

Statistical Analysis of Comparison of Services of Public and Private Banks after and before Demonetization of 2016



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Abstract

The argument posited in favor of demonetization is that the cash that would be extinguished would be "black money" and hence, should be rightfully extinguished to set right the perverse incentive structure in the economy. While demonetization effects not only on the people of country but also on banks services, savings and most probably all the features banks provided. When complete cash come in banks than what are the impacts on services. Therefore, it is imperative to evaluate the short run and medium-term impacts that such a shock is expected to have on the economy. Further, the impact of such a move would vary depending on the extent to which the government decides to remonetize. This paper elucidates the impact of such a move on the availability of credit, spending, level of activity and transactions and services of banks. Moreover, complete economy going to cashless so all activities depends on banks so evaluation of effect on services is main aim of this paper.

Keywords: Public Bank, Private Bank, Demonetization, ATM, Credit Card, Debit Card, No of Transaction, Amount of Transaction.

Introduction

A bank is a financial institution that accepts deposits from the public and creates credit. Lending activities can be performed either directly or indirectly through capital markets. Due to their importance in the financial stability of a country, banks are highly regulated in most countries. Most nations have institutionalized a system known as fractional reserve banking under which banks hold liquid assets equal to only a portion of their current liabilities. For India, the apex bank is the Reserve Bank Of India. In addition to other regulations intended to ensure liquidity, banks are generally subject to minimum capital requirements based on an international set of capital standards. It is an establishment authorized by a government to accept deposits, pay interest, clear checks, make loans, act as an intermediary in financial transactions, and provide other financial services to its customers. It is licensed to deal with money and its substitutes by accepting time and demand deposits, making loans, and investing in securities. The bank generates profits from the difference in the interest rates charged and paid. Public Sector Banks are banks where majority stake is held by the Government of India. Examples of public sector banks are: SBI, Bank of India, Canara Bank, etc. Private Sector Banks are banks majority of share capital of the bank is held by private individuals. These banks are registered as companies with limited liability. Examples of private sector banks are: ICICI Bank, Axis bank, HDFC, etc.

Demonetization

Demonetization is an instrument to encounter price rises, Black Money, bribery and misdemeanor, dishearten a cash reliant economy and facilitate employment and trade as well. Its strategy of the government by outlawing Rs. 500 and Rs.1000 currency notes has predisposed more or less all the corner of the economy. Its upshot on Banking Sector is noteworthy as Bank is a core for directing the legal tender money to all requirements of the public. The principal recipients of demonetization are Banks. It made the banks to recognize the deposits with no any cost of endorsement and significantly augmented liquidity position of the banks. It exposes the consequence of demonetization on Banking Sector. It takes in the current resolution of the central government on Demonetization and its steady outcome on Indian banking sector. It is a method by which a sequence of currency will not be legal tender. The term demonetization is

not new to the Indian economy, the uppermost demonetization, done by the RBI was the Rs. 10000 note. According to RBI data, these notes were failed to recognize again in 1946 and again in January 1978. On 8 November, 2016 Indian Prime Minister acknowledged that offered INR 500 and 1000 bank notes would no longer be acknowledged as legal tender to put a checkup on the equivalent financial system. A new-fangled redesigned series of Rs 500 and Rs 2000 banknote is in exchange since 10th of November 2016.

Review of Literature

The sectors cover Micro Businesses, E-Wallet Businesses, and Online Retail Stores and So on and conclude that in long run it definitely will have positive impact in controlling black money and fake money. The decision taken will have far reaching impact on the economy was said by Abda(2017). Cashless transaction system is reaching to growth day by day. It is not only the requirement but also a need of today society. All the POS are using double as compare to earlier also UPI and IMPS are going high in uses analyzed by Manpreetkaur (2017) in her paper. Palanisamy and Saporiga E(2017) attempted to document the historical importance of demonetization and their impact on this export and import and it reveal that India will achieve a significant growth by adopting the demo strategy and it will great a huge positive impact on the entire economy. Demonetization is a step to dig out the people which are defaulter and had black money but instead of this common people like farmers took lots of pain for lack of facilities in rural areas said by Shan(2017) in his paper. Dhara K (2017)made some question regarding positive and negative impact of demonetization and effect of online banking by the employee of some bank and conclude that this demonetization has proven somehow more successful than previous two, people become more conscious a about online banking and may be total black money do not grabbed in this it made fear in black money hold people, so its correct decision for stop corruption, terrorism and black money.KumudhaandLakshmi (2016) studied about online Marketing and E-

commerce that is in form of trend. They resulted in the paving the way of new trend in online shopping and digital payment. The scope for digital marketing is to be seen in the days to come given the internet adoption level in the country, the ease of banking operations and the mindset of the people adopting the trend.

Objective of the Study

To find the effect of demonetization on Public and private banks by their services like on ATM, credit card, debit card and online transactions.

Research Methodology

Research Variables

The variables for the proposed research were selected and defined as follows.

Transaction from POS

POS stands for point of sale. A point-of-sale (POS) transaction is what takes place between a merchant and a customer when a product or service is purchased, commonly using a point of sale system to complete the transaction.

1. Transaction from ATM, credit card and debit card: The number of time any person uses their card for getting their payment complete.
2. Amount of transaction using ATM, credit card, and debit card: The total money people are paid or receive for their payment by using their card.

Data

Total 46 Banks were selected for analysis out of which 21 are public banks and 25 are private bank. The list of banks is attached in Annexure A1. The data were collected from October 2014 to December 2018 on monthly basis that is 17 monthsbefore and 19 monthsafter demonetization from the RBI website. Here all the data were corresponding to the research variables.

Statistical Methods

The data were tested for the Normality using Shapiro – Wilk test for Normality. The data were found Non Normal. Hence the non-parametric test Mann-Whitney U test for comparison of two groups was used.

Results and Discussion

Table -1: Results for Public Banks

Public Banks							
Research variables	Time	N	Mean	Std. Deviation	Std. Error Mean	Mann-Whitney U	P value
No. of Transactions (Actuals) ATM Credit	Before	17	175892.41	21541.82	5224.66	49.000	0.000
	After	19	222440.84	34195.84	7845.06		
No. of Transactions (Actuals) POS Credit	Before	17	11531685.47	1710173.13	414777.91	1.000	0.000
	After	19	21068090.68	3341422.01	766574.78		
Amount of transactions (Rs. Millions) ATM Credit	Before	17	829.8	100.33	24.33	76.000	0.006
	After	19	958.62	161.69	37.09		
Amount of transactions (Rs. Millions) POS Credit	Before	17	30601.16	5605.88	1359.63	1.000	0.000
	After	19	71780.87	13351.61	3063.07		
No. of Transactions (Actuals) ATM Debit	Before	17	558336766.4	43281642.32	10497340.17	89.000	0.021
	After	19	587635554	27317289.27	6267015.96		
No. of Transactions (Actuals) POS Debit	Before	17	56389985.24	10560380.02	2561268.37	0.000	0.000
	After	19	175909743.4	24978055.71	5730358.98		
Amount of transactions (Rs. Millions) ATM Debit	Before	17	1535005.76	90969.05	22063.24	39.000	0.000
	After	19	1771721.25	211058.25	48420.08		
Amount of transactions	Before	17	68130.73	14696.97	3564.54	0.000	0.000

(Rs. Millions) POS Debit	After	19	235796.61	31085.76	7131.56		
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Following table presents a comparative description for the selected research variables to understand the effect of demonetization of banking operations of both public and private sector banks .It is revealed from the above analysis that for the public banks, number of Transactions (Actuals) ATM Credit before demonetization was found 175892.4118 and after demonetization it was 222440.8421. so there is significant increment in number of transaction from atm. Number of Transactions (Actual) POS Credit before demonetization was found 11531685.4706 and after demonetization it was 21068090.6842 so there is significant increment in Number of Transactions POS(p value). Amount of transactions (Rs. Millions) ATM Credit before demonetization was found 829.8048259 and after demonetization it was 958.6156826 so there is significant increment in Amount of transactions ATM Credit. Amount of transactions (Rs. Millions) POS Credit before demonetization was found 30601.16412 and after

demonetization it was 71780.87142.so there is significant increment in Amount of transactions (Rs. Millions) POS Credit. Number of Transactions (Actual) ATM Debit before demonetization was found 558336766.3529 and after demonetization it was 587635554.0000.so there is significant increment inNumber of Transactions (Actual) ATM Debit. Number of Transactions (Actual) POS Debit before demonetization was found 56389985.2353 and after demonetization it was 175909743.4211. so there is significant increment in Number of Transactions POS Debit.Amount of transactions (Rs. Millions) ATM Debit before demonetization was found 1535005.7588 and after demonetization it was 1771721.2526.so there is significant increment in Amount of transactions ATM Debit. Amount of transactions (Rs. Millions) POS Debit before demonetization was found 68130.73076 and after demonetization it was 235796.61474.so there is significant increment in Amount of transactions POS Debit.

Table -2 : Results for Private banks

Private Banks							
Research Variables	Time	N	Mean	Std. Deviation	Std. Error Mean	Mann-Whitney U	P value
No. of Transactions (Actuals) ATM Credit	Before	17	356020.24	48896.2	11859.07	85.000	0.015
	After	19	422108.37	89207.37	20465.57		
No. of Transactions (Actuals) POS Credit	Before	17	58333160.24	6771727.18	1642385.08	0.000	0.000
	After	19	99405648.21	10542581.26	2418634.02		
Amount of transactions (Rs. Millions) ATM Credit	Before	17	1807.92	165.19	40.06	92.000	0.028
	After	19	2027.57	460.68	105.69		
Amount of transactions (Rs. Millions) POS Credit	Before	17	186005.45	26425.9	6409.22	1.000	0.000
	After	19	319583.16	45424.98	10421.21		
No. of Transactions (Actuals) ATM Debit	Before	17	138390421.3	8529654.95	2068745.2	154.000	0.827
	After	19	138117476.4	15824255.75	3630333.25		
No. of Transactions (Actuals) POS Debit	Before	17	50801403.71	7421980.41	1800094.66	0.000	0.000
	After	19	121209681.4	14299489.15	3280527.8		
Amount of transactions (Rs. Millions) ATM Debit	Before	17	628312.62	41551.89	10077.81	155.000	0.851
	After	19	620285.96	96531.4	22145.82		
Amount of transactions (Rs. Millions) POS Debit	Before	17	76395.72	11695.09	2836.48	0.000	0.000
	After	19	172743.72	21010.52	4820.14		

It is revealed from the above analysis that for the private banks, number of Transactions (Actual) ATM Credit before demonetization was found 356020.2353 and after demonetization it was 422108.3684. so there is significant increment in number of Transactions ATM Credit. Number of Transactions (Actual) POS Credit before demonetization was found 58333160.2353 and after demonetization it was 99405648.2105.so there is significant increment in Number of Transactions POS Credit. Amount of transactions (Rs. Millions) ATM Credit before demonetization was found 1807.9218647 and after demonetization it was 2027.5748789.so there is significant increment in Amount of transactions ATM Credit. Amount of transactions (Rs. Millions) POS Credit before demonetization was found 186005.44647 and after demonetization it was 319583.15579.so there is significant increment in Amount of transactions POS Credit. Number of Transactions (Actual) ATM Debit before demonetization was found 138390421.2941 and after demonetization it was 138117476.4211.so there is no significant difference in Number of Transactions

ATM Debit. Number of Transactions (Actual) POS Debit before demonetization was found 50801403.7059 and after demonetization it was 121209681.4211.so there is significant increment in Number of Transactions POS Debit. Amount of transactions (Rs. Millions) ATM Debit before demonetization was found 628312.6182 and after demonetization it was 620285.9637.so there is no significant increment in Amount of transactions ATM Debit. Amount of transactions POS Debit before demonetization was found 76395.72165 and after demonetization it was 172743.71789.so there is significant increment in Amount of transactions POS.

Conclusion

From all the above analysis and discussion we found that demonetization have significant effects on all the various factors regarding the bank services which significantly makes the conclusion that within only 19 months after demonetization, all the factor of public bank have significant increment and most of the factor of private bank have significant increment in the number of transaction by atm , credit card and debit card and

amount of transaction from atm ,credit card and debit card.

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Data source:
www.dbie.com
www.rbi.com
www.banks-india.com

Annexures: A1: List of the banks selected for study

List of Public Bank		List of Private Bank	
S.N	Bank Name	S.N	Bank Name
1	Allahabad Bank	1	Axis Bank Ltd
2	Andhra Bank	2	Bandhan Bank Ltd
3	Bank Of Baroda	3	Catholic Syrian Bank Ltd
4	Bank Of India	4	City Union Bank
5	Bank Of Maharashtra	5	Development Credit Bank Ltd
6	Canara Bank	6	Dhanalakshmi Bank Ltd
7	Central Bank Of India	7	Federal Bank Ltd
8	Corporation Bank	8	Hdfc Bank Ltd
9	Dena Bank	9	Icici Bank Ltd
10	Indian Bank	10	Idfc Bank Limited
11	Indian Overseas Bank	11	Indusind Bank Ltd
12	Oriental Bank Of Commerce	12	Jammu And Kashmir Bank
13	Punjab And Sind Bank	13	Karnataka Bank Ltd
14	Punjab National Bank	14	Karur Vysya Bank Ltd
15	Syndicate Bank	15	Kotak Mahindra Bank Ltd
16	Uco Bank	16	Ratnakar Bank Limited
17	Union Bank Of India	17	South Indian Bank
18	United Bank Of India	18	Tamilnad Mercantile Bank Ltd
19	Vijaya Bank	19	The Laxmi Vilas Bank Ltd
20	Idbi Ltd	20	Yes Bank Ltd
21	State Bank Of India	21	American Express
		22	Bank Of America
		23	Barclays Bank Plc
		24	Citi Bank
		25	DbS Bank