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Chattopadhyay, Subho; Gulati, Payal; Bose, Indranil

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Awareness and participation of small retail businesses in cashless transactions : an empirical study

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#### Kontakt/Contact

ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics Düsternbrooker Weg 120 24105 Kiel (Germany) E-Mail: rights[at]zbw.eu https://www.zbw.eu/

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## Awareness and Participation of Small Retail Businesses in Cashless Transactions: An Empirical Study

#### Subho CHATTOPADHYAY

Lal Bahadur Shastri Institute of Management and Technology 29 Theatre Road, Cantonment, Bareilly(U.P.)-243001, IN subhochatterjee123@rediffmail.com

#### **Payal GULATI**

Lal Bahadur Shastri College of Higher Education C/O. Lal Bahadur Shastri Institute of Management & Technology 29 Theatre Road, Cantonment, Bareilly(U.P.)-243001, IN pygulati@gmail.com

#### **Indranil BOSE**

University of Bolton, Academic Centre. Ras Al Khaimah Al-Hudaiba Bareraat, Opposite HCT Mens' College Adjacent to American University of Ras Al Khaimah, UAE sentindranil@gmail.com

Abstract. The ambitious drive of the Government of India to transform the Indian economy from a cash based economy to a cashless economy was contingent in a big way on the people's acceptance of cashless modes of transactions, adaptability to cashless transactions and change in the transaction behavior of consumers and retailers, besides several other factors. As the small retailers form the bulk of the Indian retail sector, their ability to go cashless, their psychological preparedness and their willingness to adopt cashless transactions become an issue of prime importance in the movement towards cashless. The present study was conducted to assess the awareness of the small retailers regarding the cashless transaction and its modes, to understand their apprehensions and perceived convenience in dealing with a cashless system of the transaction and to measure their extent of participation in cashless transactions. The study was conducted in Bareilly, an important city in the state of Uttar Pradesh, with a population of around ten lakhs. Data for the study was obtained from 117 retailers using a structured questionnaire. The study found that though a significant number of small retailers were aware of the possibility of the cashless transaction and its modes, their frequency of engaging in cashless transactions was abysmally less as compared to that of cash based transactions. They were found to believe that dealing with cash was easier in comparison to handling cashless transactions. Fear of losing money due to the faulty transaction was found to be a major deterrent in going cashless amongst the small retailers surveyed during the study.

**Keywords:** small retailers; demonetization; cashless; less cash economy; transaction modes.

 $Awareness\ and\ Participation\ of\ Small\ Retail\ Businesses\ in\ Cashless\ Transactions:\ An\ Empirical\ Study$ 

#### Introduction

The news of demonetization of Rs 500 and Rs 1000 notes sent a wave of chaos and confusion across the nation. The main objective of the drive was to curb black money, fight against corruption and curtail the movement of counterfeit notes in and across the country. The sudden scrapping of 86% of the currency hobbled up the whole economy and spewed serpentine queues around the banks.

This radical drive also caused a temporary cash crunch in the economy and posed a big challenge before the RBI to replenish the demonetized currency. It also posed a challenge for the center to think and fabricate an alternative method of payment for individuals, companies, and businessmen both big and small, who were reeling under the shock of demonetization. Thus, the idea of cashless and less cash economy, which is a resonating phenomenon in the developed economies, started proliferating and gaining momentum in the country also. However, as against the developed markets where only 22%-25% of the reliance is on cash, there is nearly 78% of the reliance on cash transactions in the emerging market of India (Figure 1).

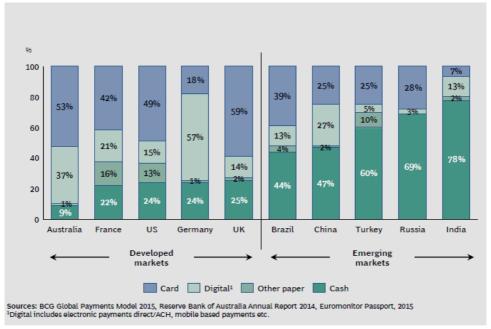


Figure 1. Cash based payments as against cashless payments: a global view

The severe shortage of currency and the government's urge to refrain from cash based transactions created a crisis situation. This unprecedented situation at the macro level called for an urgent and immediate change of habit amongst every unit and element of the economy from cash based transactions to cashless ones. This major transformation at such an enormous scale was not an ordinary target by any standards. The attitudinal and psychological reorientation of the small retailers, merchant and service providers towards the modes of the transaction would be a

major factor that would contribute to and determine the success of the idea of the cashless economy.

As these small sellers and service providers constitute the key elements and form the bulk of the unorganized sector, their ability to go cashless, their psychological preparedness and their willingness to adopt to cashless transactions becomes an issue of prime importance in the movement towards cashless. An attempt has been made to examine and assess the willingness to adopt cashless and their openness to adapt to the new system.

#### Literature review

Demonetization of the big denomination currency bills have been one of the most talked about and fiercely debated issues in India in the recent months. It has been a significant development in India's recent history, which had an immediate and widespread impact on the economy, the market and the lives of the people and may continue to have some short term and long term repercussions. Anchor and Robert (2013) while citing the case of Nigeria, argue that the policy of demonetization helps in reducing cash-related robberies, corruption, and other such fraudulent practices. This thought is further supported by Gajjar (2016) who opines that the main reason behind the generation of black money is corruption.

Notwithstanding the virtues, merits and the claimed benefits, demonetization inflicted a severe jolt to the day to day life of the common man as it caused a sudden crunch of cash in the market by sucking out 86% of the total currency in circulation (Arun & Punj, 2016). The total value of Rs. 500 and Rs. 1000 currency notes in circulation, removed during demonetization, was 16.42 lakh crore (Reserve Bank of India, 2016). Arun and Punj (2016) further mention that while the idea of a cashless or less cash society is appealing, given that it would help bring more money into the banking system and, as a result, creating better tax compliance and possibly lower corruption, the challenges of implementation are huge. Arun and Punj (2016), mention that the enormity of the difficulty posed by this severe shortage of cash can be appreciated by taking a look at the fact that 92% of the \$800 billion worth of annual retail purchases in India are made in cash. Even while making online purchases, 68 percent of the customers use cash as a medium of payment (Shah, Eisenkraft, Bettman, & Chartrand, 2016). Thus a large percentage of the population in India is still habituated to cash. Further complicating the situation is the fact that in the informal sector, which accounts for 80 percent of all jobs, 85 percent of the workers are paid in cash (Banik & Padalka, 2016).

For developing countries like India, demonetization is not an ordinary challenge because of the low penetration of the cashless instruments. To facilitate the transformation from cash based economy to the cashless economy; certain bottlenecks need to be cleared first. The availability of public infrastructure in terms of bandwidth, connectivity and the penetration and performance of smart phones need to be drastically improved (Anand, 2016). According to Arun and Punj (2016), India's average number of card transactions per capita, at 6.7, is among the lowest in

 $Awareness\ and\ Participation\ of\ Small\ Retail\ Businesses\ in\ Cashless\ Transactions:\ An\ Empirical\ Study$ 

the world (it is 249.3 in Australia, 54.8 in Brazil and 14.4 in China). The study attributes the low usage of credit and debit cards to the look and feels of cash, its anonymity, instant clearing and universal acceptance. Chahal, Sahi, and Rani (2014) mention that time risk appeared to be the strongest moderator as far as the use of credit cards is concerned. However, amongst those who exhibit a favorable disposition towards the use of credit cards, a sense of security and confidence benefits emerged as the strongest predictors of usage and service experience, respectively. Another bigger challenge pointed out by Arun and Punj (2016) in their study is the limited number and poor penetration of PoS machines. Citing the figures published by The Reserve Bank of India, the study points out that in August 2016 there were only 1.46 million PoS machines compared to 712.6 million debit cards in circulation and 26.3 million credit cards. The figure indicates 'POS' penetration of mere 0.12 percent which is abysmally low by any standards. However, the demonetization drive seems to have given some fillip to the phenomenon of cashless transactions. Banik and Padalka (2016) point out that the download of Paytm, a popular e-wallet, has tripled within a period of three weeks whereas previous attempts by the Government and The Reserve Bank of India to promote the use of ewallets were met with limited success.

Another limiting factor in the expansion of cashless transaction and digital payment is the poor penetration and popularity of mobile internet banking amongst the masses. Mobile internet banking, while increasing at a rapid pace, is still at a low level of less than 20 per cent of the overall mobile subscriber base (Anand, 2016).

There seems to be a generally lackadaisical and reluctant attitude towards going digital amongst the Indian consumers and merchants. Shah et al. (2016) point out that 1 in every 2 non users do not use digital payments because they find it "too complicated" to understand. 1 in 3 non users admits to not knowing how to use the product while 1 in 5 thinks it too complicated to try. The study further states that 87% of merchants who have never tried digital payments feel that digital payment instruments do not offer significant advantages /value benefits over existing methods. They also believe that non-digital methods provide better incentives and given many other options, there does not exist any catalyst to drive adoption of digital payments. Technical issues faced by the merchants and fear of losing money while using instruments of cashless transactions were also cited as barriers to the cashless movement by the study.

Mahajan and Singla (2017) found out that small service providers like vegetable vendors, rickshaw pullers, roadside eateries, local kirana stores, etc. who despite being ubiquitous in the Indian landscape are rapidly losing business to their counterparts in the organized sectors like the cab aggregators and e-commerce service providers as the former are neither digitally enabled nor digitally financially included.

Thus several studies indicate the lack of readiness amongst the small merchants, retailers, service providers as well as amongst the bulk of the masses to be an active part of the digital transformation. No study, however, has been carried out to assess

the prerequisite for this readiness i.e., the awareness regarding the availability and use of different instruments of cashless transactions amongst the small retailers, merchants and service providers. No discussion in literature seems to have taken place about the ease and convenience of using cashless instruments amongst the mentioned community.

#### **Objectives**

The study was conducted with the objective of assessing the awareness of the small retailers regarding the cashless transaction and its modes. As full-fledged participation in a cashless transaction requires not only the availability of facility and infrastructure but also willingness and desire amongst the individuals, an objective which was included in the study was to assess the factors which might prevent a whole hearted participation of the retailers in cashless transactions. The specific objectives of the study were:

- 1. To study the awareness regarding different instruments of the cashless transaction and estimate the frequency of use of these instruments.
- 2. To assess the perceived level of ease and convenience of retailers while using cashless modes of transactions
- 3. To assess the apprehensions of the retailers in switching over to cashless transactions.
- 4. To measure the extent of participation of retailers in a cashless transaction.

#### Methodology

To understand the level of awareness and participation of Small Retail Business in Cashless Transaction, data was collected from small retailers having an annual turnover of less than or equal to Rs. 10 lakh. The study was conducted in Bareilly and a sample of 120 respondents was chosen for the study. Three of the questionnaires were found to be faulty and were rejected. Thus the actual sample size on which the study was conducted was 117. The sampling technique used for selecting the sample elements from the population was Non Probability Sampling. The sampling unit was small retailers. Data was collected from the respondents using a structured questionnaire.

The data needed to assess the awareness of the retailers regarding the possibility of the transaction without using cash and that regarding the availability and use of the various instruments of cashless transactions was gathered using dichotomous questions (*Yes, No*). To judge the extent of use of the various modes of cashless transactions by the respondents, a five-point graphic rating scale (Never, Seldom, Sometimes, Usually, Always) was used. A five point Likert scale was also used to obtain the data needed to understand the comparative degree of use of cashless modes as against that of conventional modes of transactions. To assess the perceived level of ease of retailers while using cashless mode of transactions and that while using cash as a mode of transaction, responses were obtained using a four-point verbal balanced scale. The response related to the convenience of the retailers under

Awareness and Participation of Small Retail Businesses in Cashless Transactions: An Empirical Study

the above mentioned contrasting modes of transactions was obtained using a five-point rating scale. The apprehensions of the retailers, if any, to go cashless was found out using trichotomous questions.

Chi square test was used to assess if the respondents were significantly aware of the different modes of cashless transactions. Chi square was also used to find out if there is any relationship between the turnover of the retailers and their apprehensions of going cashless. One way Anova was used to establish if the frequency of using cashless mode of transaction varies with the turnover of the retailers. To find out if the perceived ease, as well as convenience of undertaking cashless transactions and those of cash based transactions, varies with the turnover, paired sample t-test was used.

#### **Analysis and discussion**

#### Awareness about transacting without cash

The respondents were enquired whether transactions and payments can be done even in the absence of cash. A majority of the respondents (78.6%) answered in the affirmative (Table 1 and 2).

Table 1. Possibility of cashless

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N	Valid	117
Mode		1

Table 2. Cashless is possible (Frequency table)

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		Frequency	Percent	Valid Percent	Cumulative Percent			
Valid	Yes	92	78.6	78.6	78.6			
	No	25	21.4	21.4	100.0			
	Total	117	100.0	100.0				

Table 3. Chi-Square tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.226a	3	.358
Likelihood Ratio	4.971	3	.174
Linear-by-Linear	1.997	1	.158
Association			
N of Valid Cases	117		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 1.71.

'Chi Square Test for Goodness of Fit' was employed to assess if there is any significant statistical difference in the retailers who were aware that cashless transactions are quite possible and those who believed that smooth transaction is not possible without cash (Table 3). The p value of 0.358 obtained in the chi square test indicates

a significant difference between the expected frequency and the observed frequency which implies that a significant number of respondents were aware of the possibility of transacting without cash (Refer Table 3).

#### Awareness about modes of cashless transactions

To check whether the respondents were significantly aware of the different instruments of cashless transactions, dichotomous questions were administered to them. It was found that major percentage of the respondents were aware of instruments like a debit card, credit card, mobile wallets and net banking. However, a big percentage of the retailers were unaware of UPI and banking apps. (Refer table 4 & 5).

Table 4. Awareness about modes of cashless transactions

	Aware about Debit Card	Aware about Credit Card	Aware about Mobile Wallets	Aware about UPI	Aware about Net Banking	Aware about Banking Apps
Valid	117	117	117	117	117	117
Missing	0	0	0	0	0	0
Mode	1	1	1	2	1	2

Table 5. Frequency table for awareness about modes of cashless transactions

	Aware about Debit Card	Aware about Credit Card	Aware about Mobile Wallets	Aware about UPI	Aware about Net Banking	Aware about Banking Apps
Yes	82.1%	69.2%	56.4%	13.7%	59.8%	43.6%
No	17.9%	30.8%	43.6%	86.3%	40.2%	56.4%

Chi square test was conducted to assess if a significant number of respondents were aware or unaware about the different instruments of cashless transactions. As the p values were much less than 0.05 in case of the variables 'Debit Card', 'Credit Card', 'UPI' and 'Net Banking', it indicated that there was a significant difference in the percentage of aware and unaware people for these instruments. Collating the chi square table (Table 6) with the frequency table (Table 5), it was evident the number of people who were aware of a debit card, credit card, and net banking was significantly high than those who were unaware of these instruments. On the other hand, the number of people who were unaware of UPI was significantly more than those who were aware of this instrument.

Awareness and Participation of Small Retail Businesses in Cashless Transactions: An Empirical Study

Table 6. Chi Square test to assess awareness about instruments of cash	less

	Aware about Debit Card	Aware about Credit Card	Aware about Mobile Wallets	Aware about UPI	Aware about Net Banking	Aware about Banking Apps
Chi-square	48.077a	17.308b	1.923a	61.752	4.521a	1.923a
Df	1	1	1	1.000	1	1
Asymp. Sig.	.000	.000	.166	.000	.033	.166

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 58.5.

To assess whether there exists any relationship between the turnover of the retailer and his awareness about the different instruments of cashless transactions, chi square test to check the association of attributes was applied. As the p values were higher than 0.05, the result indicated the absence of any significant relationship between the turnover of the retailers and their awareness about the different instruments of the cashless transaction (Refer Table 7).

Table 7. Chi Square test (Turnover \* Aware about modes of transactions)

	Value	df	Asymp. Sig. (2- sided)
Aware about Debit Card	6.395ª	3	.094
Aware about Credit Card	1.329ª	3	.722
Aware about Mobile Wallets	6.238ª	3	.101
Aware about UPI	2.681a	3	.443
Aware about Net Banking	6.271ª	3	.099
Aware about Banking Apps	4.582ª	3	.205

#### The frequency of using instruments of cashless

To check the frequency of transaction using different cashless instruments responses from the retailers were gathered using a five-point Likert scale (Never, Seldom, Sometimes, Usually, Always). The mean for each of these variables (i.e. each variable indicating an instrument of cashless) was found to lie between 1 & 2, which implies an abysmally low use of these instruments and that of cashless transactions. (Refer Table 8)

b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 39.0.

Vol.6 (2018) no.2, pp.209-225; www.managementdynamics.ro

Table 8. Frequency of using instruments of cashless

		Frequency of using Debit Card	Frequency of using Credit Card	the Mobile	Frequency of using UPI	Frequency of using Net Banking	Frequency of using Banking Apps
N	Valid	117	117	117	117	117	117
	Missing	0	0	0	0	0	0
M	ean	2.43	1.62	1.64	1.07	1.86	1.54

To check if the propensity of using instruments of cashless transactions varies with the turnover of the retailers, one-way Anova was employed. The prerequisite for conducting ANOVA is the fulfillment of the condition of homogeneity which has been checked using Levene Test (See Table 9). The condition of homogeneity of variance was found to be fulfilled in case of the variables 'Frequency of using Mobile Wallet' and 'Frequency of using Net Banking' (Refer Table 9). Thus, the mean for these two variables across different categories (on the basis of turnover) of respondents was compared using one-way Anova (Refer Table 10). For variables not fulfilling the homogeneity of variance condition, the mean of the usage of cashless instruments has been compared using the Robust Test of Equality of Means (See Table 11).

Table 9. Test of homogeneity of variances

Table 9. Test of nomogeneity of variances							
	Levene Statistic	df1	df 2	Sig.			
Frequency of using Debit	3.485	3	113	.018			
Card							
Frequency of using Credit	4.501	3	113	.005			
Card							
Frequency of using Mobile	.356	3	113	.785			
wallet							
Frequency of using UPI	4.014	3	113	.009			
Frequency of using Net	2.512	3	113	.062			
Banking							
Frequency of using	3.919	3	113	.011			
Banking Apps							

Table 10. ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Frequency of	Between Groups	3.870	3	1.290	1.534	.210
using Mobile wallet	Within Groups	95.053	113	.841		
	Total	98.923	116			
Frequency of	Between Groups	6.162	3	2.054	1.491	.221
using Net Banking	Within Groups	155.650	113	1.377		
	Total	161.812	116			

Awareness and Participation of Small Retail Businesses in Cashless Transactions: An Empirical Study

As the p values obtained in case of both the variables, mobile wallets and net banking, are more than 0.05, the results of Anova indicate that there is no difference in the degree of use of mobile wallets and net banking across retailers with different levels of turnover (Refer Table 10).

As indicated in Table 9, the homogeneity of variance condition was violated in case of the variables, 'Frequency of using Debit Card', 'Frequency of using Credit Card', 'Frequency of using UPI', 'Frequency of using Banking Apps'. Thus, to compare the mean of usage of these instruments across the different categories of retailers, Robust Test of Equality of Means had to be employed (Refer Table 11).

Table 11. Robust tests of equality of means

	•	Statistic <sup>a</sup>	df1	df2	Sig.
Frequency of using Debit	Welch	11.224	3	22.033	.000
Card	Brown-Forsythe	6.216	3	32.266	.002
Frequency of using Credit	Welch	1.775	3	19.452	.185
Card	Brown-Forsythe	1.531	3	30.334	.226
Frequency of using UPI	Welch				
	Brown-Forsythe	•		•	•
Frequency of using	Welch	1.493	3	19.136	.248
Banking Apps	Brown-Forsythe	1.470	3	26.471	.245

a. Asymptotically F distributed.

The results of Welch Test and Brown-Forsythe Test indicate that the frequency of usage across categories is significantly different in case of the use of debit cards (the p values obtained from Welch Test and Brown-Forsythe Test were 0.000 and 0.002 respectively). The tests also indicated that no significant difference exists across categories as far as the usage of the other instruments namely credit cards and banking apps are concerned.

The Post Hoc Test for the usage of debit cards exhibit that there is a significant difference in the frequency of use of debit card between the retailers with a turnover of Rs 2 lakhs and those with a turnover between 7 lakh to 10 lakh, with the latter showing a much greater tendency to use debit card in their transactions (Refer table 12).

b. Robust tests of equality of means cannot be performed for Frequency of using UPI because at least one group has 0 variance.

Table 12. Frequency of using debit card

	Turnover		Subset for alpha = 0.05		
		N	1	2	
Tukey HSDa,b	Upto 2 lakh	56	2.04		
	Betwen 2 lakh to 5 lakh	44	2.57		
	Between 5 lakh to 7 lakh	8	2.75	2.75	
	Between 7 lakh to 10 lakh	9		3.89	
	Sig.		.469	.100	
Waller-Duncan <sup>a,b,c</sup>	Upto 2 lakh	56	2.04		
	Betwen 2 lakh to 5 lakh	44	2.57		
	Between 5 lakh to 7 lakh	8	2.75	2.75	
	Between 7 lakh to 10 lakh	9		3.89	

### Ease and convenience of using cashless modes of transaction as against cash based transactions

A question consisting of a four-point balanced scale was administered to the respondents to obtain their perceived level of ease with cash based transactions and that with cashless transactions. Paired sample t- test was used to judge their perceived level of difference in the ease with cash transactions vis-a-vis cashless transactions. As the p value obtained from the t test was 0.000, a significant difference was found to exist in their perceived level of ease while engaging with these contrasting modes of transactions (Refer Table 14).

Table 13. Paired samples statistics

		Mean	N	<b>Std. Deviation</b>	Std. Error Mean
Pair 1	Ease with Cash	3.38	117	.918	.085
	Ease with Cashless	2.62	117	1.601	.148

Table 14. Paired samples test

		Mean	95% Confidence Interval of the Difference		t	df	Sig (2 tailed test)
			Lower	Upper			iesij
Pair 1	Ease with Cash – Ease with Cashless	.761	.371	1.150	3.867	116	.000

Another question consisting of a five-point Likert scale was administered to the respondents to obtain their perceived level of convenience with cash based transactions and that with cashless transactions. Paired sample t- test was used to judge their perceived level of difference in convenience with cash transactions visavis cashless transactions. As the p value obtained from the t test was 0.196, it indicates that no significant difference exists in their perceived level of convenience while engaging in cash based transactions or cashless transactions (Refer Table 16).

 $Awareness\ and\ Participation\ of\ Small\ Retail\ Businesses\ in\ Cashless\ Transactions:\ An\ Empirical\ Study$ 

A look at the mean of convenience with cash based transactions (3.54) as well as that of cashless transactions (3.21) also confirms the above findings (Refer Table15).

Table 15. Paired samples statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Convenience level With Cash	3.54	117	1.546	.143
	Convenience level With Cashless	3.21	117	1.536	.142

Table 16. Paired samples test

		Mean	Interva	nfidence al of the rence	t	df	Sig (2 tailed test)
			Lower	Upper			
Pair	Convenienc	.325	170	.819	1.301	116	.196
1	e level with						
	Cash -						
	Convenienc						
	e level with						
	Cashless						

#### Comparative use of cashless as against cash

A five-point Likert scale was used to assess the comparative degree of use of cashless mode as against that of conventional mode of transaction. The parameters used in the scale were *Quite less frequent than cash, Somewhat less frequent than cash, Somewhat comparable to cash, As frequently as cash* and *More frequently than cash.* A huge majority of the respondents (72.6%) indicated that they use cashless modes of payment less frequently than cash payments (Table 17).

Table 17. Comparative use of cashless as against cash

		Comparative frequency of cashless as against cash						
		Quite less frequent	Somewh at less frequent	Somewhat comparable to cash payments	As frequently as cash payments	More frequently than cash payments		
Upto 2 lakh	% of Total	31.6%	6.8%	4.3%	2.6%	2.6%		
Betwen 2 lakh to 5 lakh	% of Total	18.8%	6.0%	6.0%	.9%	6.0%		
Between 5 lakh to 7 lakh	% of Total	2.6%	1.7%	.9%	.0%	1.7%		
Between 7 lakh to 10 lakh	% of Total	3.4%	1.7%	.0%	.0%	2.6%		
Total	% of Total	56.4%	16.2%	11.1%	3.4%	12.8%		

To assess whether the comparative frequency of use of cashless payments as against that of cash based payments exhibited the similar trend across categories, one-way Anova was used. Levene Test was conducted to check the Homogeneity of Variance. As the obtained p value was less than 0.05, the condition of Homogeneity of Variance was not fulfilled (Table 18). Thus, the mean across the categorical variables was compared using Robust Test of Equality of Means.

Table 18. Test of Homogeneity of Variances.

Comparative frequency of cashless as against cash

omparae	regioni	ej ej eusine	bb ab against cash
Levene Statistic	df1	df2	Sig.
3.337	3	113	.022

Both Welch Test and Brown Forsythe Test produced p values of more than 0.05, which indicated that no significant difference existed amongst the categories of retailers as far as the comparative use of cashless payments as against that of cash payments is concerned. The result implies a general inclination and affinity to cash based transactions as against cashless transactions among all kinds of small retailers. (Refer Table 19).

Table 19. Robust Tests of Equality of Means Comparative frequency of cashless as against cash

comparative frequency of cusiness as against cash						
	Statistic <sup>a</sup>	df1	df2	Sig.		
Welch	1.673	3	19.195	.206		
Brown-Forsythe	1.423	3	26.829	.258		

a. Asymptotically F distributed.

Awareness and Participation of Small Retail Businesses in Cashless Transactions: An Empirical Study

#### The apprehension of going cashless

To find out whether the respondents were apprehensive of going cashless a trichotomous question ('Yes', 'No' 'May Be') was administered to them. The mode of the responses was found to be '2' indicating that most of the retailers were not apprehensive of the idea of going cashless (Table 20).

Table 20. Apprehensive about going cashless

N	Valid	117
	Missing	0
Mean		2.03
Mode		2

To ascertain if there is any relationship between the turnover of the retailers and their apprehension about going cashless Chi square test was used. The p value obtained from the test was 0.61 which being more than 0.05 gives a clear indication that there is no relationship between the turnover of the retailers and their apprehensions of going cashless (Table 22). It reinforces the findings that similar sentiments marked by the absence of any apprehension echo across the categories of retailers (Table 21).

Table 21. Apprehensive about going cashless

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			Apprel	Apprehensive about going				
				cashles	S			
			Yes	No	May Be			
	Upto 2 lakh	% within Turnover	19.6%	57.1%	23.2%			
	Betwen 2 lakh to 5 lakh	% within Turnover	13.6%	70.5%	15.9%			
	Between 5 lakh to 7 lakh	% within Turnover	12.5%	87.5%	.0%			
	Between 7 lakh to 10 lakh	% within Turnover	11.1%	66.7%	22.2%			
Total		% within Turnover	16.2%	65.0%	18.8%			

Table 22 Chi-Square tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.494a	6	.610

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is 1.30.

#### Assessment of reasons of not adopting cashless

To handpick the specific reasons and factors that may contribute to the apprehension of going cashless, if any, the respondents were asked to express their opinion (either in the affirmative or negative) about six probable restraining factors that were identified by the researchers from literature. Only one of the factors i.e. 'Fear of losing money due to faulty transaction' was found to be a potent cause of apprehension (Table 23).

Vol.6 (2018) no.2, pp.209-225; www.managementdynamics.ro

Table 23. Causes of apprehension (mod	es)
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	Inability to understand the language of Apps	Inability of operating the Apps	Fear of losing money due to the faulty transaction	Unavailability of proper devices	Unreliable internet connection	Unfriendly technology	
Mode	2	2	1	2	2	2	

To examine whether similar apprehensions or the lack of them are visible across categories Chi square test was applied to check the association between the level of turnover and factors contributing to apprehension. The p values obtained from the chi square tests in case of the variables 'Inability to understand language of apps' and 'fear of losing money due to faulty transaction' were 0.017 and 0.021 respectively, which indicated that the contribution of these factors to the overall apprehension of the retailers varied across the categories (Refer Table 24).

Closer examination reveals that fear of inability to understand the language of apps was highest amongst the retailers with a turnover of Up to 2 Lakhs and lowest amongst retailers with a turnover of 7 lakhs to 10 lakhs. Table 24 also reveals that the fear of losing money due to faulty transactions is most conspicuous amongst the retailers having a turnover of Up to 2 lakhs and those having a turnover of 7 lakhs to 10 lakhs. The fear was significantly overbearing amongst the latter.

Table 24. Causes of apprehension (percentage across categories)

	Inability to understand language of Apps		Inability of operating the Apps		Fear of losing money due to faulty transaction		Unavailability of proper devices		Unreliable internet connection		Unfriendly technology	
Up to 2	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
lakhs	46.4	53.6	39.3	60.7	66.1	39.9	46.4	53.6	41.1	58.9	46.4	53.6
Between 2 lakh-5 lakh	22.7	77.3	29.5	70.5	50.0	50.0	40.9	50.1	40.9	59.1	36.4	63.6
Between 5 lakh-7 lakh	12.5	87.5	12.5	87.5	25	75	25	75	37.5	62.5	12.5	87.5
Between 7 lakh- 10 lakh	11.1	88.9	44.4	55.6	88.9	11.1	11.1	89.9	33.3	66.7	11.1	88.9
Total	32.5	67.5	34.2	65.8	59	41	40.2	59.8	40.2	59.8	37.6	62.4
Chi Square (p Value	10.207 (0.017)		3.161 (0.367)		9.776 (0.021)		4.851 (0.183)		0.228 (0.973)		6.728 (0.081)	
df	3		3		3		3		3		3	

 $Awareness\ and\ Participation\ of\ Small\ Retail\ Businesses\ in\ Cashless\ Transactions:\ An\ Empirical\ Study$ 

#### Findings and implications

The study found that a significant number of small retailers chosen for the study were aware of the possibility of the cashless transaction as well as the different instruments of the cashless transaction. However, a very small percentage of these small retailers engaged in the cashless transaction and exhibited an abysmally low use of cashless instruments. An overwhelming majority of the respondents preferred to use cash while making or accepting payments instead of doing it the cashless way. Though the retailers were generally well aware of the different instruments of the cashless transaction, UPI and banking apps were the only two instruments about which proper awareness was not there amongst the retailers.

A deeper probe into the frequency of using cashless instruments revealed that in general terms the low frequency of usage of these instruments was in no way contingent on the turnover of the retailers. However, the frequency of debit card usage significantly varied amongst the band of retailers with the lowest turnover and those with an annual turnover of 7 lakh to 10 lakh, with the latter exhibiting a greater tendency to use debit cards. This implies a significant difference in the transaction habit between the retailers in the turnover category of up to two lakh and those in the category of 7 lakh tom 10 lakh. A probable reason, which is subject to further testing, may also be their ability to read and understand the language of apps and instruments (the underlying cause of which may be the difference in the level and quality of education of the respondents belonging to these varying categories) as indicated in one of the findings of the study.

During the study, the retailers were found to believe that using cash as a mode of the transaction does not provide any significant difference in convenience over using cashless modes of transaction. On the contrary, the retailers perceived that dealing with cash was easier in comparison to handling cashless transactions. The findings imply that even if the retailers do not consider carrying, storing and keeping an account of cash to be the easiest thing, they are more habitual of using cash in their transactions and hence find it much easy and spontaneous.

Though the retailers denied being apprehensive of going cashless, probing into some specific and probable causes of apprehension, if any, revealed that fear of losing money due to the faulty transaction was a prominent factor giving rise to some fear of going cashless. This factor emerged to be much more conspicuous amongst the retailers belonging to the turnover category of 7 lakh to 10 lakh. The finding implies a lack of faith and trust in the techniques and technology of cashless transaction amongst the users.

#### Conclusion

Despite a good degree of awareness about cashless transactions, the majority of the small retailers are neither sufficiently prepared nor overtly eager to participate in cashless transactions, yet. It is an indication that mere awareness amongst the

merchants and retailers is not sufficient to trigger their shift towards cashless. As the retailers want to engage in more of cash based transactions and find cash based transactions easier, for they are more habitual with it, the marketing campaign and efforts should be focused towards changing habits and attitude towards cashless than to barely create awareness. The study also concludes that strong security measures need to be built into the instruments and modes of cashless transactions and technological loopholes must be mended by expedited technological, infrastructural and software upgradation and overhauling to reduce chances of erroneousness so as to inculcate trust and a sense of security amongst the current and potential users of cashless systems.

#### References

- Anand, N. (2016). Vodafone set to launch payments bank by March. *Business Standard*. Retrieved from https://www.business-standard.com/article/companies/vodafone-set-to-launch-payments-bank-by-march-116121300822\_1.html.
- Anchor, N.P., and Robert, A. (2013). Shifting Policy Paradigm from Cash Based Economy to Cashless Economy: The Nigerian Experience. *Afro Asian Journal of Social Sciences*, 4(4), 1-16.
- Arun, G.M., and Punj, S (2016). Banking on E-Cash. *India Today*. Retrieved from https://www.indiatoday.in/magazine/from-india-today-magazine/story/20170102-digital-economy-cashless-transactions-online-banking-mobile-banking-digital-currency-e-wallets-830074-2016-12-22.
- Banik, N., and Padalka, M.S. (2016). India's Demonetization: Time for a Digital Economy. *The Diplomat*. Retrieved from http://thediplomat.com/2016/12/indias-demonetization-time-for-a-digital-economy
- Chahal, H., Sahi, K.G., and Rani, A. (2104). Moderating Role of Perceived Risk in Credit Card. *Journal of Indian Business Research*, 6(4), 286-308.
- Gajjar, N. (2016). Black Money in India Present Status and Future Challenges and Demonetization. *International Journal of Advance Research in Computer Science and Management Studies*, 4(12), 47-54.
- Mahajan, P., and Singla, A. (2017). Effect of Demonetization on Financial Inclusion in India. International Journal of Science Technology and Management, 6(1), 338-343
- Reserve Bank of India (2016). Annual report. Retrieved from https://rbi.org.in/SCRIPTs/AnnualReportPublications.aspx?Id=1208.
- Shah, A.M., Eisenkraft, N., Bettman, J.R., and Chartrand, T.L. (2016). "Paper or Plastic?": How We Pay Influences Post-Transaction Connection. *Journal of Consumer Research*, 42(5), 688-708.

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