

# Increasing Non-Interest Income in Banks from the Use of Credit and Debit Cards in ATMs: A Novel Approach

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## Abstract

Most of the online banking channels have a favourable impact on the fee based ROA and ROE of both SBI and ICICI; except for the use of credit and debit cards in ATMs; Guha et al (2020). In this paper, regression model has been used to show the impact of use of credit and debit cards at ATMs on the commission, excise and brokerage of both banks; and a multiple regression model has been developed which will help in increasing fee-based income from the use of credit and debit cards in ATMs. This has important implications for the banking sector as well as the government; because, online banking channels contribute directly towards commission, exchange and brokerage of banks and these are a major source of non-interest income. Fees on the use of credit cards and debit cards in ATMs are levied on the basis of the number of transactions. However, no fees are levied on the basis of the amount of transactions. This lacuna that exists in the banking system demands attention. The aim of this paper is to make appropriate suggestions to increase the fee-based income from the use of credit and debit cards in ATMs.

**Keywords:** Fee-based income, Indian banks, Credit cards, Debit cards.

## 1. Introduction:

A study by Guha, Hota and Sahu (2020) shows; most of the online banking channels have a favourable impact on the *fee based* ROA and ROE of both SBI and ICICI, except for the use of credit and debit cards in ATMs. It is important to understand any plausible causes of the same and make appropriate suggestions to improve the performance of the use of credit and debit cards in ATMs.

The main motivation for this study is that, even though the total non-interest income has actually decreased after the financial crisis but, service charges, one of the subcomponents of noninterest income, have increased; (Haubrich & Young, 2019). Also, fees generated from the use of credit and debit cards in ATMs, contribute directly towards 'Commission, exchange and brokerage' in Indian banks, (Sharma, 2009); but, the effect of the aforesaid online banking channels on the 'Commission, exchange and brokerage' is less. This is important because, increasing non-interest income of banks can help the banking industry, the government and the economy by improving banks' performance; as the banking industry around the world is slowly shifting its revenue base from traditional activities to non-traditional activities that generate fee income, service charges and other types of non-interest income; particularly after the financial crisis of 2006-2007 and banks have improved their risk-return profiles as an outcome of diversification; Edirisuriya, Gunasekarage and Dempsey (2015), Singh (2016). Over the years e-banking

has become a major contributor of non-interest income. But, the effect of two online banking channels; 'Credit card usage in ATMs' and 'Debit card usage in ATMs' on banking income is less. This fact along with the fact that the cost of cash is rising; motivates us to find out whether a model can be developed that can help in increasing the contribution of the aforesaid e-banking channels towards banking income.

In this study, regression technique has been used to show the effect of the use of credit cards and debit cards at ATMs on the commission, excise and brokerage (which is a part of total banking income) of both banks. Next, it has been discussed why banks need to increase fees for increased cash usage along with developing a multiple regression model which will help in increasing fee-based income from the use of credit and debit cards in ATMs. Finally, this paper also tries to determine the right amount of fees that should be levied, if this new approach is followed, with the help of probability approach.

## 2. Review of Literature

Haubrich and Young (2019), in their paper, show that service charges have increased after the global financial crisis. They also use regression to find out why banks increased their dependence on non-interest income. In order to increase non-interest income from the use of credit and debit cards in Indian banks, a regression model has been developed. The review of literature that leads to the formation of our regression equation has been categorized in terms of the dependent and the independent variables.

### *Service charges: An important part of non-interest income*

Non-interest income is the income for a bank which arises from non-traditional activities; (Singh, 2016). He says the Indian banking industry is slowly increasing its earnings through diversification to non-traditional activities that generate fee-based income, like service charges and other non-interest income. He adds, after the financial crisis of 2008 non-interest income has gained attention all over the world; and the shift towards non-traditional activities is assumed to reduce the volatility of banks' revenues and thus reduce risks; because, non-interest income is less dependent on overall business conditions as compared to interest income. Pennathur, Subrahmanyam and Vishwasrao (2012) in their work note, there is a significant reduction of risk, measured by profitability variables, with an increase in fee-based income for public sector banks. Default risk declines as well. Apart from India, Edirisuriya et al (2015), say that since the deregulation of the Australian financial market, banks in Australia have also significantly diversified to a broader range of financial products and services. This has led to improved risk-return profiles of Australian banks. Another study by Haubrich and Young (2019) shows, that a large portion of banks' revenue comes from non-interest income, which includes overdraft fees and ATM charges. In the study, the authors find that total non-interest income has actually decreased; even though, the low market interest rate has had an impact on the banks'

interest income. However, service charges, one of the subcomponents of noninterest income, have increased. A significant outcome of this study is that, the increase in service charges gets hidden in the data on total non-interest income; because; other types of non-interest incomes fell during the same period.

The fact that total service charges in banks have increased after the global financial crisis is very important in the formation of the regression equation wherein "Commission, excise and brokerage" is the dependent variable.

### *Contribution of e-banking to non-interest income*

Saluja and Wadhe (2015), from 2006 – 2014, conduct a study on 31 Indian banks categorized under four major bank groups of scheduled commercial banks, in order to investigate how E-banking impacts the profitability of Indian scheduled commercial banks. The results show that an increase in number of ATMs affects the profitability positively. Another study shows that, foreign banks report highest fee income then private domestic banks followed by public sector banks; (Pennathur et al, 2012). This study shows that higher the levels of governmental ownership lesser the likelihood to pursue non-interest income sources. The result has implications for banks in emerging banking markets pursuing non-interest revenue sources as changes are bound to occur in the risk profile of such banks. Singh (2016), also finds that, in India, foreign banks report maximum fee income followed by private sector banks while public sector banks report

significantly less. The author finds that return on equity, loan quality, profit per employee, and personalized customer services offered to bank customers have a strong and positive influence on non-interest income. Another important finding of this study is that, as banks increase focus on traditional interest income sources, there is a tendency to diversify less into non-traditional or non-interest income.

Around the world, Hossein (2013), studies the banks that have taken to online banking in selected Asian countries. The time period of the study is between 1990 and 2010. The study allows for the heterogeneous country effect and the empirical results indicate a co-integration relationship in the short-run. To determine the long-run relationship, a full-modified OLS has been used. The study makes use of bank specific as well as macro-economic control variables to understand the impact of internet banking on the banks' return on assets (ROA) and return on equity (ROE). According to the study, e-banking starts contributing to banks' ROE three years lagged; including a negative impact for one year lagged. Furst, Lang, and Nolle (2002), compiled responses to a questionnaire that was developed by the examiners from the Office of the Comptroller of the Currency (OCC). The time period was between mid-August and mid-September 1999. The study was conducted on 2,535 national banks in USA. The results show that internet banks rely more on non-traditional sources of income and less on core deposits for funding as against

non-internet banks; and accounting efficiency ratios as well as returns on equity are better for internet banks.

The online banking channels; use of credit cards in ATMs and use of debit cards in ATMs contribute directly towards "Commission, excise and brokerage" in Indian banks; (Sharma, 2009). This is important for the formation of the regression equation.

#### *More charges for more cash*

Chakravorti (2014) says, only 8.2% households are unbanked in the U.S. However, for individuals in the U.S., cash usage has highest impact on the unbanked due to the impact of a regressive tax. Also, it is a lot of work since paper money has to be guarded, managed, stored, and accounted for. U.S. retail businesses lose about \$40 billion annually due to theft of cash and the U.S. treasury loses about \$100 billion annually because of cash in circulation. In India, 20% adults are unbanked; according to the Global Findex Report of 2017. But, due to India's sheer population size 20% equals to more than 190 million adults. This leads to under reporting of earnings and transactions; due to which the society bears a huge cost of cash. A report prepared by IIT-Bombay says; more than Rs 5,000 crore is spent annually on printing and managing cash. The report claimed that the amount spent towards maintaining Unified Payment Interface (UPI) could be much lower and the expenditure on cash could be curtailed; ([www.economictimes.com](http://www.economictimes.com)). A new study

conducted by Visa says, in India, the cost of cash transactions is equivalent to 1.7 per cent of the gross domestic product (GDP). Bringing it down from 1.7% to 1.3% alone would lead to a savings of Rs 70,000 crore over a period of 5 years; (www.businessstandard.com). Interestingly, the Reserve Bank of India has reported an unprecedented rise in currency held by public. In the immediate aftermath of demonetisation, the cash component came down from about 12% of GDP to 7.5% of GDP only to rise steadily in subsequent years; it has grown a whopping 57% from Rs. 17.5 trillion on Nov 4, 2016 to Rs 28 trillion on Oct 8, 2021; (www.thewire.in). Fees on the use of credit cards and debit cards in ATMs are levied on the basis of the number of transactions. After surpassing the stipulated number of free transactions per month, the customers are charged a certain 'fee' by the bank. However, no fees are levied on the basis of the amount of transactions. In a world where the cost of cash is rising and in developing countries like India, where the use of cash is increasing; is an important fact to be considered while developing a multiple regression model to increase fee-based income.

### 1. Importance of the study

Some very important observations have emerged after review of literature; first, there is an increase in the diversification activities of banks after the global financial crisis of 2006-07. Second, e-banking has become a major contributor of non-interest income, and is becoming popular by the day. Third, cash is still the king in developing economies like India, this

fact along with the fact that the cost of cash is rising; motivates us to find out whether a model can be developed that can help in increasing the contribution of 'Credit card usage in ATMs' and 'Debit card usage in ATMs' to 'Total banking income' as the usage of these e-banking channels increase.

### 2. Objectives of the study

-To develop a new regression equation that will help in increasing fee-based income, in Indian banks, from the use of credit and debit cards in ATMs.

-To ascertain the right amount of fees that should be levied from ATM users in order to increase fee-based income from ATMs.

### 5. Methodology $\{ \displaystyle P(A \cup B) = P(A) + P(B) - P(A \cap B) = P(A) + P(B) - 0 = P(A) + P(B) \}$

For this study, various types of non-interest income of both SBI and ICICI have been obtained; including commission, excise and brokerage. Also, data on use of credit as well as debit cards in ATMs has been obtained. The amounts are in million Rupees. All data has been collected from www.rbi.org and www.moneycontrol.com. The leading public sector bank SBI and private bank ICICI have been selected for the study. ICICI was the leading private sector bank in India till March 2017 (www.qz.com). These banks have been selected because it is assumed that all other banks follow the leaders as far as trends in non-interest income are considered. The study has been conducted over a period of 6 years from 2011-2017. Data on online banking

channels like, use of credit and debit cards in ATMs is not available before 2011.

Regression has been carried out using SPSS and LASSO technique (Tibshirani, 1996) has been used to study the impact of use of credit cards and debit cards in ATMs on the commission, excise and brokerage of SBI and ICICI. With regression technique, it can be found out what effect the use of credit cards and debit cards at ATMs has on the commission, excise and brokerage of both banks.

The regression models used in this paper are as follows;

SBI;

$$Y_s = f(C_s)$$

$$Y_s = f(D_s)$$

For ICICI;

$$Y_i = f(C_i)$$

$$Y_i = f(D_i)$$

Where,  $Y_s$  stands for 'Commission, excise and brokerage' for SBI,  $C_s$  stands for use of credit cards at ATMs for SBI,  $D_s$  stands for use of debit cards at ATMs for SBI,  $Y_i$  stands for 'Commission, excise and brokerage' for ICICI,  $C_i$  stands for use of credit cards at ATMs for ICICI and  $D_i$  stands for use of debit cards at ATMs for ICICI.

Furthermore, a multiple regression model has been developed by adding

a new variable which will help in increasing the contribution from the use of credit and debit cards towards both banks' non-interest income.

The multiple regression equations;

for SBI are;

$$Y_s = f(N_x) + f(C_s)$$

$$Y_s = f(N_x) + f(D_s)$$

And for ICICI;

$$Y_i = f(N_x) + f(C_i)$$

$$Y_i = f(N_x) + f(D_i)$$

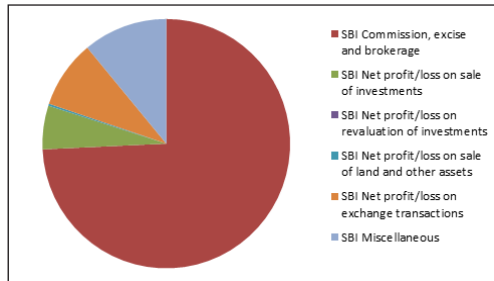
Where, the new variable added,  $N_x$  stands for the number of times withdrawals touch Rs.10000 mark.

More analysis has been carried out in order to ascertain the right amount of fees that should be levied from customers which will help in increasing fee-based income in public and private sector banks in India as the use of credit and debit cards increases in ATMs; and keeping in mind the rising cost of cash.

## 6. Data Analysis and Interpretation

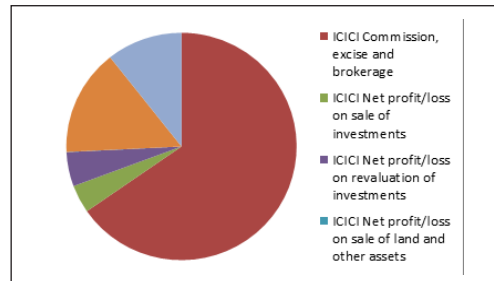
The total amount of some sources of non-interest income is negative or very less; refer Appendices 3 & 4, so they are not visible in the pie chart. However, it can be clearly seen that Commission, Excise and Brokerage is the major source of non-interest income. Please refer to Figure 1 & 2.

**Figure 1: Pie Chart showing various sources of non-interest income of SBI**



Source: www.moneycontrol.com

**Figure 2: Pie Chart showing various sources of non-interest income of ICICI**



**Regression Analysis**

Regression has been performed, using LASSO technique in SPSS (Tibshirani, 1996), to show the effect of use of credit as well as debit cards in ATMs on the Commission, excise and brokerage of SBI and ICICI; please refer to appendices 1& 2. It can be seen that even though these online banking channels contribute directly towards the Commission, excise and brokerage of both banks (Sharma, 2009); yet, in case of SBI there is enough scope of improving the same while in case of ICICI it is really poor and requires major improvement. Please refer to the regression results in Table 1.

**Table 1: The regression results (R-Square); regressions run on commission, excise and brokerage of SBI and ICICI.**

<b>Banks Use of Credit Cards in ATMs</b>
<b>Use of Debit Cards in ATMs</b>
SBI 0.7 0.6
ICICI 0.2 0.1

Source: www.rbi.org and www.moneycontrol.com

**A. Need for a new regression model**

Fees on the use of credit cards and debit cards in ATMs are levied on the basis of the number of transactions. After surpassing the stipulated number of free transactions per month, the customers are charged a certain ‘fee’ by the bank. However, no fees are levied on the basis of the amount of transactions i.e., no difference exists between withdrawing Rs. 5000 and Rs. 15000. Each and every type of say, debit card, allows a certain amount of withdrawal at ATMs. But, even within a category, there should be fees levied from those who withdraw more cash.

This is important because, the Reserve Bank of India reported, ‘an unforeseen rise in currency held by public. It has shown a dramatic 57% growth; from Rs. 17.5 trillion on Nov 4, 2016 to Rs 28 trillion on Oct 8, 2021; five years after the government announced the demonetisation of Rs 500 and Rs 1,000 notes on November 8, 2016’. This indicates that cash is still the king in the financial system despite the big push

in digital transactions and less cash economy. Currency to GDP ratio, which dipped to 7.5 per cent in the immediate aftermath of demonetisation, has now risen up to 14.5 per cent as of November 2021. ([www.thewire.in](http://www.thewire.in)).

But cash is a costly affair; and in a country like India where more than 190 million adults are unbanked, under reporting of earnings and transactions compels the society to bear a huge cost of cash. According to a report prepared by IIT-Bombay; about Rs 5,000 crore is spent annually on printing cash alone and even more on managing it ([www.economictimes.com](http://www.economictimes.com)). Also, a new study by Visa says, the cost of cash transactions in India is equivalent to 1.7 per cent of the gross domestic product (GDP). Reducing it to 1.3% would lead to savings of Rs 70,000 crore over 5 years ([www.businessstandard.com](http://www.businessstandard.com)).

The daily cash withdrawal limits of SBI and ICICI banks are discussed below. Please refer to Tables 2 & 3 respectively.

Keeping the above facts in mind, it can be rightly said that there is a need to impose fees on those who withdraw more cash. For this, let us suppose (please note that the charges are hypothetical) those who withdraw in between Re.1 to Rs. 9999 are charged no fees; while those who withdraw between Rs. 10000 to Rs. 19999 are charged Re.1. Withdrawals between Rs.20000 to Rs. 29999 are charged Re.2 and so on. It can be represented as  $N_x$ . Where, x stands for Rs.10000 and N is the number of times withdrawals touch Rs.10000 mark; i.e., 0 for

withdrawals below Rs.10000, 1 when it is Rs.10000 but below Rs.20000. 2 when it is Rs.20000 but below Rs.30000 and so on; and  $N_x$  together represent the charges that should be levied from a customer every time the withdrawals touch the 10000 mark. So, irrespective of what a customer is withdrawing every day, if her total monthly cash withdrawal from ATMs stands at Rs. 45000;  $N_x$  will be equal to 4.

Adding this new variable will lead to new multiple regression equations;

For SBI;

$$Y_s = f(N_x) + f(C_s)$$

$$Y_s = f(N_x) + f(D_s)$$

For ICICI;

$$Y_i = f(N_x) + f(C_i)$$

$$Y_i = f(N_x) + f(D_i)$$

Where,  $Y_s$  stands for 'Commission, excise and brokerage' for SBI,  $C_s$  stands for use of credit cards at ATMs for SBI,  $D_s$  stands for use of debit cards at ATMs for SBI,  $Y_i$  stands for 'Commission, excise and brokerage' for ICICI,  $C_i$  stands for use of credit cards at ATMs for ICICI,  $D_i$  stands for use of debit cards at ATMs for ICICI and  $N_x$  stands for the number of times withdrawals touch Rs.10000 mark.

Addition of this new independent variable will help in increasing R-square in all four cases; i.e., increasing fee-based income in public and private sector banks in India as the use of credit and debit cards increases in ATMs.



**Table 2:** Daily ATM cash withdrawal limits applicable to SBI debit cards.

ATM/ Debit cards ATM withdrawal limit
SBI Classic and Maestro Debit Cards Rs. 20000
SBI Global International Debit Card Rs. 40000
SBI Gold International Debit Card Rs. 50000
SBI Platinum International Debit Card Rs. 1lakh
SBI In Touch Tap and Go Debit Card Rs. 40000
SBI Mumbai Metro Combo Card Rs. 40000
SBI My Card International Debit Card Rs. 40000

Source: [www.indiatvnews.com](http://www.indiatvnews.com)

**Table 3:** Daily ATM cash withdrawal limits applicable to ICICI debit cards.

ATM/ Debit cards ATM withdrawal limit	
Saphiro debit card	Rs. 2.5lakh
Rubyx debit card	Rs.1.5lakh
Coral debit card	Rs. 1lakh
Coral business debit card	Rs. 1.5lakh
Visa signature debit card	Rs. 1.5lakh
MasterCard world debit card	Rs. 1lakh
Business banking platinum debit card	Rs. 2lakh
Priviledge banking titanium debit card	Rs. 1lakh
Priviledge banking gold debit card	Rs. 75000
Business debit card	Rs. 1lakh
Woman's debit card	Rs. 50000
HPCL debit card	Rs.50000
Platinum debit card	Rs. 1lakh
Platinum chip card	Rs. 1lakh
Smart shopper silver debit card	Rs. 50000

Source: [toughnickel.com](http://toughnickel.com)

## B. Probability of consumer preference

Probability is the branch of mathematics that depicts how likely an event is to occur, or how likely it is that a proposition is true. The probability of an event is a number between 0 and 1, wherein, roughly speaking, 0 indicates impossibility of the event and 1 indicates certainty. The higher the probability of an event, the more likely it is that the event will occur; (Brown & Wong, 2015).

If either event *A* or event *B* can occur but never both simultaneously, then they are called mutually exclusive events. If two events are mutually exclusive, then the probability of *both* occurring is denoted as:

$$P(A \cap B) \{\displaystyle P(A \cap B)\} \text{ and } P(A \text{ and } B) = P(A \cap B) \{\displaystyle P(A \cap B)\} = 0 \{\displaystyle P(A \cap B) = 0\}$$

If two events are mutually exclusive, then the probability of *either* occurring is denoted as;

$$P(A \cup B) \{\displaystyle P(A \cup B)\} \text{ and } P(A \text{ or } B) = P(A \cup B) \{\displaystyle P(A \cup B)\} = P(A) + P(B) - P(A \cap B) \{\displaystyle P(A \cap B)\} = P(A) + P(B) - 0 = P(A) + P(B)$$

Now, due to charging the amount  $N_x$  from customers two different situations can arise;

For SBI,

$$Y_s = f(N_x) + f(C_s) \text{ and } Y_s = f(N_x) + f(D_s)$$

Or,  $Y_s = f(C_s)$  and  $Y_s = f(D_s)$ ; where  $N_x = 0$ , i.e., cash transactions are below Rs.

10000. This means that the customers will not be willing to pay the extra charges at all.

Similarly for ICICI;

$$Y_i = f(N_x) + f(C_i) \text{ and } Y_i = f(N_x) + f(D_i)$$

Or,  $Y_i = f(C_i)$  and  $Y_i = f(D_i)$ ; where  $N_x = 0$ .

In case the second event arises the cost of printing currency is saved. However, if the first event arises the amount  $N_x$  should be such that it covers the cost of printing currency and ultimately the economy should suffer no loss due to excessive cash withdrawal.

## 7. Conclusion

The aim of this paper was to correct a lacuna that exists in the Indian banking scenario. The online banking channels; use of credit cards in ATMs and use of debit cards in ATMs, contribute towards Commission, Excise and Brokerage of banks. But, it can be seen that in case of SBI there is enough scope of improving the same while in case of ICICI it is really poor and requires major improvement. This is also important because 'Commission, excise and brokerage' is the major source of non-interest income for both public and private sector banks in India.

Analysis shows that, fees on the use of credit cards and debit cards in ATMs are levied on the basis of the number of transactions. However, no fees are levied on the basis of the amount of transactions. Each and every type of card allows a certain amount of withdrawal at ATMs; but, even within a category, there should be more fees levied from

those who withdraw more cash. So, a new multiple regression equation has been developed which takes this fact into consideration. This will help in increasing the fee-based income in banks. This study has important implications for the banking sector as well as the government, because; online banking channels contribute directly towards commission, exchange and brokerage of banks and these are a major source of non-interest income and even though most of the online banking channels have a favourable impact on the *fee based* ROA and ROE of both SBI and ICICI; income from the use of credit and debit cards in ATMs is less and can be increased (Guha et al, 2020). An important reason for this might be because no fees are levied on the basis of the amount of transactions in ATMs and the rise in the currency in the system in the aftermath of demonetisation indicates that despite the big push in digital transactions and less cash economy, cash is still the king in the financial system. Also, printing currency is a costly affair. This study also takes help of probability approach to determine the right amount of fees that should be levied for increased cash transactions that will benefit the economy through banks. Apart from managerial implications, this study has some theoretical implications as

well. Banks profit from diversification activities and non-interest income but mostly foreign banks focus on increasing non-interest income as compared to public sector banks; (Edirisuriya et al., 2015), (Singh, 2016). This paper focuses on novel ways to increase non-interest income. However, this paper focuses only on developing a regression model in order to increase fee-based income from the use of credit cards and debit cards at ATMs. But, if this new approach is followed, will it create immense pressure on the account holders in terms of charges levied? Or can both charges co-exist? Or are fees levied on the basis of amount of transactions better for the economy?

All these are a matter of further research.

## Appendices

**Appendix 4:** First column shows the years, second shows commission, exchange and brokerage, third shows net profit/loss on sale of investments, fourth column shows net profit/loss on revaluation of investments, fifth column shows net profit/loss on sale of land and other assets, sixth shows net profit/loss on exchange transactions and the last shows miscellaneous non-interest income in ICICI. All amounts are in million Rupees.

YEARS	Commission, excise and brokerage	Net profit/ loss on sale of investments	Net profit/ loss on revaluation of investments	Net profit/ loss on sale of land and other assets	Net profit/loss on exchange transactions	Miscellaneous
2012	54,351.0	3,314.0	-4,053.0	-17.0	12,590.0	8,843.0
2013	54,617.0	5,651.0	-1,287.0	353.0	13,331.0	10,793.0
2014	63,073.0	4,174.0	3,480.0	1,364.0	18,265.0	13,923.0
2015	69,799.0	15,503.0	-18.0	69.0	20,421.0	15,988.0
2016	74,617.0	42,583.0	-4,629.0	281.0	22,716.0	17,664.0
2017	80,349.0	88,139.0	-1,907.0	21.0	13,552.0	14,890.0

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**Appendix 1:** First column shows the years, second shows the amount of commission, excise and brokerage in SBI, third shows the amount of transactions of credit cards at ATMs and the last column shows the amount of transactions of debit cards at ATMs; in SBI. All amounts are in million Rupees.

YEARS	Commission, excise and brokerage	Creditcard transactions at ATMs	Debitcard transactions at ATMs
2011-12	120,909.0	1259	4901271
2012-13	114,837.0	1596	5809581
2013-14	126,113.0	2335	6826093
2014-15	131,728.0	3982	7202720
2015-16	144,160.0	3806	7475747
2016-17	162,766.0	4190	7534605

**Appendix 2:** First column shows the years, second shows the amount of commission, excise and brokerage in ICICI, third shows the amount of transactions of credit cards at ATMs and the last column shows the amount of transactions of debit cards at ATMs; in ICICI. All amounts are in million Rupees.

YEARS	Commission, excise and brokerage	Credit card transactions at ATMs	Debit card transactions at ATMs
2011-12	54,351.0	556	1288351
2012-13	54,617.0	492	1424964
2013-14	63,073.0	475	1665409
2014-15	69,799.0	3780	6723846
2015-16	74,617.0	1300	1829940
2016-17	80,349.0	1113	1679027

**Appendix 3:** First column shows the years, second shows commission, exchange and brokerage, third shows net profit/loss on sale of investments, fourth column shows net profit/loss on revaluation of investments, fifth column shows net profit/loss on sale of land and other assets, sixth shows net profit/loss on exchange transactions and the last shows miscellaneous non-interest income in SBI. All amounts are in million Rupees.

<b>YEARS</b>	<b>Com- mission, excise and bro- kerage</b>	<b>Net prof- it/loss on sale of invest- ments</b>	<b>Net prof- it/loss on revalu- ation of invest- ments</b>	<b>Net profit/ loss on sale of land and other assets</b>	<b>Net prof- it/loss on exchange transac- tions</b>	<b>Miscel- laneous</b>
2012	120,909.0	-9,197.0	0	-441.0	14,322.0	17,922.0
2013	114,837.0	11,019.0	-38	-327.0	16,916.0	17,941.0
2014	126,113.0	22,794.0	-2,027.0	-386.0	18,953.0	20,083.0
2015	131,728.0	36,180.0	0	-427.0	19,360.0	38,918.0
2016	144,160.0	51,688.0	-1,517.0	-167.0	17,993.0	66,296.0
2017	162,766.0	107,496.0	0	-371.0	23,884.0	60,833.0