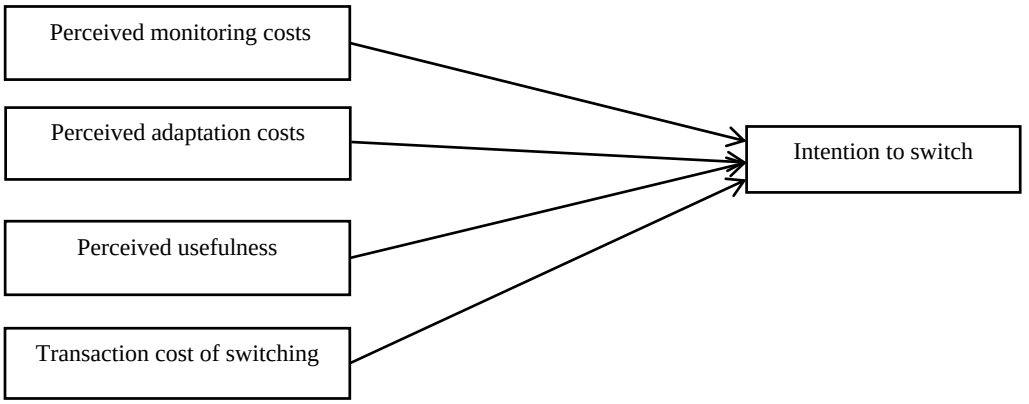

Figure 1. Proposed research model (Model 1)

MATERIALS AND METHODS

This research used both quantitative and qualitative methods to answer the research questions. In-depth interviews with Vietnamese cardholders were first performed to investigate the factors affecting cash withdrawal intention, as well as the detailed dimensions of each construct that served the development of measurement scales and hypotheses. The conceptual model was then tested based on quantitative data collected from a survey. The research, therefore, consists of two phases as below:

Phase 1

The qualitative research using in-depth interview method was conducted with thirty Vietnamese debit cardholders in April 2019 to investigate the determinants of their intentions to withdraw cash and possible items in the measurement scales of each factor. Each interview lasted 30min and date was hand-noted upon the interviewees' permission. Findings served the development of hypotheses and conceptual model as well as the adaptation and development of measurement scales for each construct used in the conceptual model.

Phase 2

A quantitative survey was designed to assess the proposed model. Perceived usefulness of debit card was measured with 4 items adapted from Ozturk (2016). TC of switching or costs of the cash withdrawal transaction was scored with 3 items adapted from Jones *et al.* (2000). Since this study regards cash withdrawal as a switching behavior, the measurement scale of cash withdrawal intention was adapted from that of switching intention proposed by Bansal and Taylor (2002). The measurement scales for the two constructs in this study were mostly developed by the authors based on the results from the in-depth interview research and the scale development procedure suggested by Robert (1991). Based on the concepts of adaptation costs and monitoring costs, the authors prepared an appropriate interview question that "Do you encounter any troubles, annoyance, or difficulties during the use of debit card? Please share your experience", which helped explore the detailed measurement items of the constructs. The response format to measure all variables was based on a 5-point Likert scale.

The questionnaire was in Vietnamese and pretested with twenty Vietnamese debit cardholders

to check the questionnaire's comprehension; ease of answering; easy-to-understand phraseology and language; and Length and practicality of the survey (Hague *et al.*, 2004). Data were collected through a paper-based questionnaire during May of 2019. The survey was implemented in Hanoi where most commercial banks in Vietnam are located. Data were collected face-to-face with debit cardholders at 36 ATM points that were randomly selected from lists of ATM points. The intercept survey yielded 379 usable responses of which 63.9% were filled by females. As shown in **Table 2**, Most respondents aged 23-40 (78.6%). Regarding education level, most respondents had Bachelor's or Master's degrees (73.6%). Income-wise, the majority were earning >VND 10 million/month (65.7%).

Structural equation modeling (SEM) was used to assess the hypothesized model. Before that, the measurement scales of each construct were assessed using Anderson and Gerbing's (1988) method. To test the significance and estimate the path coefficients for hypothesized relationships, AMOS 22 was used for SEM analysis.

Table 1. Variable measurement

Construct		Variable codes and items	Sources
Perceived monitoring costs (PMC)	PMC1	I spend lots of effort to make sure about security during banking transactions via debit cards	Self-designed
	PMC2	I spend lots of effort and time checking to see if my banking transactions are properly recorded	
	PMC3	I spend lots of effort and time checking to see if my banking transactions are properly processed	
Perceived adaption costs (PAC)	PAC1	I spend lots of effort and time dealing with the problems that arose when my debit card is lost	Self-designed
	PAC2	I spend lots of effort and time dealing with problems that arose when banking transactions are mistaken	
	PAC3	I spend lots of effort and time dealing with problems that arose when banking transactions can't be processed when required	
	PAC4	I spend lots of effort and time dealing with problems that arose when my banking transactions are recorded incorrectly	
	PAC5	I spend lots of effort and time dealing with problems that arose when my debit card information is stolen	
Perceived usefulness (PU)	PU1	I believe payment transactions and financial management would be difficult to perform without debit cards	Ozturk (2016)
	PU2	I believe using debit cards saves me time	
	PU3	I believe using debit card enhance the effectiveness of payment transactions and financial management	
	PU4	Overall I find the debit card is useful	
TC of switching	TCS1	In general, it would be a hassle withdrawing money from debit card account	Jones *et al.* (2000)
	TCS2	It would take a lot of effort and time withdrawing money from debit card account	
	TCS3	For me, the cost in time, money, and effort to withdraw money from debit card account is high	
	SWI1	I am likely to withdraw money from my debit card account	

Switching intention (SWI)	SWI2	Probability of me withdrawing money from my debit card account is high	Bansal and Taylor (2002)
	SWI3	I will certainly withdraw money from my debit card account	

Basic information of sample size is presented in **Table 2**, below:

Table 2. Sample Descriptions

Indicators	Segment	f	%
Gender	Male	137	36.1
	Female	242	63.9
Age range	18 - 22	17	4.5
	23 - 30	127	33.5
	31 - 40	171	45.1
	41 - 50	51	13.5
	>50	13	3.4
Education	Primary & Secondary	7	2.9
	Tertiary	48	12.7
	Bachelor	166	43.8
	Master	135	35.6
	Doctoral	23	6.1

RESULTS AND DISCUSSION

Findings from the in-Depth Interview

In-depth interviews with thirty Vietnamese debit cardholders were performed in which respondents were asked about their frequency of cash withdrawal and reasons underlying this behavior. Some respondents mentioned the aspects of perceived adaptation costs and perceived monitoring costs related to debit card usage that motivated them to use cash for daily transactions as featured in the TC economics perspectives.

However, when the respondents faced the question regarding their willingness to withdraw all money in the debit card accounts and use only cash for all money transactions, they show their hesitance due to perceived usefulness of debit card and TCs of switching from plastic money to cash.

Based on the respondents' answers during the in-depth interview, the most important factors that directly affect cardholder's intention to withdraw cash including perceived monitoring costs and perceived adaptation costs related to debit card usage as well as perceived usefulness of debit card and TCs of switching from plastic money to cash.

Further questions identified dimensions of perceived adaptation costs and perceived monitoring costs, which support the development of detailed measurement items for these two constructs. Specifically, when being asked "Do you encounter any troubles, annoyance, or difficulties during your usage of debit card? Please share your experience", respondents shared many arguments and stories regarding time and effort that they had to spend when they either monitor the banks' debit card service performance such as checking to make sure about the security during banking transactions via debit cards and checking whether banking transactions are processed and recorded correctly or resolve issues arising during debit card usage. All of these

data were used to design a pool of measurement items, which were then subject to face validity checked by experts in bank marketing and pretest with Vietnamese debit cardholders following the scale development procedure of Robert (1991).

Findings from the Survey

Assessment of the Measurement Scales

Before testing the conceptual model, the convergent and discriminant reliability and validity of the measurement scales, and the proposed model's fit with the data were evaluated according to Churchill (1979) and Anderson and Gerbing (1988). We performed confirmatory factor analysis to examine the convergent validity of measurement items used for each latent variable **(Table 3)**. All factor loadings were statistically significant. Thus, all measurement scale items of the 5 variables were retained for further exploratory factor analysis with principal factor as extraction method followed by a varimax rotation. The results demonstrated 5 factors subjected to how these constructs were measured initially. Therefore, the unidimensionality and the construct validity of the measurement scales of the 5 latent variables were confirmed (Straub, 1989).

Moreover, the model showed a rationally good fit with the data.

Table 3. Confirmatory Factor Analysis Results

Codes	Mean	Standard deviation	Factor loading	t-value
PMC				
PMC 1	3.60	0.70	0.672	9.519
PMC 2	3.27	0.71	0.610	9.009
PMC 3	3.69	0.72	0.687	-
PAC				
PAC 1	3.30	0.78	0.727	15.209
PAC 2	3.31	0.79	0.788	16.871
PAC3	3.16	0.83	0.780	16.647
PAC4	3.24	0.82	0.877	19.335
PAC5	3.26	0.80	0.807	-
PU				
PU1	3.23	0.80	0.646	11.995
PU2	3.13	0.84	0.612	11.361
PU3	3.43	0.79	0.738	-
PU4	3.28	0.79	0.908	15.318
TCS				
TCS1	3.78	0.75	0.537	8.646
TCS2	3.30	0.83	0.822	9.884
TCS3	3.16	0.84	0.685	-
SWI				
SWI1	3.60	0.70	0.496	_____
SWI2	3.27	0.71	0.893	7.230
SWI3	3.69	0.72	0.609	7.984

Model fit indicators: CMIN/df = 2.435; p=.000; RMR=0.031; GFI=0.922; CFI = 0.932; AGFI= 0.893; RMSEA=0.062; PCLOSE=0.015; "-" denotes loading fixed to 1.

Source: Estimated by authors.

Table 4. Mean variance extracted, interconstruct correlation, and reliability

	PMC	PAC	PU	TCS	SWI	Reliability
PMC	AVE=0.526					0.693
PAC	0.168	AVE=0.693				0.896
PU	0.291	0.068	AVE=0.590			0.807
TCS	0.244	0.065	0.141	AVE=0.587		0.708
SWI	0.039	0.104	0.00016	0.013	AVE=0.598	0.693

Source: Estimated by authors.

According to **Table 4**, the Cronbach's alpha coefficients for all of the constructs were either just higher than or below 0.7, so, their reliability was acceptable. Moreover, as according to **Table 5**, the Average Variance Extracted (AVE) value for each construct was >0.5 while all AVE values are higher than the square of correlations between the 2 constructs. So, the discriminant and convergent validity of the constructs was confirmed (Fornell & Larcker, 1981; Anderson & Gerbing, 1988).

We retained all measurement items for each construct to test the hypothesis **(Table 1)**.

Hypothesis Testing

To test the hypothesized relationships between latent variables in the proposed model **(Figure 1)**, the path analysis of Oh (1999) was used in AMOS 22 and indicated that the proposed model had a reasonably good fit to the data.

Table 4 demonstrates the path coefficients of hypothesized relationships in the proposed model. Among the paths to intention to switch, perceived adaptation costs associated with debit card usage significantly and positively affect cash withdrawal intention while a significantly negative relationship between perceived usefulness of debit card and intention to withdraw money was found (supporting H2 and H3). But, neither perceived monitoring costs nor TCs of cash withdrawal significantly affected intention to withdraw cash (rejecting H1 and H4).

Table 5. Path coefficients

Construct path	Path coefficients
PMC to SWI	0.106
PAC to SWI	0.155**
PU to SWI	-0.097*
TCS to SWI	-0.015
Fit indices	
CMIN/df	2.435
CFI	0.932
GFI	0.922
AGFI	0.893
RMR	0.031
RMSEA	0.062
PCLOSE	0.015

Note: *p < 0.05; **p < 0.001

Source: Estimated by authors.

This research provided an insight into cash withdrawal as a switching behavior in which a cardholder switches his/her financial governance mode from using a debit card with associated banking services to withdrawing cash for managing money and doing payment transaction on their own. Debit card usage can be regarded as a transaction between a debit card user or the buyer and the debit card issuing bank or the seller. Even though the cardholder has such plastic money in hand, s/he always faces choice over using debit card or withdrawing cash and these choices can be regarded as the "make" or "buy" decision. However, the TC economics perspective only explains the decision making between "make" or "buy" based on perceptions of TCs involved when the actor has not made a decision yet.

The findings reveal that among TCs associated with debit card usage, only perceived adaption costs significantly enhance the intention to switch from using a debit card to holding and using cash by cash withdrawal. These perceived adaption costs include time and effort that the cardholder needs to spend to deal with problems that arise when the debit card is lost; banking transactions are mistaken, recorded wrongly, or cannot be processed when s/he needs or debit card information is stolen. Moreover, perceived usefulness negatively affects intention to withdraw cash. For those who value the usefulness of debit cards, they tend to favor using a debit card rather than cash.

Although the interview research revealed the potential effects of perceived monitoring costs and TCs of cash withdrawal on intention to withdraw cash, such relationships were found insignificant according to the survey's results.

CONCLUSION

This study suggested that to discourage cash withdrawal, measures aiming at lowering perceived adaptation costs related debit card usage as well as enhancing perceived usefulness of debit cards should be taken. Perceived adaptation costs can be reduced in two ways: mitigating the possibility of disturbances and enhancing the efficiency in resolving problems arising from such disturbances. The banking procedures in resolving disturbances during debit card usage should be simplified so as to facilitate faster and more efficient cooperation between the bank and the cardholder in resolving unexpected problems. Moreover, banks should adopt new technological advances to raise the accuracy and security of debit card transaction either on the internet or at ATM points. Nowadays, the risk of payment insecurity and losing debit cards can also be mitigated by using QR code or devices, including smartphones and other mobile devices, for contactless payment.

This study has a notable theoretical contribution in the research stream of switching behavior and transaction economics perspective. By using debit card or cash as a choice over "make" or "buy", this study has investigated the mechanism underlying the switching intention from "market" to "hierarchical" governance mode. In more detail, besides TCs, new variables such as benefit-loss costs and TCs of switching are also added to explain such switching intention.

This research had some limitations. First, although we utilized a proper sampling method with adequate sample representation, a larger sample size with a more diverse demographic background and experience in using debit cards may help draw more insightful implications. Future researches can further test this model in a new setting where the development of the banking industry and the cashless economy are at different stages. Moderators and mediators in

the relationship between each determinant and intention to withdraw cash can be also further explored. Moreover, this study also suggests a new research stream regarding the decision to switch from one governance mode to other which can be explored and further tested in different research settings of both individual customer and organizational behaviors.

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