INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT

IJRCM

IJRCM

CONTENTS

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

ii

CALL FOR MANUSCRIPTS

We invite unpublished novel, original, empirical and high quality research work pertaining to the recent developments & practices in the areas of Computer Science & Applications; Commerce; Business; Finance; Marketing; Human Resource Management; General Management; Banking; Economics; Tourism Administration & Management; Education; Law; Library & Information Science; Defence & Strategic Studies; Electronic Science; Corporate Governance; Industrial Relations; and emerging paradigms in allied subjects like Accounting; Accounting Information Systems; Accounting Theory & Practice; Auditing; Behavioral Accounting; Behavioral Economics; Corporate Finance; Cost Accounting; Econometrics; Economic Development; Economic History; Financial Institutions & Markets; Financial Services; Fiscal Policy; Government & Non Profit Accounting; Industrial Organization; International Economics & Trade; International Finance; Macro Economics; Micro Economics; Rural Economics; Co-operation; Demography: Development Planning; Development Studies; Applied Economics; Development Economics; Business Economics; Monetary Policy; Public Policy Economics; Real Estate; Regional Economics; Political Science; Continuing Education; Labour Welfare; Philosophy; Psychology; Sociology; Tax Accounting; Advertising & Promotion Management; Management Information Systems (MIS); Business Law; Public Responsibility & Ethics; Communication; Direct Marketing; E-Commerce; Global Business; Health Care Administration; Labour Relations & Human Resource Management; Marketing Research; Marketing Theory & Applications; Non-Profit Organizations; Office Administration/Management; Operations Research/Statistics; Organizational Behavior & Theory; Organizational Development; Production/Operations; International Relations; Human Rights & Duties; Public Administration; Population Studies; Purchasing/Materials Management; Retailing; Sales/Selling; Services; Small Business Entrepreneurship; Strategic Management Policy; Technology/Innovation; Tourism & Hospitality; Transportation Distribution; Algorithms; Artificial Intelligence; Compilers & Translation; Computer Aided Design (CAD); Computer Aided Manufacturing; Computer Graphics; Computer Organization & Architecture; Database Structures & Systems; Discrete Structures; Internet; Management Information Systems; Modeling & Simulation; Neural Systems/Neural Networks; Numerical Analysis/Scientific Computing; Object Oriented Programming; Operating Systems; Programming Languages; Robotics; Symbolic & Formal Logic; Web Design and emerging paradigms in allied subjects.

Anybody can submit the **soft copy** of unpublished novel; original; empirical and high quality **research work/manuscript** ==*anytime*== in *M.S. Word format* after preparing the same as per our **GUIDELINES FOR SUBMISSION**; at our email address i.e. infoijrcm@gmail.com or online by clicking the link **online submission** as given on our website (***FOR ONLINE SUBMISSION, CLICK HERE***).

GUIDELINES FOR SUBMISSION OF MANUSCRIPT

1.   ==**COVERING LETTER FOR SUBMISSION**==:

           DATED: _____

       THE EDITOR

       IJRCM

       Subject: **SUBMISSION OF MANUSCRIPT IN THE AREA OF** _____.

(e.g. Finance/Mkt./HRM/General Mgt./Engineering/Economics/Computer/IT/ Education/Psychology/Law/Math/other, ==please specify==)

       DEAR SIR/MADAM

Please find my submission of manuscript titled '_____' for likely publication in one of your journals.

I hereby affirm that the contents of this manuscript are original. Furthermore, it has neither been published anywhere in any language fully or partly, nor it is under review for publication elsewhere.

I affirm that all the co-authors of this manuscript have seen the submitted version of the manuscript and have agreed to inclusion of their names as co-authors.

Also, if my/our manuscript is accepted, I agree to comply with the formalities as given on the website of the journal. The Journal has discretion to publish our contribution in any of its journals.

NAME OF CORRESPONDING AUTHOR	:
Designation/Post*	:
Institution/College/University with full address & Pin Code	:
Residential address with Pin Code	:
Mobile Number (s) with country ISD code	:
Is WhatsApp or Viber active on your above noted Mobile Number (Yes/No)	:
Landline Number (s) with country ISD code	:
E-mail Address	:
Alternate E-mail Address	:
Nationality	:

* i.e. Alumnus (Male Alumni), Alumna (Female Alumni), Student, Research Scholar (M. Phil), Research Scholar (Ph. D.), JRF, Research Assistant, Assistant Lecturer, Lecturer, Senior Lecturer, Junior Assistant Professor, Assistant Professor, Senior Assistant Professor, Co-ordinator, Reader, Associate Professor, Professor, Head, Vice-Principal, Dy. Director, Principal, Director, Dean, President, Vice Chancellor, Industry Designation **etc**. *The qualification of author is not acceptable for the purpose*.

NOTES:

a) The whole manuscript has to be in *ONE MS WORD FILE* only, which will start from the covering letter, inside the manuscript. *pdf. version is liable to be rejected without any consideration*.

b) The sender is required to mention the following in the **SUBJECT COLUMN of the mail**:

   New Manuscript for Review in the area of (e.g. Finance/Marketing/HRM/General Mgt./Engineering/Economics/Computer/IT/ Education/Psychology/Law/Math/other, please specify)

c) There is no need to give any text in the body of the mail, except the cases where the author wishes to give any **specific message** w.r.t. to the manuscript.

d) The total size of the file containing the manuscript is expected to be below **1000 KB**.

e) Only the **Abstract will not be considered for review** and the author is required to submit the **complete manuscript** in the first instance.

f) *The journal gives acknowledgement w.r.t. the receipt of every email within twenty-four hours* and in case of non-receipt of acknowledgment from the journal, w.r.t. the submission of the manuscript, within two days of its submission, the corresponding author is required to demand for the same by sending a separate mail to the journal.

g) The author (s) name or details should not appear anywhere on the body of the manuscript, except on the covering letter and the cover page of the manuscript, in the manner as mentioned in the guidelines.

2. **MANUSCRIPT TITLE:** The title of the paper should be typed in **bold letters**, **centered** and **fully capitalised**.

3. **AUTHOR NAME (S) & AFFILIATIONS:** Author (s) **name**, **designation**, **affiliation** (s), **address**, **mobile/landline number** (s), and **email/alternate email address** should be given underneath the title.

4. **ACKNOWLEDGMENTS:** Acknowledgements can be given to reviewers, guides, funding institutions, etc., if any.

5. **ABSTRACT:** Abstract should be in **fully Italic printing**, ranging between **150** to **300 words**. The abstract must be informative and elucidating the background, aims, methods, results & conclusion in a **SINGLE PARA**. *Abbreviations must be mentioned in full*.

6. **KEYWORDS:** Abstract must be followed by a list of keywords, subject to the maximum of **five**. These should be arranged in alphabetic order separated by commas and full stop at the end. All words of the keywords, including the first one should be in small letters, except special words e.g. name of the Countries, abbreviations etc.

7. **JEL CODE:** Provide the appropriate Journal of Economic Literature Classification System code (s). JEL codes are available at www.aeaweb.org/econlit/jelCodes.php. However, mentioning of JEL Code is not mandatory.

8. **MANUSCRIPT:** Manuscript must be in *BRITISH ENGLISH* prepared on a standard A4 size *PORTRAIT SETTING PAPER*. *It should be free from any errors i.e. **grammatical**, **spelling** or **punctuation**. It must be thoroughly edited at your end*.

9. **HEADINGS:** All the headings must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.

10. **SUB-HEADINGS:** All the sub-headings must be bold-faced, aligned left and fully capitalised.

11. **MAIN TEXT**:

THE MAIN TEXT SHOULD FOLLOW THE FOLLOWING SEQUENCE:

INTRODUCTION

REVIEW OF LITERATURE

NEED/IMPORTANCE OF THE STUDY

STATEMENT OF THE PROBLEM

OBJECTIVES

HYPOTHESIS (ES)

RESEARCH METHODOLOGY

RESULTS & DISCUSSION

FINDINGS

RECOMMENDATIONS/SUGGESTIONS

CONCLUSIONS

LIMITATIONS

SCOPE FOR FURTHER RESEARCH

REFERENCES

APPENDIX/ANNEXURE

The manuscript should preferably be in *2000* to *5000 WORDS*, But the limits can vary depending on the nature of the manuscript.

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

vii

12.   **FIGURES & TABLES:** These should be simple, crystal **CLEAR**, **centered**, **separately numbered** & self-explained, and the **titles must be above the table/figure**. **Sources of data should be mentioned below the table/figure**. *It should be ensured that the tables/figures are referred to from the main text.*

13.   **EQUATIONS/FORMULAE:** These should be consecutively numbered in parenthesis, left aligned with equation/formulae number placed at the right. The equation editor provided with standard versions of Microsoft Word may be utilised. If any other equation editor is utilised, author must confirm that these equations may be viewed and edited in versions of Microsoft Office that does not have the editor.

14.   **ACRONYMS:** These should not be used in the abstract. The use of acronyms is elsewhere is acceptable. Acronyms should be defined on its first use in each section e.g. Reserve Bank of India (RBI). Acronyms should be redefined on first use in subsequent sections.

15.   **REFERENCES:** The list of all references should be alphabetically arranged. ***The author (s) should mention only the actually utilised references in the preparation of manuscript*** and they may follow Harvard Style of Referencing. **Also check to ensure that everything that you are including in the reference section is duly cited in the paper**. The author (s) are supposed to follow the references as per the following:

- All works cited in the text (including sources for tables and figures) should be listed alphabetically.

- Use (**ed.**) for one editor, and (**ed.s**) for multiple editors.

- When listing two or more works by one author, use --- (20xx), such as after Kohl (1997), use --- (2001), etc., in chronologically ascending order.

- Indicate (opening and closing) page numbers for articles in journals and for chapters in books.

- The title of books and journals should be in italic printing. Double quotation marks are used for titles of journal articles, book chapters, dissertations, reports, working papers, unpublished material, etc.

- For titles in a language other than English, provide an English translation in parenthesis.

- *Headers, footers, endnotes* and *footnotes* should **not be used** in the document. However, **you can mention short notes to elucidate some specific point**, which may be placed in number orders before the references.

PLEASE USE THE FOLLOWING FOR STYLE AND PUNCTUATION IN REFERENCES:

BOOKS

- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.

- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

CONTRIBUTIONS TO BOOKS

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

JOURNAL AND OTHER ARTICLES

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–23

UNPUBLISHED DISSERTATIONS

- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

ONLINE RESOURCES

- Always indicate the date that the source was accessed, as online resources are frequently updated or removed.

WEBSITES

- Garg, Bhavet (2011): Towards a New Gas Policy, Political Weekly, Viewed on January 01, 2012 http://epw.in/user/viewabstract.jsp

DEMONETISATION AND INDIAN BANKING SECTOR - A SHORT TERM ANALYSIS

SREEDEVI E.S
RESEARCH SCHOLAR
DEPARTMENT OF COMMERCE & MANAGEMENT STUDIES
UNIVERSITY OF CALICUT
THENHIPALAM

Dr. B JOHNSON
PROFESSOR & HEAD
DEPARTMENT OF COMMERCE & MANAGEMENT STUDIES
UNIVERSITY OF CALICUT
THENHIPALAM

ABSTRACT

The word demonetisation has become very common and familiar even to the small children in the country. Since a year has passed after demonetisation, there is no need for a preamble about this historical incident. From the date of its announcement by the Prime Minister on 8 November 2016, it became the attention of entire nation as it has been affected the economy as a whole. The major objective of the study is to analyse the effects of demonetisation on the banking sector in India. The effect of demonetisation on the aggregate deposits of residents, domestic credit and electronic payments are analysed in this paper. The present study makes use of secondary sources of information. The data was collected from various published sources of Reserve Bank of India, mainly RBI Bulletin and from published journals, articles, reports, newspapers etc. The study includes all the scheduled commercial banks operating in India. The study period include 24 months divided into the periods of pre demonetisation and post demonetisation. The pre demonetisation period includes twelve months spanning from 2015 November to October 2016. The study makes use of paired sample t test to test the significant difference between pre and post demonetisation and one sample Kolmogorov Smirnov test to check the normality. The study has found that demonetisation made significant effect on the banking sector in India.

KEYWORDS
aggregate deposits, demonetisation, domestic credit, electronic payment.

JEL CODES
E50, E51, E58, E59.

1. INTRODUCTION

T he word demonetisation has become very common and familiar even to the small children in the country. Since a year has passed after demonetisation, there is no need for a preamble about this historical incident. From the date of its announcement by the Prime Minister on 8 November 2016, it fascinated the attention of entire nation as it has been affected the economy as a whole. By this massive attempt, the central government intended to contain four major evils that will curb the growth of the economy such as black money, fake currency, terrorism and corruption. Besides, the government also aimed to encourage digital transactions instead of cash transactions by making Indian economy a cashless economy. The government argued that it is the high-denominated currencies, which were sweepingly used for the above said illegitimate activities. That is why the government ceased the legal tender of high-denominated currencies of Rs 500 and Rs 1000. Instead of these demonetised notes, RBI immediately made available the new Mahathma Gandhi series of currencies of 2000 and 500 rupees with new look, color, size and design highlighting the scientific achievements and cultural heritage of the country. There are different views about the success of demonetisation. Most of them believed that the policy was fundamentally a wrong step from the part of central government, which had launched even without considering the advice of the RBI. Demonetisation slowed down the GDP growth of the country and it also enhanced the expenditure on the security printing from July 2016 to June 2017 which stood at Rs 79.65 billion as against Rs 32.4 billion during previous year. Report shows that the growth of major industries decelerated following demonetisation. In addition to this, it also raised protest, anger and agitation among the ordinary people in the country who struggled more because of non-availability of currencies and loss of employment. On the other hand, demonetisation brought some positive effects on the economy. Report shows that demonetisation enhanced the direct tax collection in the country and more than a lakh of shell companies have identified and cancelled its registration. The concerned authorities had identified various benami properties and suspicious transactions. It is also expected that the real benefits of demonetisation will manifest in long run. India has a well-developed banking system that is widespread across every nook and corner of the nation. It was this vibrant banking system that took active involvement during demonetisation to pump the new currencies into circulation. Within 2016 December 31 from 9 November, RBI pumped 5540 billion rupees in circulation and the total value of the demonetised currencies were Rs 15347 Billion, which is around 86.9% of the total currency in circulation. Following the demonetisation, RBI recently launched the bank notes on the denomination of Rs 200 and Rs 50 in Mahatma Gandhi series. The banking system takes active involvement on the execution of the policy of demonetisation. It also believed that the banks are the biggest beneficiaries of demonetisation.

2. REVIEW OF LITERATURE

Manpreet Kaur (2017) analysed the impact of demonetization on Indian banking system with special reference to e-Cash. The study argued that the banks would get low cost deposits due to demonetisation because the public will deposit the old currency in their current and savings accounts. Therefore, the current account savings account ratio of banks would improve due to demonetisation. He also argued that the E-wallet business firms would also gain due to demonetisation. **Prabhu et.al (2017)** examined the influence of demonetisation on the banking operations. The study argued that even though demonetisation disturbed the banking operation for a while due to exchange, it is highly helpful for the Indian economy for the development and growth. **Avanika Gupta (2017)** in her paper examined the impact of demonetisation on the accessibility of the disabled persons to the banks. Her study found that banks were already inaccessible by the disabled. Demonetization widened this gap rapidly. **Arvind Kumar (2017)** also analysed the status of electronic based payment system in India. India is the country where majority of the transactions are through cash. Only 2% of transactions are cash less transaction. Now, because of demonetisation, the cash less transactions are growing day by day. The system have lot of advantages. Therefore, the future of the cash less transaction system are growing day by day. is bright in India. **Sweta Singhal (2017)** found that usage of E- banking services among both rural and urban population improved after demonetisation. The study was conducted among 50 selected rural women and 50 selected urban women. **Angel Jasmine (2017)** studied the impact of demonetisation in India by taking a number of areas of the economy such as household sector, government debt, farming and fishing industry, business, industrial output, IT, jewelry, real estate, banks etc. Her study also analysed the demonetisation policies of different countries across the world and found that in developed countries they were successful but not in African counties.

Even though several studies were conducted to examine the impact of demonetisation on the Indian economy, only few studies have attempted to analyse its on the Indian banking sector. These studies were limited to E-cash, E-banking, electronic payment system, accessibility of disabled persons during demonetisation, banking operations during demonetisation etc. Present study tries to fill the gap by analysing the effects of demonetisation on the Indian banking sector by taking deposits, advances and electronic payment as the major variables.

3. STATEMENT OF THE RESEARCH PROBLEM

Demonetisation is not a novel policy executed recently in India. India had experienced demonetisation twice before. In 1946, currencies of Rs 1000, 5000 and 10000 were taken out of circulation and all those currencies were reintroduced in 1954. In 1978, the above-mentioned currencies were again demonetized. At last, in 2016, the country experienced a biggest demonetization ever in its history. The highest value currencies of Rs 500 and 1000 were demonetised, which was worth Rs 15347 Billion and it was around 86.9% of the total currency in circulation. The total currency in circulation at that time was Rs 17742 Billion, which was 13% of the GDP. History shows that demonetisation was experimented in many developed and developing countries across the globe with certain definite objectives. Countries like the United States of America, the Soviet Union, Australia, Nigeria, Zimbabwe, Zaire, Venezuela, North Korea, and Pakistan implemented demonetisation in different periods with different objectives, and the attempt of the majority of the countries had failed. Demonetisation in India was also implemented to attain certain specific objectives. The main aim of such a great initiative was to contain terrorism by the way of the proceeds of counterfeit currency and other activities such as espionage, smuggling of arms, drugs etc. On 30 August 2017, RBI reported that about 99% of the demonetised currencies have returned to the banking system that is 15.28 lakh crore out of 15.44. How far the move of demonetisation has attained its objectives needs to be elucidated by the concerned authorities. Whatever be the targets of demonetisation intended by the authorities, here the present study discusses only what changes demonetisation have made on the banking sector especially on the aggregate deposits of residents, domestic credit and electronic payment. Since it has been only a year after demonetisation, it is not able to assess its long-term impact on the deposits and advances of commercial banks, still it is highly relevant to see what short-term effects the demonetisation has made on the Indian banking sector.

4. OBJECTIVE AND HYPOTHESES OF THE STUDY

The major objective of the study is to analyse the effects of demonetisation on the banking sector in India. The effect of demonetisation on the aggregate deposits of residents, domestic credit and electronic payments are analysed in this paper. For the attainment of this objective the following hypotheses have been formulated;

1. H_0: There is no significant difference in the aggregate deposits of residents with the scheduled commercial banks during pre and post demonetisation.
2. H_0: There is no significant difference in the domestic credit made by scheduled commercial banks during pre and post demonetisation.
3. H_0: There is no significant difference in the electronic payments made during pre and post demonetisation.

5. RESEARCH METHODOLOGY

The study is designed as a descriptive one based on secondary source of data. It makes use of secondary sources of information. The data was collected from various published sources of Reserve Bank of India mainly RBI Bulletin and from published journals, articles, reports, newspapers etc. The study includes all the scheduled commercial banks operating in India. The study period include 24 months divided into the periods of pre demonetisation and post demonetisation. Pre demonetisation period includes twelve months ranges from 2015 November to October 2016. Post demonetisation period ranging from 2016 November to 2017 October. For the purpose of attainment of objectives, three variables are selected which include aggregate deposits of residents, domestic credit and electronic payments. Aggregate deposits of residents include demand and time deposits of residents. These time deposits subsumed by long term and short term time deposits. Domestic credit consists of credit to the government and credit to the commercial sector. Credit to the commercial sector comprise of bank credit, net credit to primary dealers, investment in other approved securities and investment in non SLR securities. Electronic payments contain payments made through Real Time Gross Settlement, Cheque Truncation System, Immediate Payment Service, National Automated Clearing House, Mobile Banking, Prepaid Payment Instruments, Card usage at POS and National Electronic Fund Transfer. The study makes use of paired sample t test to test the significant difference between pre and post demonetisation and one sample Kolmogorov Smirnov test to check the normality. Since it has been a year after demonetisation, it is too early to assess the impact and effect of demonetisation on banking sector, but still it will be useful to analyse its short-term effects on the Indian banking sector.

6. ANALYSIS OF DATA

The present study analyse the effects of demonetisation on the banking sector in India. The effects of demonetisation on the aggregate deposits of residents, domestic credit and electronic payments are presented as follows:

6.1 EFFECTS OF DEMONETISATION ON THE AGGREGATE DEPOSITS OF RESIDENTS

A Bank deposit consists of money placed into banking institution for safekeeping. At the time of demonetisation, old high denomination bank notes could either be deposited into the bank accounts or exchanged through bank counters or at the issue counters of RBI until 30 December 2016. Initially the value of the notes exchanged limited to the maximum of 4000 in a day by a person on the production of valid identity proof. Cash withdrawals from banks over the counters were also restricted to Rs. 10000 and subject to the maximum of Rs 20000 in a week. There was no restriction on the non-cash method of operations such as cheques, demand drafts, mobile wallets, debit and credit cards and electronic fund transfers. ATM withdrawals were also restricted to the limit of Rs 2000 per day per card initially, and later it rose to Rs 4000. Most of the ATM counters had closed following the demonetisation due to the shortage of new currency. Here this paper analyse the aggregate deposits of residents with scheduled commercial banks before and after demonetisation in order to find out what changes demonetisation have made on the deposits. Table 1 shows the aggregate deposits of residents with scheduled commercial bank from November 2015 to October 2016 and November 2016 to October 2017 and their growth rate in percentage.

TABLE 1: AGGREGATE DEPOSIT OF RESIDENTS WITH SCHEDULED COMMERCIAL BANKS DURING PRE AND POST DEMONETISATION

Pre Demonetisation			Post Demonetisation		
Month	Deposits (Rs in Billion as on the last reporting Friday)	Growth rate (Percentage)	Month	Deposits (Rs in Billion as on the last reporting Friday)	Growth rate (Percentage)
Nov 2015	88249.6		Nov 2016	104846.6	
Dec 2015	88871.5	0.7%	Dec 2016	105686.2	0.8%
Jan 2016	89639.1	0.9%	Jan 2017	104650.2	-1.0%
Feb 2016	90416.6	0.9%	Feb 2017	104367.4	-0.3%
Mar 2016	90777.0	0.4%	Mar 2017	106728.9	2.3%
Apr 2016	92734.7	2.2%	Apr 2017	104804.2	-1.8%
May 2016	92604.1	-0.1%	May 2017	104147.1	-0.6%
Jun 2016	92864.5	0.3%	Jun 2017	104669.4	0.5%
Jul 2016	93706.4	0.9%	Jul 2017	104210.8	-0.4%
Aug 2016	97269.7	3.8%	Aug 2017	105401.0	1.1%
Sep 2016	100936.6	3.8%	Sep 2017	107826.7	2.3%
Oct 2016	99317.9	-1.6%	Oct 2017	107126.4	-0.6%

Source: RBI Bulletin various issues

Note: Growth rate=$(X_1-X_0)/X_0*100$
Growth rate computed from secondary data

The biggest growth during pre demonetisation was found in August and September 2016, that is 3.8%. During post demonetisation period, the highest growth rate was reported in March and September 2017, which was 2.3%. Before checking whether there is any significant difference exists in the aggregate deposits of residents with scheduled commercial banks during pre and post demonetisation, one sample KS test was conducted in order to check whether the data follows normality or not. The null hypothesis of the KS test states that the data does not follow normal distribution. Table 2 shows the test result of one sample KS test.

TABLE 2: RESULT OF ONE-SAMPLE KOLMOGOROV-SMIRNOV TEST

		Post Demonetisation Deposit	Pre Demonetisation Deposit
N		12	12
Normal Parameters[a]	Mean	105372.0750	93115.6417
	Std. Deviation	1225.31192	4092.58720
Most Extreme Differences	Absolute	0.249	0.193
	Positive	0.249	0.193
	Negative	-0.159	-0.117
Kolmogorov-Smirnov Z		0.864	0.667
Asymp. Sig. (2-tailed)		0.445	0.765

a. Test distribution is Normal.

The calculated two tailed *p* values of KS test of pre and post demonetisation aggregate deposits of residents are **0.765** and **0.445** respectively. Since the calculated values are higher than the **0.05**, the null hypotheses are rejected in both pre and post demonetisation deposits. Therefore, the test distribution is normal. Since the data follows normal distribution, parametric tests can be used. The mean value of the pre demonetisation period is 93115.6417 and post demonetisation is 105372.0750. In order to check whether these mean values show statistically significant difference, paired sample t test was used. Table 3 gives the test results of paired sample t test.

TABLE 3: RESULT OF PAIRED SAMPLE T TEST OF PRE AND POST DEMONETISATION DEPOSITS

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pre Demonetisation - Post Demonetisation	-12256.43333	3479.15427	1004.34533	-14466.98249	-10045.88418	-12.203	11	0.000

Source: Computed from secondary sources

The test results show a *t* statistic of **-12.203** with **11** degrees of freedom. The two tailed *p* value is .**000**, which is less than **0.05**. Earlier a hypothesis was formulated that there is no significant difference in the aggregate deposits of residents with the scheduled commercial banks during pre and post demonetisation. As the p value is less than 0.05, the null hypothesis is rejected at 5% level of significance. Thus, there is a significant difference between the average aggregate deposits of residents during pre and post demonetisation.

6.2 EFFECTS OF DEMONETISATION ON THE DOMESTIC CREDIT

Deposits are the major source used by banks to provide as credit to the borrowers. Giving loan is one of the important primary functions of banks. Interest received on these loans is the main source of income to the banks. Previous analysis shows that demonetisation has improved the deposits with the banks in the country. At the time of demonetisation, large funds were available with the banks. Therefore, the banks can provide loans at cheaper rate of interest. It was reported during demonetisation that the banks are providing loans at a low rate. Therefore, here the study checks whether demonetisation has improved the domestic credit in the country. Domestic credit includes credit to the government and credit to the commercial sector. Table 4 shows the domestic credit of scheduled commercial banks during pre and post demonetisation**.**

TABLE 4: DOMESTIC CREDIT OF SCHEDULED COMMERCIAL BANKS DURING PRE AND POST DEMONETISATION

Pre Demonetisation			Post Demonetisation		
Month	Domestic credit (Rs in Billion as on the last reporting Friday)	Growth rate (Percentage)	Month	Domestic credit (Rs in Billion as on the last reporting friday)	Growth rate (Percentage)
Nov 2015	100633.4		Nov 2016	112247.9	
Dec 2015	102325.6	1.7%	Dec 2016	116166.5	3.5%
Jan 2016	103372.2	1.0%	Jan 2017	116578.3	0.4%
Feb 2016	104231.5	0.8%	Feb 2017	115105.0	-1.3%
Mar 2016	104595.6	0.3%	Mar 2017	115665.6	0.5%
Apr 2016	105250.0	0.6%	Apr 2017	114777.7	-0.8%
May 2016	105474.9	0.2%	May 2017	115093.2	0.3%
Jun 2016	106056.3	0.6%	Jun 2017	115949.9	0.7%
Jul 2016	106742.0	0.6%	Jul 2017	115515.1	-0.4%
Aug 2016	107228.4	0.5%	Aug 2017	117006.3	1.3%
Sep 2016	110368.2	2.9%	Sep 2017	119476.5	2.1%
Oct 2016	109643.7	-0.7%	Oct 2017	119625.6	0.1%

Source: RBI Bulletin various issues

Note: Growth rate=$(X_1-X_0)/X_0*100$
Growth rate computed from secondary data

The highest growth rate reported during pre demonetisation period was 2.9% in September 2016. 3.5% in December 2016 was the highest growth rate reported during post demonetisation. Kolmogorov Smirnov test was conducted in order to check whether the data follows normality or not. A null hypothesis was formulated for this purpose that the data does not follow normal distribution. Table 5 shows the test result of one sample KS test.

TABLE 5: RESULT OF ONE-SAMPLE KOLMOGOROV-SMIRNOV TEST

		pre advance	post advance
N		12	12
Normal Parameters[a]	Mean	105493.4833	116100.6333
	Std. Deviation	2804.00391	2000.66671
Most Extreme Differences	Absolute	.101	.171
	Positive	.101	.159
	Negative	-.097	-.171
Kolmogorov-Smirnov Z		.351	.592
Asymp. Sig. (2-tailed)		1.000	.875

a. Test distribution is Normal.

The two tailed *p* values of pre and post demonetisation advances are **1.000** and **0.875** respectively. Since the calculated values are higher than the **0.05**, the null hypotheses are rejected. Therefore, the test distribution is normal. Since the data follows normal distribution, parametric paired sample t test can be used to check whether there is any statistically significant difference between pre and post demonetisation domestic credit of banks. Table 6 gives the test results of paired sample t test.

TABLE 6: RESULT OF PAIRED SAMPLE T TEST OF PRE AND POST DEMONETISATION DOMESTIC CREDIT

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	pre credit - post credit	-10607.15000	1591.24539	459.35298	-11618.17908	-9596.12092	-23.092	11	0.000

Source: Computed from secondary data

The test results show a *t* statistic of **-21.092** with 11 degrees of freedom. The two tailed *p* value is .**000**, which is less than 0.05. A hypothesis has formulated in this regard that there is no significant difference in the domestic credit made by scheduled commercial banks during pre and post demonetisation. Here p value is less than 0.05. Therefore, the null hypothesis is rejected at 5% level of significance, which means that the average advances of pre and post demonetisation differ significantly.

6.3 EFFECTS OF DEMONETISATION ON THE ELECTRONIC PAYMENT

In India, almost 90% of the transactions were on cash basis. Indian government aimed to move the country into a cashless economy because it is very advantageous to the nation. Fake currency, black money, terrorism etc are certain evils of the nation that can be contained by going cash less. The government imposed certain restrictions on the cash transactions during demonetisation, but there was no restriction on the non-cash payment transactions. The present study analyses whether demonetisation improved the electronic payment in India or not. In this study, electronic payment includes Real Time Gross Settlement (RTGS) both customer and interbank transactions, Cheque Truncation System (CTS), Immediate Payment Service (IMPS), National Automated Clearing House (NACH), credit card usage at POS, debit card usage at POS, Prepaid Payment Instruments such as m-Wallet, PPI cards and Paper Vouchers, mobile banking and Electronic Fund Transfer (EFT) or National Electronic Fund Transfer (NEFT). Table 7 shows the value of electronic payment made during pre and post demonetisation.

TABLE 7: ELECTRONIC PAYMENT DURING PRE AND POST DEMONETISATION

Pre Demonetisation			Post Demonetisation		
Month	Electronic payment (Rs in Billion)	Growth rate (Percentage)	Month	Electronic payment (Rs in Billion)	Growth rate (Percentage)
Nov 2015	66470.01		Nov 2016	95641.49	
Dec 2015	84480.18	27.1%	Dec 2016	105992.37	10.8%
Jan 2016	80603.69	-4.6%	Jan 2017	98802.38	-6.8%
Feb 2016	84971.37	5.4%	Feb 2017	94248.15	-4.6%
Mar 2016	120945.46	42.3%	Mar 2017	151725.79	61.0%
Apr 2016	84729.93	-29.9%	Apr 2017	111615.18	-26.4%
May 2016	91699.62	8.2%	May 2017	113647.31	1.8%
Jun 2016	100289.71	9.4%	Jun 2017	115947.12	2.0%
Jul 2016	90802.58	-9.5%	Jul 2017	108536.49	-6.4%
Aug 2016	94764.00	4.4%	Aug 2017	110979.4	2.3%
Sep 2016	104683.84	10.5%	Sep 2017	125932.64	13.5%
Oct 2016	94778.78	-9.5%	Oct 2017	115899.6	-8.0%

Source: RBI Bulletin various issues

Note: Growth rate=$(X_1-X_0)/X_0*100$

Growth rate computed from secondary data

The highest growth rate of electronic payment was reported during pre demonetisation period in March 2015 and during post demonetisation in March 2016, which was 61%. Here also one sample KS test was conducted to check whether the data follows normality or not. Table 8 shows the test result of one sample KS test.

TABLE 8: RESULT OF ONE-SAMPLE KOLMOGOROV-SMIRNOV TEST

		Pre demonetisation electronic payment	Post demonetisation electronic payment
N		12	12
Normal Parameters[a]	Mean	91601.5975	112413.9933
	Std. Deviation	13560.90278	15403.31683
Most Extreme Differences	Absolute	0.157	0.243
	Positive	0.157	0.243
	Negative	-0.133	-0.119
Kolmogorov-Smirnov Z		0.545	0.840
Asymp. Sig. (2-tailed)		0.928	0.480

a. Test distribution is Normal.

The calculated values of pre and post demonetisation electronic payments are **0.928** and **0.480** respectively. Since the calculated values are higher than the **0.05**, the null hypothesis is rejected that the test distribution is normal at 5% level of significance. Since the data follows normal distribution, parametric test can be used in the study. The mean value of the pre demonetisation electronic payment is 91601.59 and post demonetisation electronic payment is 112413.99. In order to check whether there is any statistically significant difference between pre and post demonetisation electronic payment, paired sample t test had used. Table 9 gives the test results of paired sample t test.

TABLE 9: RESULT OF PAIRED SAMPLE T TEST OF PRE AND POST DEMONETISATION ADVANCES

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	pre payment - post payment	-20812.39583	6069.76824	1752.19116	-24668.94258	-16955.84908	-11.878	11	0.000

Source: Computed from secondary data

The test results show a *t* statistic of **–11.878** with 11 degrees of freedom. The two tailed *p* value is **0.000**, which is less than 5% level of significance. A null hypothesis was formed in this regard that there is no statistically significant difference in the electronic payment during pre and post demonetisation. As the p value is less than 0.05, the null hypothesis is rejected at 5% level of significance, which means that the average electronic payments during pre and post demonetisation differ significantly.

7.   CONCLUSION

From the above analysis, it is clear that the demonetisation affected banking sector significantly. Three hypotheses were formulated in this study, which are rejected at 5% level of significance. Hence, the study proves that demonetisation made significant changes on the aggregate deposits of residents and domestic credit to the borrowers. Besides, going cash less economy is one of the important missions of Indian government. The study focused on this aspect also. In this case also, null hypothesis was rejected at 5% level of significance. That means the demonetisation boosted the non-cash transactions in the country. Even though it is too early to assess the true and a correct impact of demonetisation on the banking sector, the study focused the short-term effects of demonetisation, which was found to be positive and favourable to the banking sector.

REFERENCES

1.   Ahuja, H. (2017): "Demonetisation :An Impact on Indian Banking" Paper presented at 2 Days International Conference on Research Trends in Engineering, Applied Science and Management, Rajasthan, India, 209–212
2.   Gupta, A. (2017). "A Field Study on the Impact of Demonetisation Act on Disabled and their Accessibility to Banks," New Man International Journal of Multi Disciplinary Studies, Vol. 4, No. 3*, pp. 93–97.
3.   Kaur, M. (2017). "Demonetization and Its Impact on Indian Banking System (With Special Reference to E-Cash)," International Journal of Business Management and Scientific Research, Vol. 27, pp. 87–89.
4.   Kumar, A. (2017). "Demonetization and Cashless Banking Transactions in India," International Journal of New Innovations in Engineering and Technology, Vol.7, No. 3, pp.30–36.
5.   Prabhu, M., Girish, V., & Mamatha, R. (2017). "Demonetization and its effect on Banking Sector," IOSR Journal of Business and Management, pp. 20–22.
6.   Reserve Bank of India Annual Report 2016-17. RBI.
7.   Shirley, A. J. (2017). "Impact of Demonetisation in India," International Journal of Trend in Research and Development, pp. 20-23.
8.   Singhal, S. (2017), "Demonetisation and E-banking in India," International Journal of New Technology and Research, Vol.3, No.1, 20–25.
9.   Srinivasan, G. U., Eakamaram, A., & Nesamani, V. (2017). "Demonetization : Impact on Banking Sector," International Journal of Trend in Research and Development, pp.17–19.

WEBSITES

10.   www.investopedia.com
11.   www.thehindu.com
12.   www.npci.org.in
13.   www.rbi.org.in

REQUEST FOR FEEDBACK

Dear Readers

At the very outset, International Journal of Research in Commerce, Economics & Management (IJRCM) acknowledges & appreciates your efforts in showing interest in our present issue under your kind perusal.

I would like to request you to supply your critical comments and suggestions about the material published in this issue as well as, on the journal as a whole, on our e-mail **infoijrcm@gmail.com** for further improvements in the interest of research.

If you have any queries, please feel free to contact us on our e-mail **infoijrcm@gmail.com**.

I am sure that your feedback and deliberations would make future issues better – a result of our joint effort.

Looking forward to an appropriate consideration.

With sincere regards

Thanking you profoundly

Academically yours

Sd/-
Co-ordinator

DISCLAIMER

ABOUT THE JOURNAL

In this age of Commerce, Economics, Computer, I.T. & Management and cut throat competition, a group of intellectuals felt the need to have some platform, where young and budding managers and academicians could express their views and discuss the problems among their peers. This journal was conceived with this noble intention in view. This journal has been introduced to give an opportunity for expressing refined and innovative ideas in this field. It is our humble endeavour to provide a springboard to the upcoming specialists and give a chance to know about the latest in the sphere of research and knowledge. We have taken a small step and we hope that with the active co-operation of like-minded scholars, we shall be able to serve the society with our humble efforts.

Our Other Journals

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

III