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INSTITUTIONAL IMPEDIMENTS TO INTERNATIONAL REMITTANCE: TRANSMISSION-COST ISSUES IN NIGERIA

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ABSTRACT: This study investigates the institutional impediments of remittances with reference to the cost of transmission in Nigeria. The study is motivated by the increasing inflows of remittances through informal channels that would have been directed into the financial system to improve savings and enhance financial deepening if they were accounted for. The study therefore investigates whether the use of informal channels is caused by the increasing costs of collecting remittances that is partly induced by financial institutions. The study uses a bank exit survey data and a household survey data collected by the Center for Demographic and Allied Research (CDAR). T-test analysis and logit regressions were employed to achieve the objectives of the research. The findings show that there is no significant difference in the frequency of receipt for the formal and informal channels, transaction cost negatively and significantly determinants the use of formal channels flows, and finally there exist a significant difference between the transaction costs of using formal and informal channels of remittances. Financial institutions should therefore checkmate the charge of remittance receipt to encourage the use of formal channels and increase the frequency of flows.

KEYWORDS: Institutional, Impediment, Remittances, Transmission-Cost, Nigeria

INTRODUCTION

Workers remittances have grown steadily over the past 30 years, rising at an average annual rate of more than 7% in nominal terms over the last decade in contrast to net official flows (Schiopu and Siegfried 2006). The rate of remittances inflow is higher in less developing countries as it is a major source of income to many households. Nigeria's large population estimated at about 150 million people reflects the volume of emigrants they could have and this is evident in the volume of remittance receipt over the years. The World Development Indicators shows that international remittance into Nigeria is impressively high as Nigeria's remittance stood at 5.4 billion US dollars and 10 billion US dollars by 2006 and 2010 respectively. Also according to the World Bank, still in 2010, Africans in the Diaspora remitted over US\$21.5 billion to sub Saharan Africa with Nigeria contributing over US\$2 billion of this amount. This makes Nigeria one of the top ten countries that receive remittances. This placed Nigeria first in Africa and 10th in the world in terms of remittance receipt. This record is however only based on formal remittance receipt while the informal receipt is unaccounted for.

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Remittances are more impacting as it targets individuals and household directly there by reducing the effect of corruption greatly and hence the most gainful direct source of external financing (Yuni, 2012). Most Nigerian migrants see it as a duty to transfer money home periodically to sustain family and friends. Given the fact that they are rational beings it's only normal that they send through the safest and cheapest means possible. It is therefore the place of the Federal government and particularly the financial block powered by the central bank to put in place policies to facilitate their task. However there have been few national policies on Remittances aimed at absorbing much more remittance or to ease the process.

Transmission channels of remittance could be regrouped into two major channels; often referred to as the formal and informal flows. The formal flows refer to the use of financial institutions like banks and other specialized financial institutions (Money Transfer Agencies- MTA) dedicated to the transfer of money between countries. The most commonly known and used in Nigeria are western union and money gram. The informal flows vary from place to place that involve, sending through friends and relatives coming back home, through low secured borders, sending in the form of goods, hiding cash in goods sent amongst others. Informal flows are motivated by the cost of sending through financial institutions, the cost and protocol to receive and the exchange rate used to convert the money. All these are institutional setups that in some form setback the flow of remittances. Sander and Maimbo, (2003) opine that Remittance recipients are typically better off than their peers who lack this source of income. At the national level, remittances have a substantial effect on the balance of payments and on foreign exchange revenues. Yet remittance flows for Africa are heavily underreported and the documented benefits of remittances would be even greater if the substantial unrecorded flows were estimated and taken into account. While Debra (2007) attests to this and officially recorded that remittances into Guyana rose to US\$ 225.9 million at the end of 2006, from US\$29.2 million at the end of 2000, yet these figures however underestimate the true magnitude of remittances, since they represent only official balance of payments statistics and exclude remittances transferred through the informal channels.

The large unrecorded remittances is due to the use of informal flows by most migrants and this study hypothesises that the use of informal channels is due to institutional impediments such as the high cost of transactions in financial institutions, processes and protocol observed in formal flows, requirements of receipt in financial institutions amongst others. The cost of transfer varies generally and depends on the amount to be sent, as well as the recipient country in question. Siddiqui and Abrar (2003) notes three main costs (at the recipient end) in his study; the charge for handling the transaction of remittance, nominal costs which could be treated as speed money (meant to facilitate transactions) and the cost for illiterate beneficiaries to hire assistants. However other costs of the recipients include transportation cost, high exchange rates and time spent, while some banks deduct the charge at the recipient end depending on the agreement. Sander and Maimbo (2003), state that average cost of remittance is about 13 percent of its value globally.

The unrecorded remittance flow to developing countries through informal channels is significantly larger, possibly even double the estimated figure or more in some regions, say experts at the World Bank and UN agencies. In the third quarter of 2012, the cost of sending officially reported remittances averaged 7.5 per cent worldwide among the top 20 remittance channels. In Africa alone, the figure was 12 per cent. But in the shadowy underworld of unreported remittance flows, for example to Myanmar, the costs can be as high as 20 per cent, according to one Yangon-based

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aid official (Gwen, 2013). While SSRC (2009) report that estimates of the size of informal remittances vary widely, ranging from 35 to 250 percent of formal remittances. "Bodomo states that about 12% of diaspora money sent home through formal financial channels are swallowed up by bank fee" (Doyle, 2013). A few governments, recognizing the valuable contributions of remittances, have facilitated foreign exchange transactions or provided investment incentives such as matching grants.

The regulation of transaction cost is very significant especially in Nigeria that records one of the highest Remittance receipt in the world. Suro et al. (2002) opine that reducing the cost of transfer to 5 percent of the amount remitted would free up more than a \$1 billion the next year for some of the poorest households in the United States, Mexico and the Central American countries covered in the Pew Hispanic Center projections and within a decade, the savings could amount to some \$12 billion. It goes without saying that such amount could change many, many lives. While Ratha (2003) estimates that if transaction costs were lowered by even 5 percent overall remittances to developing countries would increase by \$3.5 billion. Certainly a larger share would pass through formal channels.

The high transaction cost of remittance tends to dissuade migrants from using official benefits thereby casting the economic benefits that come with it. These benefits range from the increase in the amount sent and frequency of flow, improving the financial system as transactions increase and then keeping accounts of the inflow of remittance. Also, it also compels migrants to wait until they find an informal but trustworthy means of remitting before they do, thereby restraining the flow. Puri and Ritzema (1999) opines that the best solution to the problem of increasing their developmental significance would be to implement wide ranging policy reforms aimed at setting the macroeconomic house in order and encouraging remittance inflows through official channels by using micro-finance tools and improving the existing banking network to effectively compete with informal market arrangements so as to channel the funds into productive investment.

Orozco and Ellis (2013) state that, in Bangladesh, almost 54 percent of remittances are transferred through informal channels, such as friends and relatives hand carrying money. And this might be worse in Nigeria considering the loose borders and laisser-faire controls. In the words of Orozco et al. (2010) most of the stock of savings from remittances, estimated to be at least US\$128 million, is informal. Such a presence of informality stems in large part from the lack of financial product offering by remittance agents, banks, and MFIs". There is therefore need to examine the channels of remittance flows in Nigeria in an attempt to proffer solutions for enhancing the use of financial institutions and enjoying the benefit that come with it. Literature abounds on remittances in Nigeria with over 95% of them on formal remittance inflows due to the difficulties observed in accounting for the informal flows. Nevertheless, many authors acknowledge the strength of the informal flows and its significant contribution that could be harnessed and they include Orozco et al., (2010). It is on this note that this study investigates the institutional impediments of remittances flows by examining the differences between formal and informal flows with respect to transaction cost. The study therefore does this with the aid of the following research questions; which is the preferred means of transmission of remittance receipt in Nigeria?What are the determinants of the preferred means of transmission? And which transmission channel costs more?

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Global Evidence

Global evidence of literature that relates remittances costs, channels and their responses to policies as well as institutions abound. Puri and Ritzema (1999) investigates thepotential role of microfinance with regard to the scope for linking unrecorded remittances and investment. Their finding suggests that remittance leakages are, to a significant extent, a reflection of the macroeconomic policy regimes of labour-sending countries. Therefore, a first-best solution to the problem of increasing their developmental significance would be to implement wide ranging policy reforms aimed at setting the macroeconomic house in order; the second solution would be to encourage remittance inflows through official channels by using micro-finance tools and improving the existing banking network to effectively compete with informal market arrangements so as to channel the funds into productive investment. Much later, Suro et al (2002) did a cross country analysis on migrant remittances in relation to banking activities. The study employed standard sampling techniques frequently under-represent the poor and working class, the undocumented, and, in some cases, the foreign-born and Spanish-dominant. Their results suggest that in the mid-1990s deregulation and increased regional economic integration stimulated the sending of remittances. Non-bank financial institutions, like the well-known Western Union, competed to send immigrants' remittances. As more of these companies entered the market the transfer charges for immigrants decreased. Immigrants have switched from using informal transfers (sending money home with friends) to sending their remittances though the formal transfer companies. This may have stimulated the sending of more remittance dollars.

Siddiqui and Abrar (2003) examined the current role of financial institutions in transferring remittance and macro-economic background against which such transfers takes place. It also evaluates current use of remittance, the characteristics and needs of remittance sending and remittance receiving persons. Their findings opine that, the respondent families assigned a few reasons for the payment of speed money; while some of them had to bribe to collect the money through cheques, some had to pay additional charges if the amount was large or if one needed to collect the money on an urgent basis. In a few incidents the illiterate beneficiaries of remittance had to incur some additional costs as they needed to secure help from others to process banking formalities. In such cases they treated them to food and pay for their travel if all the costs in the official method are counted. While Sander and Maimbo (2003) in the same year, examined ways of reducing obstacles to developmental contributions for migrant labour remittances in Africa. They used descriptive statistics to find that throughout Africa, financial and monetary policies and regulations have created barriers to the flow of remittances and their effective investment. A few governments, recognizing the valuable contributions of remittances, have facilitated foreign exchange transactions or provided investment incentives such as matching grants. Their recommendations posit that more could be done, however, especially in the context of the regulation of the financial industry. Restrictive licensing of money transfer services, for example, limits access to remittances and restricts the potential impact of remittances in many areas. Other regulations and policies create unattractive environments for investment and block improvements in financial services. They however recommend that removing those obstacles and adapting relevant financial products and services, such as savings and investment options would boost remittance flows and raise their impact on development.

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Furthermore, Orozco (2004) conducted a detailed assessment of the marketplace for remittance transfer services between the United States and Latin America. The study reached two major conclusions relevant to the new initiatives: That although the cost of sending remittances is now much lower than in the late 1990s, the rate of decline has slowed markedly in the past three years. Prices have dropped only slowly despite rapidly growing volume and increased competition in the marketplace. This suggests that further price reductions might be difficult to achieve under current market conditions. Also, a substantial number of banks and credit unions in the United States have launched major initiatives in remittance services over the past three years. The study's findings are based on the most extensive examination of the U.S. remittance transfer industry every conducted. Also, another major findings is that with increased competition new products have come on the market that offer lower prices for senders who transmit larger amounts hence reducing overall cost of sending money. And then Gibson et al. (2005) analysed the cost elastic nature of remittances using estimates of the cost-elasticity of remittances with data employed from a survey of Tongan migrants in New Zealand. Their findings suggest that Pacific Island countries can expect a more than proportionate increase in remittances from areduction in costs. The negative cost-elasticity also suggests that a money transfer operator who lowers costs islikely to experience an increase in remittance volume from existing customers. However, thetotal increase in remittance volume experienced by this company is likely to be greater still, since a change in costs will attract remitters who had been using other channels to transmitmoney, and may also lead to an increase in the number of migrants sending money throughany channel. In a competitive environment, there is therefore ample incentive for moneytransfer companies to compete through lower prices.

Siegel (2007) empirically analyses to what extent the level of immigrant integration determines the channel chosento send remittances. The findings of the study suggest that the impact of immigrant integration is conditional on other factors. If the migrantsending country has put into place institutional policies (such as banks from the sending country in the hostcountry) to keep close ties to migrants via remittances or if there is lack of access in the recipient country toformal transfers, integration has almost no influence on the remittance channel decision. For this reason, acombination of policies would be best able to tackle the task of incentivizing migrants towards more formaltransfers. While, Orozco et al., (2010) examined the market place and financial access opportunities of remittance transfers to Senegal. Their findings show that, nearly 400,000 transfers are carried out each month by banks, MFIsand the Senegalese postal office, amounting to an estimated US\$789 million. And this figuresuggests that informal flows may be less than 30% of the estimated 530,000 remittancerecipient market. They also opine that remittance recipients in Senegal haveaccumulated an important stock of savings, but most of these savings are informal. Thus, incentives to bring these stocks into the formal system are important. Yet, there is a verylimited financial service approach among institutions paying remittances in Senegal, andwhen such an approach exists, it focuses on migrantsAlso the market segment is larger, representing at least 60 percent of the entire remittance receivingpopulation, who already has savings but do it informally. Also, DMA (2011) investigated the difficulties of remitting money from the UK to Ghana and found that the main difficulty experienced in sending money to Ghana from the UK, was the need to make an international telephone call to the recipient when they have sent the money, with 81% of those surveyed citing this as a problem. This is interesting as many of the MTOs offer a service to customers to SMS the reference number directly to the recipient free of charge. The uptake for the service was poorly utilised by consumers. Another main difficulty, cited

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by 71% of sample senders, is the need for the recipient to produce identification in Ghana when picking up funds.

Much recently, Mahmoud (2012) investigated the use of informal channels for Remitting Money from Overseas by the wage Earners of Bangladesh. The analysis shows that majority of the samples think exchange rate, urgency of remittance and transaction time of the remittance service provider are the most important factors behind using informal channels to remit money. On the other hand illiteracy, illegal worker, anonymity etc. are not considered as that much important. Results are shown in graphs as well as in a tabular form. Factors that are considered most important are linked with the structural bottleneck of the formal channels. Establishing as well as promoting cheap, convenient, and reliable ways of transferring remittances can ensure greater propensity of remittance through formal channel. Also, Kosse and Vermeulen (2013) investigated the determinants in migrants' choice of payment channel when transferring money to relatives abroad. They surveyed 1,680 migrants in the Netherlands, identifying five remittance channels: bank services, money transfer operator (MTO) services, in-cash transfers via informal intermediaries, ATM cash withdrawals abroad and carrying cash when travelling back home. They presented evidence of the role played by general paymenthabits: migrants who regularly use internet banking for other purposes are more likely to use bankservices for remittances as well. Their findings suggest that other important drivers exist indetermining the choice of payment channels, such as personal characteristics and country-specificfactors, (perceived) costs, ease of use and the availability of remittance options. Their findings further suggest that financial education, cost reduction and new (mobile) remittance solutions may serve avaluable role.

Finally, Orozco and Ellis (2013) investigated the impact of remittance in developing countries and analyzed the characteristics of transfers with keen interest in transaction cost. They opine that the causes of informality and costs are often related to the infrastructure available to transfer flows to the home country, the regulatory environment in the home country restricting payments only to banking institutions (for example, excluding microfinance institutions, credit unions, or small savings banks), the economies of scale of the transfers, the extent of interdependence between the migrant's home and host countries, and the level of private sector competition across corridors. They concluded by stating that transfers of remittances by migrants can cause different problems associated with the presence of informal transfers and the cost of remitting, so government should stipulate and implement policies so as to improve remittance.

In Nigeria many studies have been carried out to investigate the impacts and relationship of remittance with macro and micro indicators. Studies like Osili (2004) investigated migrants housing investments in their communities of origin with respect to remittance. Agu (2009) studied the relationship between remittance flows and the rest of the economy. Udah (2011) investigated the channels by which remittances impact on economic performance in Nigeria. Olowa and Awoyemi (2012)examined the demographic determinants of migration and receipt of remittances in rural Nigeria. While Nwosu et al (2012) investigated the microeconomic determinants of Remittances. However, the works in Nigeria have not attempted to investigate the institutional impediments to remittances. This study therefore seeks to use household survey data and bank exit survey data to provide information about formal and informal flows, which therefore permits us to investigate the relationship between remittance flows and the channels of transmission with the aim of examining the institutional influence thereof.

METHODOLOGY AND DATA

The study employs survey data carried out by the Center for Demographic and Allied Research (CDAR) in 2011/2012. The study uses both the bank exit survey and the household survey that was used to capture both financial institutional behavior to remittances and the end use of remittances from the households. The survey was meant for only international remittance recipients, carried out in Anambra and Enugu states of Nigeria based on their high remittance receipt of previous years. The household survey covered 430 households that made up 1578 individuals, while the bank exit survey interviewed 500 individuals that came to receive remittances from banks. To determine the preferred means of remittances transmission in Nigeria, and to investigate the remittance channel that costs more in terms of the transactions by the beneficiary the study uses a t-test of significant differences to ascertain the level of difference and how significant the difference is. This was done with the aid of the bank exit survey, given that more than 85% of the respondents had used both channels (formal and informal), and were therefore better placed to state the difference with the channels in relation to the number of times they had received remittances.

To ascertain the preferred means of transmission of remittance receipt in Nigeria, the study uses T-test analysis to examine the statistical difference for the frequency of remittance flows (as a proxy for preference of remittance channels) between the formal and informal remittance channels.

The study further uses a logit regression to estimate the determinants of the preferred means of transmission, which constitute the second objective of the study. To achieve this, the study used the household survey data which gives provision for other socio-demographic characteristics that might determine preference of channels. The logit model for channel preference was designed as a function of household size (hhsize), sex, age, estimated salary (estsal), educational attainment (estsal), marital status (marstat), frequency of receipt (freq) and transmission cost (tcost). This is presented as;

 $Logit(CP) = ln[\frac{p}{1-p}] = \beta_0 + \beta_1 hhsize + \beta_2 sex + \beta_3 age + \beta_4 estsal + \beta_5 edatt + \beta_6 marstat + \beta_7 freq + \beta_8 tcost + \mu$

The odds ratio was used for easy interpretation as an alternative to the ambiguous log likelihood interpretation.

To ascertain the third objective which is to investigate the transmission channels that costs more for receiving remittance in Nigeria, the study uses a T-test analysis to examine the statistical difference for the cost of transmission between the formal and informal remittance channels.

The study defines the formal remittance channels to be remittance transferred through financial institutions, while the informal channels were those that were sent through other means than financial channels that include sending through friends, through borders amongst others. The study used the frequency of remittance receipt through formal and informal channels to proxy for the preferences of channel used.

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ANALYSIS AND POLICY IMPLICATIONS

Difference in the remittance transmission channel with respect to frequency of use

To examine the preferred means or channel of remittance transmission in Nigeria, the study used a student test to check the statistical difference of the number of times remittances is received through formal (financial institutions) and informal channels. The results are presented below;

Tuble 1. Fulliper of times Memittance was received by chamiler used					
Group	Mean	Std. Err.	Std. Dev.		
Informal Channels	2.333333	.8819171	1.527525		
Formal Channels	1.967213	.1440386	1.124977		
combined	1.984375	.141723	1.133784		
diff	0.3661202	0.6742781			
t-value	0.5430				
$\Pr\left(\left T\right > t \right)$	0.5891				
0 0 1 10 0 1					

Table 1: Number of times Remittance wa	as received by channel used
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Source: Stata 13 Output

The results from Table 1 suggests that the respondents that receive remittances from non-formal means averaged around 2.3 times a year while those that received remittance from financial institutions averaged about 1.967213. However, it is worth noting that the standard deviation is higher for informal channels than the formal channels that show wider disparity for the former. This t-value of 0.5420 is lower than 1.96 (standard at 5% level of significance), while the 2 tailed probability is 0.5891 higher than 0.05 (standard at 5% level of significance). This therefore implies that we do not reject the null hypothesis and therefore conclude that there is no significant difference between remittance channels as it concerns the number of times they use this channel.Hence policies could be formulated to make the processes of collecting money from formal channels easier with reduced charges and other incentives to improve the use of formal channels and then gain the benefits that accrue with the use of financial institutions.

Determinants of the preferred means of remittances

To investigate the determinants of the preferred means of remittances, the study employs a logit regression, wherein the dependent variable is dummy in nature and categorized as 1 for the choice of formal flows and 0 for informal flows. The results of the determinants of the preferred means of transmission are therefore presented on the table below;

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rable 4.4: Determinants of the preferred means of remittances							
Variable	Odds ratio	Std. Err.	Z	P > z			
House hold size	.561563	.2206072	-1.47	0.142			
Sex (Female as base							
category)							
2_Male	.6923972	0.9272949	-0.27	0.784			
age	1.045138	.0993389	0.46	0.642			
Estimated salary	1.1403128	.1300841	2.12	0.034*			
Education level (no							
education)							
2_Primary	.0536902	.1055479	-1.49	0.137			
3_secondary	.4851806	1.014087	-0.35	0.729			
4_Tertiary	1.0531906	.0130572	2.13	0.033*			
Marital status (single)							
2_married	.455311	1.364179	-0.26	0.793			
3_Divorced	.0330218	.2565382	-0.44	0.661			
Frequency of Receipt	.0162388	.0276787	-2.42	0.016*			
Transaction cost	.039203	.0136023	-2.53	0.015*			
_cons	.00000000142	.000000000123	2.70	0.007*			
Pseudo R ²	0.6192						
Prob> chi ²	0.0000						

Source: Stata 13 Output, * is significant at 5% significant level

The probability chi^2 of 0.0000 shows an overall significance of the model while the pseudo R²suggests that the independent variables explain the dependent variable by 61.92%. This therefore shows that the model is reliable to a significant extent. The results suggest that a unit increase in transaction cost significantly reduces the odds ratio that a respondent uses a formal channel to receive remittances with respect to informal channels. A unit increase in transaction cost significantly reduces the odds ratio a formal channel with respect to an informal channel by 0.039203. This implies that transaction costs could reduce the preference of using formal channels and use informal channels as an alternative. This therefore implies that the transaction costs should be reduced to increase the use of formal channels by recipients.

The z-value of household size suggests that house hold size is not a significant determinant of the choice of informal channels and the fact that it is negative opines that there exist an inverse relationship between household size and the odds of choosing a formal channel with respect to an informal channel. Yuni (2012) opines that remittances increase with larger household sizes, thereby suggesting that if the increase in household size reduces the odds of using a formal channel as an alternative to informal channel then we can infer that huge amounts of remittances come through the informal flows. The result therefore highlights on the fact that conscious efforts must be made to entice migrants to use formal channels rather than informal channels. A unit increase in males with respect to females (as the base omitted or omitted category) reduces the odds ratio that an individual uses a formal channel as an alternative to informal channel as an alternative to informal channel as an alternative to females (as the base omitted or omitted category) reduces the odds ratio

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However, we note that sex is not a significant determinant of channel choice given its probability value of 0.784 which is higher than 0.05 for the standard 5% significant level.

A unit increase in age increase the odds ratio that an individual choses the formal channel as an alternative to informal channels. This implies that as age increases the preference of using formal channels over informal channels increases. This could be associated to the fact that informal channels are more risky than the formal channels thereby making older individuals more skeptical to use informal flows. Respondents with higher salaries increased the odds of using formal channels with respect to informal channels as the positive value of the z-value suggests a direct relationship. Unlike age, estimated salary level is a significant determinant of the choice of remittance channels. Also all the categories of education have an inverse relationship with choosing formal channels with respect to respondents that have no education. The tertiary education has a probability value of 0.033 (lower than the standard 0.05 at 5% significant level) that makes it a positive but significant determinant of choosing formal channels. This is expected a priori as it is expected that higher educational levels should inform the individuals on the risks of using informal channels as oppose to formal channels. Also the respondents with higher frequency of receipts reduced the odds ratio that an individual will use a formal channel significantly. In fact, a unit increase in the frequency of receipt reduced the odds that an individual will use a formal channel by .0162388, and the probability value of 0.016 shows that it is a significant determinant at 5% significant level. This finding differs a little from that of the T-test analysis made above, however the frequency of receipt could be significant with the logit analysis considering the other factors that explain the choice of channel flows.

Determining the statistical difference between remittance transmission channels with respect to cost

To ascertain the statistical difference between the costs of transaction in the use of both remittance channels the study used a student test. The results are presented below;

Table 5. Transaction cost of receiving remittances by channel used				
Group	Mean	Std. Err.	Std. Dev.	
Informal Channels	1.098684	.0306202	.3775113	
Formal Channels	1.5	.5	1	
combined	1.108974	.0322492	.4027922	
diff	.4013158	.2021194		
t-value	1.9855			
$\Pr(T > t)$	0.0489			

Table 3: Transaction cost of receiving remittances by channel used

Source: Stata 13 Output

Table 3 above shows the t-test results of transaction costs by remittance channels. The transaction costs by the beneficiary is defined by telephone bills with respect to the transaction, bank charges in the case of formal flows, taxi to and fro the bank, and any other charges. The transaction costs were regrouped into three categories and the mean for informal flows is lower than that of formal channels. The difference between both channels is significant given the probability value of 0.0489 which is lower than 0.05 at 5% significant level. This therefore implies that we reject the null hypothesis and therefore conclude that there is a significant difference between remittance

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channels as it concerns transaction cost of recipient. It could be inferred that the major difference between the transaction costs for formal channels and informal channels is the bank charges that is put by financial institutions.

CONCLUSION

The study empirically x-rays the institutional impediments of remittances with particular reference to the cost of transmission into Nigeria. The study was motivated by the increasing informal flows of remittances and the fact that it is unaccounted for. The findings of the result suggest that there is no significant difference in the frequency of receipt for the formal and informal channels, transaction cost negatively and significantly determinants the use of formal channels flows, and that there exist a significant difference between the transaction costs of using formal and informal channels of remittances in Nigeria. As such, it becomes imperative for financial institutions to review the transmission cost with theoutlook of encouraging the use of formal means, and therefore accrue all the benefits that are due to using formal flows. These benefits include; financial deepening, accountability of inflows and outflows, incorporating it in policy design using the right magnitude, checkmate the dependency level on remittance and to avoid contradiction to existing policies especially concerning money in circulation, amongst others.

REFERENCES

- Agu C., (2009). Remittances for Growth: A two fold analysis of feedback between Remittances, Financial flows and the real economy in Nigeria. JEL Classification: F24, F41 011. http://www.africametrics.org/documents/conference09/papers/Agu.pdf
- Debra R. (2007). The Development impact of remittances on Caribbean Economies: The case of Guyana. Central Bank of Guyama.
- DMA (2011). Constraints in the UK to Ghana Remittances Market: Survey analysis and policy recommendations.URL:https://www.gov.uk/government/uploads/system/uploads/attachme nt_data/file/67581/Constraints-UK-Ghana.pdf
- Doyle M. (2013). Africans' remittances outweigh Western aid. News Africa 17 April 2013. URL: http://www.bbc.co.uk/news/world-africa-22169474
- Gibson J., Mckenzie D. J. and Rohorua H. (2005). How cost-elastic are Remittances? Estimates from Tongan Migrants in New Zealand. URL: http://siteresources.worldbank.org/DEC/Resources/PEBGibsonMcKenzieRohorua.pdf
- Gwen R. (2013). Moving money: The true costs of expat workers sending cash home remain hidden URL:http:///00beae34-4b5c-11e2-887b-00144feab49a.html
- Kosse A. and Vermeulen R. (2013). Migrants' choice of remittance channel: Do General payments habits play a role. *DNB working paper*, *375*.
- Mahmoud A. S. M. S. (2012). Determinants behind the use of informal channels for remitting money from overseas by the wage earners of Bangladesh. URL: http://www.pmbf.ait.ac.th/www/images/pmbfdoc/research/report_sharifmahmud.pdf
- Nwosu O. E., Fonta M. W., Aneke G. and Yuni N. D. (2012). Microeconomic Determinants of migrant remittances to Nigerian households. *Economics Bulletin-12-00711*.
- Olowa O. W. and Awoyemi T. T. (2012). Determinants of migration and remittances in rural Nigeria. *Journal of Development and Agricultural Economics*, 4(7): 191–198.

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- Orozco M. (2004). The remittance marketplace: Prices, Policy and Financial institutions. URL: http://ww.thedialogue.org/PublicationFiles/pew%20remitt%20orozco.pdf.
- Orozco M., Burgess E. and Massardier C., (2010). Remittance transfers in Senegal: Preliminary findings, lessons and recommendations on its marketplace and financial access opportunities. *International migration paper, 109*.
- Orozco M. and Ellis C. G. (2013). Chapter 4: Impact of Remittance in developing countries. URL:http://www.migracion.ue.alc.eu/documents/conf_y_eventos/2013/Taller%20Chile/Im pact%20of%20remittances%20in%20developing%20countries.pdf
- Osili U. O., (2004). Migrants and housing investments: Theory and evidence from Nigeria. URL: http://essays.ssrc.org/remittances_anthology/wpcontent/uploads/2009/08/Topic_10_Osili.p df
- Puri S. and Ritzema T. (1999). Migrant workers remittances, Micro-finance and the informal Economy: Prospects and issues. *Social Finance Unit working paper, 21.*
- Ratha, D. 2003. Worker's Remittances: An Important and Stable Source of External Development Finance in World Bank. *Global Development Finance: Striving for Stability in Development Finance*, I: 157–75.
- Sander C. and Maimbo S. M. (2003). Migrant labour remittances in Africa: Reducing obstacles to development contributions. *Africa regions working paper series*, 64.
- Schiopu L. and Siegfried N., (2006). Determinants of workers remittances: Evidence from the European Neighbouring Region. Working paper series No 688, October 2006.
- Siddiqui T. and Abrar C. R. (2003).Migrant worker remittances and Micro-Finance in Bangladesh.InternationalLabour Organization working paper, 38.
- Siegel M. (2007). Immigrant integration and Remittance channel Choice. *Maastricht Graduate* School of governance working paper, 09.
- Suro R., Bendixen S., Lowell B. L. and Benavides D. C. (2002). Billions in Motion: Latino immigrants, Remittances and Banking. URL: http://pewhispanic.org/files/reports/13.pdf
- SSRC (2009).Formal vs. Informal Remittances.Social Science Research Council, Brooklyn, New York.
- Udah E. B., (2011). Remittances, human capital and economic performance in Nigeria. *Journal of* sustainable development in Africa, 13 (4).

Yuni D. N. (2012).International Remittances and Household Expenditure Patterns: Case Study Of Enugu and Anambra States Of Nigeria. An unpublished M.Sc thesis

World Bank indicators, (2013).URL: http://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD