#### EFFECT OF CASHLESS POLICY ON NIGERIA'S ECONOMIC GROWTH

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#### Abstract

This study examined the impact of cashless policy on the economic growth of Nigeria for the period of 2011 - 2018. Data was collected from secondary sources through annual reports obtained from Central Bank of Nigeria Statistical Bulletins. The impact of cashless policy was proxied by Automated Teller Machine (ATM), Point of Sale (POS), and Internet Banking (WEB), while economic growth was proxied by Gross Domestic Product (GDP). Multiple regressions were applied to determine the impact of the policy on the GDP using the ATM, POS and the WEB. The study revealed that ATM has a positive effect on GDP. On the other hand, the regression results also show that POS and WEB had a negative effect on GDP. Based on the findings of the study, it is therefore recommended that awareness should be created on the benefits derivable from cashless policy to stimulate improvement of business activities, thereby enhancing economic growth.

# Keyword: Cashless Policy, Economic Growth, Technology, Digitalization

#### INTRODUCTION

The introduction of cashless policy for all economic transactions in Nigeria is expected to pose challenges to both policy makers and policy implementers. This concern revolves around the consistency, resilience, effectiveness, and efficiency of monetary policy. Historically, different forms of payment have been in existence. First was trade by barter which was predominant in the pre-literate period. The difficulty of double coincidence of want brought about the introduction of different forms of money. Although, the introduction of money as a means of exchange also had some associated challenges such as money laundering, insecurity in holding cash, and a host of others (Achor and Robert, 2013; Khairun and Yasmin 2010,; and, Odior and Banuso 2012) predicted the eventual removal or limiting the use of exchange instrument such as cash. This is referred to as cashless economy. Today, developed countries in the world are rapidly moving away from traditional means of cash payment instrument towards electronic payment instrument and it is generally believed that this paradigm shift will boost economic activities, resulting in economic growth (Humphrey, 2004).

Economic growth can be seen as an increase in the capacity of an economy to produce goods and services over a period of time. A country is said to experience economic growth if the key indicators for measuring a nation's progress are favorable. These key indicators include foreign direct investment, gross domestic product, exchange rate, industrial production index, and inflation rate. Economic growth also represents a long run expansion in the productivity potential of a country (Gupta, 2015). The sanity and soundness of a nation's financial system determines to a large extent the level of economic activities of the nation.

The introduction of cashless policy has the tendency to enhance economic activities (Igbara, Emerenini & Daasi, 2015). This is because the cashless system is a driving force that is changing the landscape of developing economy towards a more developed and competitive economy. A cashless based economy is

one in which both retail and commercial activities are carried out electronically without the use of cash. The more cash is continually used, the more the government spends money in replacing worn-out or torn currency. An efficient payment system (which depends less on cash) is a necessity for economic growth.

For any economy to develop therefore, its mode of payment must be secured, affordable, and convenient. In order to grow the economy, the central bank of Nigeria in the year 2011 proposed the cashless policy to reduce the cost of handling cash and printing new notes that cost the Federal Government N192 billion. In order to reduce this cost and save reasonable amount that will accrue to the federation account, cash handling and other related challenges such as money laundering, armed robbery, revenue leakages that may arise from direct cash handling. A cashless economy allows for electronic means of transactions rather than the use of cash. It also makes it easier to fight excess cash carrying and other related challenges. Since the financial sector of every economy is the one responsible for mobilizing savings and ensuring that such monies are allocated efficiently for all investments, the global volume and value of non-cash payment has continued to grow particularly in the developed nations and it is believed that such parameters they are clear indications for a country's growth. There is no doubt that Nigeria is a highly cash-based economy with 66% of cash outside the banking sector. What is however more important is the fact that the country has embraced and implemented the cashless policy with the hope that it would boost economic activities (Cobb, 2005).

From our research, most of the studies conducted in Nigeria like that of Muyiwa, Tunmibi, and John-Dewole (2013); and, Amire and Omoare (2015) used primary data and their work did not cover up to 2016. Perhaps, their findings may have been overtaking by events considering happenings within the country's economy. This creates a methodological and periodic gap. This study intends to fill the gap by using a different quantitative approach to examine the impact of cashless policy on the economic growth of Nigeria.

The following null Hypotheses have been formulated;

**H0**<sub>1</sub>: There is no significant effect of ATM on economic growth of Nigeria.

**H02:** There is no significant effect of POS machines on economic growth of Nigeria.

H03: There is no significant effect of internet banking on economic growth of Nigeria.

The study investigated the effect of cashless policy on the economic growth of Nigeria. The independent variable is proxied by ATM, POS and Internet Banking (WEB) while the dependent variable is proxied by GDP. The study covered an eight year period ranging from 2011-2018. This study will serve as a reference material to researchers who wish to undertake a similar study. The remaining paper is structured as follows; Section 2 presents the review of related literature, empirical review and theoretical discussions while section 3 describes the methodology of the study. Results and their discussion are presented in section 4 and finally, section 5 delivers the conclusion and recommendations of the study.

#### LITERATURE REVIEW

# **Conceptual review**

One major pre-requisite for boosting economic growth and development is to facilitate a secured, convenient and affordable payment system (Ajayi & Ojo, 2016). Cashless policy as defined by Nweke (2012) as a setting where goods and services are bought and paid for through electronic means ensures that there is little or no transaction friction. Nweke also maintains that in a cashless economy the amount of money in a person's wallet is practically irrelevant. Cashless policy is a secured and convenient way of

making payment. It involves means of making payments without the use of physical cash serves as an opening for technological advancement in the field of world economy. A cashless payment system entails more of behavioral changes in people where the use of money as a medium of exchange for goods and services is eliminated and replaced by electronic transfer payments or non-electronic payment via cheques (Tee and Ong 2016).

Woodford (2003) noted that contrary to what is suggested by the term, cashless policy does not refer to an outright absence of physical cash transaction in the economy, but that cash transactions are reduced to the minimum. Scholar such as Eromosele and Obinna (2012) opined that the CBN cashless policy is designed to provide technological payment service that would breakdown the traditional barriers hindering financial inclusion of millions of Nigerians at low cost, secured and convenient financial services to urban and semi-urban and the grass-root or rural area across the country.

The ATM according to Davies, Moutinho and Curry, (2009) is made up of the Central Processing Unit (CPU) for controlling the UI and exchange gadgets, chip or magnetic reader to perceive the client. Essentially, touch screen is utilized to choose the different part of exchange and record printer which gives the client an exchange. Most ATMs are connected to interbank systems, making workable for individuals to make withdrawal and deposit cash from machine not having a place with the bank they have account or the nation where their record are held in this manner, empowering money withdrawal in neighborhood cash (Moutinho, 2009). ATMs are regularly recognized by signs above them demonstrating the name of the bank which owns them.

Omotayo (2015) described the purpose of POS as an electronic installment gadget which empowers a person to make purchases with electronic cards. Moreover, the POS acknowledge Debit/Credit card for installment of merchandise. The POS has a card that stores data on microchips. The microchip can be portrayed as a purse in which money related value is held electronically. Fundamentally, the card is utilized to make acquisition of merchandise on the web at stores, shopping centers, and commercial center. POS permits cardholders to get data on their financial balance through charge or money card thus giving the cardholder a continuous access to online assets.

Internet banking refers to the use of internet facilities or electronic devices to effect payment without necessarily having to travel from one location to the other to use the facilities of a bank. According to scholars such as Kumari and Khanna (2017) this kind of transaction can be done through the internet on PCs, laptop and other devices. Siyanbola (2013) also postulated that bank customers who have subscribed to internet banking can do the basic banking transaction at their convenience through the web: internet banking such as mobile banking uses the electronic card infrastructure for carrying out payment instructions and final settlement of goods and services over the internet between merchants and customers.

Electronic payments and mobile payments collectively accounted for an estimated 22.5 billion transactions in 2018; significant advancement in mobile technology is expected to cause payments to rise to 34% share transactions (from 20% versus) e-payment which will reduce to 66% from (88%). Card usage has continued to rise while cheque usage declined because card remains the preferred non- cash globally payments instruments are on the average market shares of more than 40% and a high of 68% in Canada. Similarly, cheque usage continues to decline across the globe and account for 16 of all non-cash global transactions done by 22%. This is an indicator that the world is moving toward cashless (Bill and Melinda, 2012)

In a cashless economy, customers make payment using internet payment at an unmanned vending machine, manned POS using mobile devices, personal digital assistance (PDA) smart card and other electronic payment system (Humphrey and Berger,1990). Scholars such as Akhalumeh and Ohiokha (2012) estimated that 99% of over 215 million customer transactions in Nigerian banks were through ATM and over the counter cash withdrawals were valued at N2.1 trillion. It was also estimated that an average Nigerian transacts about N65 in cash out of N100 income earned (Princewell & Anuforo, 2013).

According to Sullivan & Sheffrin (1996) a country's Gross Domestic Product is the overall economic output. They further state that the gross domestic product can be quantified in the value of all goods and services produced within the boarder of a county in a year. Similarly, the gross domestic product is the monetary value of all finished goods and services produced within a country's border in a specific time period. Although GDP is usually calculated annually, it includes all the public and private consumption, government outlays, investment and exporters import that take place within a defined territory (Anyanwu 1996).

#### **Theoretical Literature**

Three theories are fundamental to understanding the relationship between cashless policy and economic growth. They are the diffusion of innovation theory, Yusuf's cashless elasticity of financial inclusion model, and the modern theory of financial intermediation.

# The Diffusion of Innovation Theory

The Diffusion of Innovation Theory was created by Rogers (1962). Rogers clarifies how after some time, a thought or item picks up force and spreads or diffuses through a particular populace or social framework (Rogers, 1995). Diffusion of innovation theory can be utilized to break down the impact of cashless payment on the economy. The theory further clarified how innovation is diffused to individuals from a general public overtime. The DOI theory was hypothesized on the supposition that reception of another thought or innovation is brought about by cooperation between people through relational systems. Right now, it is the spread of cashless payment where buyers look for improved and advantageous exchange while organizations look for new profit openings. The diffusion or spread of cashless exchanges inside the network or society, in view of the sorts of innovation adopters and innovation choice procedure. Since the outcomes of diffusion (financial development) in cashless payment relies upon how rapidly the network or society is happy to receive cashless payment through various phase of innovation forms, in this manner, the results of embracing cashless policy contrast in various society.

# Yusuf's Cashless Elasticity of Financial Inclusion Model

The Yusuf Cashless Elasticity of Financial Inclusion Model created by Yusuf in 2014 opined that there are variations in the representativeness of formal sector participants and informal sector participants especially SMEs entrepreneurs to the presentation of cashless policy instruments (ATM, POS, WEB and so forth.) The presentation of cashless policy instruments contributed significantly to the upgrade of financial inclusion among participants in the formal sector. The model emphasized that the degree of adaptability or elasticity differs from formal sector participants to informal sector participants. This model describes the cashless instrument adaptability of financial inclusion as elastic that is of utmost solidarity and essentially more significant than solidarity on account of the formal sector (Yusuf, 2014). Based on this, it is assumed that cashless policy would affect the economy if the formal and informal sector participants coexist and where the formal sector is overwhelmed by the informal and small and medium scale entrepreneurs. While the informal sector is commanded by small scale business entrepreneurs that

are non-proficient or neo-educated; the financial service cost for both the formal and informal sector participants is constant. There are no restrictions to the accessibility of financial infrastructures to both the formal and informal participants consequently to the micro scale business entrepreneurs are also financially dynamic in their area and would oblige changes on the off chance that they are necessary and able as long as it would improve their incentives.

# **Modern Theory of Financial Intermediation**

Merton and Bodie (1995) developed the modern theory of financial intermediation. The modern theory of financial intermediation comprises of the traditional theory and the change in financial environment. The theory focuses on six core functions of financial intermediaries which include provision of means for clearing and setting payments to facilitate the exchange of goods and service; provision of mechanism for polling resources; risk management; resources allocation; provision of price information to help in coordinating decentralized decision making in various sectors of the economy; and, provision of the means to tackle the problem of moral hazard and information asymmetry. In this study, the stated functions by Merton and Bodie (1995) could be expressed as resources accumulation, resource allocation managing risk, and various facilitation of exchange. It is when these functions have been properly met that financial intermediation contributes to economic growth. Furthermore, the growth theory corroborates this by adding that all advance and developed financial intermediation can enhance economic growth through marginal or additional productivity of capital, proficiency of channeling service to investment, saving rate and technological innovations.

This study is hinged on the modern theory of financial intermediation since its postulation aligns with the hypotheses of the study and it also explains the likely relationships between the variables in the study. For instance, it agrees that a well-developed financial intermediation with technologically advanced means of settlement of payment for facilitation of exchange leads to economic growth.

# **Empirical Review**

Amire and Omoare (2015) investigated the impact of cashless policy on economic activities. The study used primary data that for the research. The finding of the study was that cashless policy has contributed to the promotion of technology enhanced businesses. Osazevbaru and Yomere (2015) examined the challenges and benefits of cashless policy, reciprocal cash based policy, and whether other point of sales card acceptance services stakeholders attract a significant part of banks income in a cashless economy. The study employed secondary data and content analysis in data analysis. The study found that banks' income was higher in cashless settings than in cash-based arrangement, therefore cashless policy offers immense benefits to the banking sector.

Isa and Abalis (2013) using time series data for a period of 2006- 2013 investigated the effect of cashless policy on the profitability of commercial banks in Nigeria. Data was collected from secondary sources through annual report and statistical bulletin of the Central Bank of Nigeria (CBN). The effect of cashless policy was measured using ATM, POS and IT, while profitability was proxy by return on equity. Return on equity was regressed on ATM, POS and IT using multiple regression techniques and the study revealed that both ATM and POS have a positive impact on ROE. On the other hand, the findings revealed that IT has a negative impact on ROE. Based on the findings established by the study, it recommended that for banks to improve on profitability there is the need to offer numerous products and services through mobile and internet banking in an efficient and cost-effective manner.

Muyiwa, Tunmibi, and John-Dewole, (2013) examined the impact of cashless policy in Nigeria. A survey research design was adopted and questionnaires were used as data collection instrument. The study revealed that cashless policy will increase employment and reduce cash related robbery thereby reducing risk of carrying cash. The study further revealed that cashless policy will also reduce the cash related corruption and attract more foreign investors to the country. The study recommended that with the introduction of cashless policy in Nigeria economy would redirect the economy to take a better position or shape.

Suberu, Afonja, Akande and Olure-Bank (2015) investigated the implication of cashless policy on the banking sector with a view of revealing the possible challenges and prospects to the Nigerian economy. Data was collected through secondary sources. The Ordinary Least Square (OLS) econometric technique was employed to analyze the data collected. The study findings revealed that the marginal productivity coefficient of bank credit to the domestic economy is positive but insignificant.

Ernest and Banuso (2015) investigated the implication of cashless policy on the banking sector with a view of exposing the possible challenges and prospects it poses to the Nigerian economy whilst using aggregated approach. The study employed descriptive statistical techniques to highlight the effectiveness of the cashless policy of the CBN in Nigeria. This study was informed by the rising doubts as regards the effectiveness of the various economic policies in achieving developmental goals of Nigeria. Furthermore, the current evolution of electronic money posed interesting questions of policy making all over the globe.

Igbara, Emerenini and Daasi (2015) examined the effect of cashless approach for small scale organizations. The investigation was done in Ogoni of Rivers state utilizing purposive sampling. 250 proprietors and administrators of small-scale organizations were chosen and surveyed. The information gathered was coded and analyzed utilizing frequency table and percentage and regression analysis was used to test the formulated hypotheses. The outcome uncovered that SMEs in Ogoni land are predominately involved with ownership issues with little pay. A significant number among these organizations were found to have extremely poor financial propensity. It was additionally uncovered that out of the SMEs, a factually dominant part of them do not depend on substantial capital cost. Considering the way that arrangement of administration is their center transactions and bank exchange, ATM use and internet banking have less or no critical impact since their exchange relies on money. Discoveries from the examination recommend that that administrators of SMEs have zero resilience to ICT utilization in both the activities and exchange of their organizations and this establishes a significant test to the selection of cashless policy in the study area and for the most part, there was an adversely huge impact of the presentation of cashless policy on the development and activity of SMEs in Ogoni land.

Okereke (2016) examined the impact of Automated Teller Machine (ATM) transaction value, point of sales terminal, internet banking and mobile banking transaction value on economic value of Nigeria. The quantitative design was used and Ordinary Least Square (OLS) method of multiple regression analysis was employed to test the research hypotheses. The result of findings shows that only Point Of Sales terminal was significant to economic growth while Automated Teller Machine, mobile banking and internet banking are insignificant to economic growth within the period under study.

Reviewed literature shows that most of the studies used OLS which is a motivating factor for the research to use a different methodological approach to investigate the impact of cashless policy on economic growth in Nigeria.

#### **METHODOLOGY**

This study employed correlational research design. Data was collected from secondary sources through annual reports obtained from Central Bank of Nigeria's Statistical Bulletins. The impact of cashless policy was proxied by Automated Teller Machine (ATM), Point of Sale (POS) and Internet Banking (WEB), while economic growth was proxied by Gross Domestic Product (GDP). Multiple regressions were applied to determine the impact of the policy on the GDP using the ATM, POS and the WEB. This study covers a period of eight (8) years (2011-2018). The dependent variable for this study is Economic Growth proxy by Gross Domestic Product (GDP) (Suberu, Afonja, Akande & Adeyinka, 2015) while the independent variables in this study of cashless policy proxy by Automated Teller Machine (ATM) (Igbara, Emerenini & Daasi, 2015), Point of sale (POS) terminals (Okereke, 2016) and Internet (WEB) (Okereke, 2016).

# **Model Specification**

The Multiple regression model was used for the study and it is expressed as follows

#### GDP= $\alpha + \beta_1 ATM + \beta_2 POS + \beta_3 WEB + \epsilon$

Where:

GDP = Gross Domestic Product ATM = Automated Teller Machine

POS = Point of Sale WEB = Internet Banking

 $\alpha$  = Constant

 $\beta_1$ — $\beta_3$  = Coefficient of Independent Variable

# **RESULTS AND DISCUSSIONS**

This section presents the empirical findings and analysis of the data. This is followed closely by interpretations and discussions.

# **Descriptive Statistics**

Descriptive statistics highlight the basic attributes of the data in a study. Descriptive Statistics provides simple summary about the sample and measures. The descriptive statistics of the dependent and independent variables are reported in table 1. It shows the average indicator of variables computed and the deviation from these averages. It also shows the standard error, maximum and minimum value respectively

**Table 1 Summary of Descriptive Statistics (2011-2018)** 

Variable	e Ob	s Mean	Std Error	Std. Dev.	Min	Max			
GDP	8	4.806616179	0.013371548	0.032753469	4.759751221	4.838999683			
ATM	8	12.46770714	0.078351398	0.191920946	12.19362542	12.69793806			
POS	8	11.00359206	0.210430796	0.515448076	10.49136169	11.6517746			
WEB	8	10.81527978	0.089570712	0.219402541	10.49923832	11.12175785			
Source: XL Stat									

The table shows the mean statistics value of the Gross Domestic Product is 4.8066 with a standard error of 0.0134. It also has a standard deviation statistics value of 0.0328. It has a minimum and maximum value of 4.7598 and 4.8389 respectively. Also, the mean value for ATM is 12.4677 with a standard error of 0.0784. It has a standard deviation statistics value of 10.1919 It also has a minimum and maximum of 12.1936 and 12.6979 respectively. Similarly, the average statistics value for Point of Sale (POS) is 11.0036 with a standard error of 0.2104. It has a standard deviation value of 0.5154. It has a minimum and maximum value of 10.4914 and 11.6518 respectively. Finally, the mean value of the internet banking (WEB) is 10.8153 with a standard error of 0.0896. It has a standard deviation statistics value of 0.2194. It also has a minimum and maximum value 10.4992 of and 11.1218 respectively.

#### **Correlation Matrix**

The correlation is widely used in statistics to measure the degree of relationship between the linear related variables. For this study, the results of the correlation analysis are reported in table 2.

	GDP	ATM	POS	WEB
GDP	1.0000			
ATM	-0.9187	1.0000		
POS	-0.9904	0.942475	1.0000	
WEB	-0.93294	0.785432	0.910542	1.0000

Source: XL Stat

**Table 2** shows the relationship between the gross domestic products and the proxy for cashless policy which includes automated teller machine (ATM), point of sale (POS) and internet banking (WEB). The result shows that ATM is negatively correlated to gross domestic product with a statistical value of -0.9178. This result is in line with hypotheses 1. Also, the correlation results revealed that a negative significant relationship exists between POS and GDP with a statistical value of -0.9904. This result is also in line with hypotheses 2, which states that there is no significant relationship between POS and GDP. Finally, the relationship between WEB and GDP was correlated and the findings revealed a strong and negative relationship with a statistical value of -0.93294.

#### **Regression Analysis**

This study examined the impact of ATM, POS and WEB on Gross Domestic Product of Nigeria. The results of the regression analysis are reported in table 3.

**Table 3** Model Summary

Multiple R	R Square	Adjusted R Square	Standard Error	Observations
0.993276156	0.986597523	0.966493808	0.005995423	8

		Standard		
	Coefficients	Error	t Stat	P-value
Intercept	5.642765054	0.57920121	9.742323	0.010372342
ATM	0.003124636	0.049151072	0.063572	0.955093098
	-			
POS	0.053939865	0.027399142	-1.96867	0.187834522
WEB	-0.0260348	0.034764165	-0.7489	0.532016458

Source: XL Stat

**Decision Rule:** Reject the null hypotheses if  $H_0 < 0.05$ 

Table 3 shows the p-value, t-stat, co-efficient and standard error of the independent variables. ATM has a p-value of 0.95 and t stat of 0.064. This implies that hypotheses 1 has failed to be rejected and that a 1% increase in ATM services will result to 0.003% increase in gross domestic product which shows that it is positive and insignificant. Similarly, the impact of POS was regressed on gross domestic product. The findings revealed that POS has a p-value of 0.18; t-stat has a value of -1.969 and a co-efficient of -0.05393. Based on the decision criterion, this study has failed to reject the null hypothesis, which states that there is no significant relationship between POS and GDP. This means that a 1% increase in Point Of Sales terminal would result in -0.054 decrease in the gross domestic product. Finally, the relationship between WEB and GDP was also regressed and the results show a p-value of 0. 53, a t-stat of -0.749 and a co-efficient of -0.260. This suggests that the point of sale (POS) has a negative effect on the gross domestic product of Nigeria.

#### CONCLUSION AND RECOMMENDATIONS

This study focused on the impact of cashless policy on the economic growth of Nigeria. Correlation and regression analysis were used to amylase the data collected from the Central Bank of Nigeria data base and annual statistical bulletin. The results of the correlation matrix between ATM, POS, WEB and GDP suggest a strong negative association. Also, the co-efficient result shown in table 3 revealed that an increase in ATM transaction would positively impact the economic growth of Nigeria, even though the impact may not be significant. On the other hand, the co-efficient for POS and WEB revealed a negative outcome. This means that an increase in the rate of Point Of Sale terminal and internet transaction would not result to a significant increase in the Gross Domestic Product. In line with the findings, the study concludes that economic growth of Nigeria is not dependent on cashless policy.

Based on the conclusions drawn, the following recommendations are suggested:

There is the need for the authorities concerned to intensify awareness on the benefits derivable from cashless policy to stimulate improvement in economic activities. This can be achieved through a periodic review of the policy to examine its strengths and weaknesses in order to seek for continuous improvement as well as better ways of communicating the benefits to the existing and potential users.

Policy implementers, particularly banks operating in Nigeria need to invest huge financial resources on computer technology and telecommunication facilities with a back-up arrangement for power supply. It is believed that such arrangement would boost user confidence and help improve the volume and value of transactions. This would in turn boost economic activities.

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# **APPENDIX**

# DESCRIPTIVE STATISTICS

GDP		ATM		POS		WEB	
	4.8066161		12.4677		11.0035		10.815
Maan		Maan		Maan		Maan	
Mean	79	Mean	0714	Mean	9206	Mean	27978
Standard	0.0133715	Standard	0.07835	Standard	0.21043	Standard	0.0895
Error	48	Error	1398	Error	0796	Error	70712
Standard	0.0327534	Standard	0.19192	Standard	0.51544	Standard	0.2194
Deviation	69	Deviation	0946	Deviation	8076	Deviation	02541
Sample	0.0010727	Sample	0.03683	Sample	0.26568	Sample	0.0481
Variance	9	Variance	365	Variance	672	Variance	37475
	-		-		_		-
	1.6944096		1.25683		2.44066		0.3098
Kurtosis	27	Kurtosis	236	Kurtosis	5627	Kurtosis	76603
	_		_				_
	0.5216894		0.42795		0.21447		0.0671
Skewness	49	Skewness	8783	Skewness	5951	Skewness	85912
	4.7597512		12.1936		10.4913		10.499
Minimum	21	Minimum	2542	Minimum	6169	Minimum	23832
	4.8389996		12.6979		11.6517		11.121
Maximum	83	Maximum	3806	Maximum	746	Maximum	75785
Count	8	Count	8	Count	8	Count	8

# SUMMARY OUTPUT

Regression Statistics					
	0.99327				
Multiple R	6156				
	0.98659				
R Square	7523				
Adjusted R	0.96649				
Square	3808				
	0.00599				
Standard Error	5423				
Observations	8				

# ANOVA

					Significa
	df	SS	MS	F	nce F
		0.005292	0.001	49.0753	0.020036
Regression	3	058	764	8247	204

7.18902E 3.59E
Residual 2 -05 -05
0.005363
Total 5 949

	Coefficie	Standard			Lower	Upper	Lower	Upper
	nts	Error	t Stat	P-value	95%	95%	95.0%	95.0%
	5.64276	0.579201	9.742	0.01037	3.150663	8.13486	3.15066	8.13486
Intercept	5054	21	323	2342	386	6721	3386	6721
					-		-	
	0.00312	0.049151	0.063	0.95509	0.208355	0.21460	0.20835	0.21460
ATM	4636	072	572	3098	359	4631	5359	4631
	-		-		-		-	
	0.05393	0.027399	1.968	0.18783	0.171828	0.06394	0.17182	0.06394
POS	9865	142	67	4522	859	9129	8859	9129
	-		-		-		_	
	0.02603	0.034764	0.748	0.53201	0.175612	0.12354	0.17561	0.12354
WEB	48	165	9	6458	929	3328	2929	3328