**Socio-economic Characteristics and Informal Credit System Patronage in Cross River State\***

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**Abstract**

This study investigates factors that influence Informal Credit Systems patronage among rural dwellers in Cross River State. Survey design was adopted for this study. Using the multi stage sampling technique comprising cluster, simple random, snow-ball, purposive and accidental sampling techniques, 567 respondents emerged as the study sample. The study adopted quantitative data. The questionnaire consisted of three sections with 15 triangulated items. Descriptive statistics based on research questions was calculated using frequency count and percentages. Independent t-test and analysis of variance (ANOVA) as well as least significant difference (LSD) test were employed to determine the influence of patrons’ socio-demographic variables on their utilization and usage of informal credit systems. Among other findings, the study revealed that: patrons’ gender was significant in influencing their usage of rotatory saving as a form of informal credit systems; the relationship between the influence of patrons’ marital status and informal credit systems’ usage among the various categories of informal credit systems showed a significant usage in rotatory and fixed savings; higher demands and family responsibilities were found to be motivating factors for informal credit systems’ patronage among married patrons; household size significantly influenced informal credit systems usage for rotatory and fixed savings; patrons’ level of education did not have any influence on their usage of rotatory and fixed savings as forms of informal credit systems. From the foregoing findings, evidence abound that the transactions of informal credit groups is necessary for group cohesion and rural development in Cross River State. This conclusion is realizable by tapping into the resources that dwell largely on ICSs members to spur participation and commitment to ICS utilization and patronage as well as identify people of integrity that can also contribute in the organization and management of informal credit groups.

**Keywords:** Socio-economic, Characteristics, Informal credit system, patronage, economy.

**INTRODUCTION**

The notable problems that characterize rural areas as vastly observed by various researchers include the prevalence of poverty, deplorable state of the economy and abysmal failure of rural development programmes initiated over the years (Dudwick, Hull, Katayama, Shilpi and Simler, 2011; Ekong, 2010; Nelson and Nelson, 2010). The persistence of poverty, which is chief among the problems, has attracted rigorous efforts by various governments to address the situation as it has a far-reaching consequence on the economy of rural areas. The nature of the rural poor is further manifested in limited employment and income generating opportunities due to the absence of credit facilities (Ajadi, 2010). Rural dwellers are greatly hit by the inequality created by formal credit systems which is marked by high collateral and a rural economy that is highly lacking in growth and opportunities which in turn has created more problems for the rural dwellers.

The fragmented nature of Nigeria’s market is defined by its formal and informal nature and sources. The emergence of demand for short-term credit especially among small holding traders and farmers which the rural economy is characterized by, and the disparity of credits accessibility created by the formal credit systems which largely do not favour the rural dwellers, have most likely led to the development of informal credit acquisition to fill the gap, thus giving the rural economy an opportunity to function.

The poverty state of rural dwellers and the epileptic nature of their economy have relegated them to an agricultural economy which is highly subsistent in nature. Given this scenario, the rural economy has been greatly starved of fund and credit acquisition. The formal financial institutions, according to Atieno (2001), have failed to cater for the credit needs of small holders (rural) economy by putting into consideration various factors including: inability of the latter to provide the collateral that the formal financial institution may require from them; lending terms and the conditions plus risk involved in recovering credit facilities. According to Robinson (2004), as far as 90 percent of persons living in developing countries are disadvantaged especially when it comes to access to financial services. Due to incomplete information about rural access and the viability of credit services, a very high proportion of the rural population has been deprived access to formal financial institutions.

Informal credit institutions still constitute a significant part of the economy of Third World Countries (TWC). The rural economy cannot be undermined as its productivity improvement is also important in a development process (Haugen, 2005). However, in spite of the proliferation of formal credit institutions among rural dwellers (Satyasai, 2012; Kumar, Singh and Sinha, 2010), there remains a very high level of informal lenders patronage as a dominant source of credit for rural areas (Kosgey, 2013; Li, Li, Huang and Zhu, 2013; Kumar, Turvey and Kropp, 2012). Given the nature of rural dwellers’ economic activities which are characterized as agricultural (Yadav and Sharma, 2015; Kishore, 2012) and small enterprises (Khandker and Koowal, 2015; Laoubi and Yamao, 2012), their productive investment requires funding and access to credit is crucial for this purpose especially as it may serve as social security and insurance to them.

The informal credit system (ICS) is as old as man and the existence of any financial system. In fact, it has the credit of existing alongside man even before civilization and the emergence of the formal credit sector which seems to have over-powered and dominated the informal credit system. The ICSs have gained some level of patronage despite the existence of high interest policies, bad management, fraudulent practices and exploitation for which the formal credit system has been blamed (Daasi, 2014 and Ehirim & Oguoma, 2013). What motivates people to depend on ICSs and the factors that have sustained their use as a credit system besides easy access to funds and proximity remains a puzzle, as it were. A poor understanding of such motivations and sustaining factors may affect the future organization, growth, performance and management of informal credit systems. It is against this backdrop that this study examines the socio-economic importance of informal credit systems patronage among rural dwellers with implications for poverty alleviation and rural development in Cross River State.

**METHODS**

**Research design:** This study adopted the survey design to meet its purposes. Surveys, according to various authors (Chawla and Sondhi, 2014; Ary, Jacobs, Sorensen and Walker, 2014), describe current conditions or attitudes as well as explain the reason for certain existing situations. The survey design is considered appropriate because it has the advantage of effectiveness in obtaining information about personal perceptions, belief, feelings, motivations, anticipation and future plans as well as past behavior. The survey was carried out through the administration of questionnaire and interview on members of informal credit systems in Cross River.

**Population of the study:** The study population constitutes patrons of informal credit systems operating on a group basis (ROSCA and FISCA) within the study area. Specifically, the study population includes men and women who are members of either rotatory or fixed saving credit associations. However, other categories of informal credit systems (MBs and IMLs) which operate on individual basis were not taken into due consideration and they do not constitute our unit of analysis.

**Sample and Sampling procedure:** The sample size of 576 respondents was derived for this study using Bill’s (2004) sample size determination formula. However, 567 respondents responded to the questionnaire. Multi-stage sampling technique was used to select patrons of informal credit groups. This involved cluster, simple random, snow-ball and accidental sampling techniques. Firstly, the clustering was based on senatorial zones that make up Cross River State. This was to ensure that each zone was adequately represented in the study. Simple random sampling technique was adopted at the second stage to select 50 percent of the total numbers of Local Government Areas (LGAs) so as to ensure randomization and representativeness. This also enabled proportional representation of the LGAs according to the senatorial zones. Meanwhile, 9 LGAs (Akpabuyo, Odukpani, Akamkpa, Obubura, Ikom, Boki, Ogoja Obudu and Obanliku) out of 18 LGAs were selected through balloting method.

Thirdly, purposive sampling technique was employed to select 3 rural communities from each LGA. This gave rise to 27 communities. Thereafter, the snow-ball sampling method was employed to select 3 informal credit groups from each of the rural communities selected. This amounted to 81 informal credit groups. Finally, the intercept sampling method was employed to select the actual respondents which stood at 576 respondents.

**Research Instrument:** Questionnaire was the major instruments of data collection. The purpose of the survey was to investigate the socio-economic variables of patrons of informal credit systems in Cross River State. A triangulated questionnaire comprising 5 sections was used to obtain information from respondents. Each of the sections was designed to address a particular objective that the study sought to realize.Hence, five hundred and sixty seven (567) copies of questionnaire were administered to respondents.

**Method of Data Analysis:** In examining the socio-economic factors that enhances the patronage of informal credit systems in Cross River State, the independent t-test and Analysis of Variance (ANOVA) with Least Significant Difference (LSD) multiple comparison test were considered suitable. It was assumed that there are many socio-economic characteristics ( such as: gender, household size, level of education, level of monthly income and present occupation) that could affect the usage of informal credit systems, hence, the multiple comparison test (using LSD) became necessary in order to establish the statistical relationship between the two variables.

**RESULTS AND DISCUSSION**

**The influence of patrons’ gender on ICSs usage**

Data in Table 1 show that at .05 level of significance and 565 degree of freedom, the critical t-value obtained was 1.97. The calculated t-values obtained in establishing the influence of gender on usage of four types of informal credit system were as follows: usage of rotatory savings, t = -4.12 (p<.05); usage of fixed savings, t = 0.87 (p>.05); usage of mobile bankers, t = -1.64 (p>.05); usage of individual money lenders, t = 0.23 (p>.05). The calculated t-value is greater than the critical t-value in usage of rotatory savings, while the calculated t-values for usage of fixed savings, mobile bankers and individual money lenders were less than the critical t-value

**Table 1: Independent t-test analysis of influence of gender on ICS usage in the study area**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Informal credit system** | **Gender** | **N** | **Mean** | **Std. Deviation** | **t** | **Sig.** |
| Rotatory saving | Male | 384 | 1.32 | 0.86 | -4.12\* | .000 |
|  | Female | 183 | 1.69 | 1.25 |  |  |
| Fixed saving | Male | 384 | 2.27 | 0.99 | 0.87 | .387 |
|  | Female | 183 | 2.19 | 1.18 |  |  |
| Mobile bankers | Male | 384 | 2.86 | 0.96 | -1.64 | .103 |
|  | Female | 183 | 3.01 | 1.07 |  |  |
| Individual money lenders | Male | 384 | 2.76 | 1.25 | 0.23 | .819 |
|  | Female | 183 | 2.73 | 1.24 |  |  |
|  |   |   |   |   |   |  |
| Source: Field data (2017) \*p<.05; df = 565; critical t = 1.97 |  |  |  |  |  |

With the foregoing results, it can be established that gender does not significantly influence ICS usage with regards to rotatory savings. It was however retained regarding fixed savings, mobile bankers and individual money lenders. This indicates that there is no significant influence of gender on the usage of fixed savings, mobile bankers and individual money lenders as forms of ICS in the study area. The negative significant t-value obtained in establishing the influence of gender on the usage of rotatory savings showed that the difference in usage is in favour of the second comparison group which is female. A mean value of 1.69 was obtained for the female which is significantly higher than the mean value of 1.32 obtained for the male respondents, showing that rotatory savings are used more by the females. This indicates that females significantly differ from males in their usage of rotatory savings as a form of informal credit group.

**The influence of patrons’ household size on ICSs usage**

Table 2 indicates that at .05 level of significance and degree of freedom 565, the critical t-value obtained was 1.97. The calculated t-values obtained in establishing the influence of household size on usage of four types of informal credit systems are as follows; usage of rotatory savings, t = 3.14 (p>.05); usage of fixed savings, t = -2.86 (p>.05); usage of mobile bankers, t = -.65 (p<.05); and usage of individual money lenders, t = -1.03 (p<.05). The calculated t-value was greater than the critical t-value in usage of rotatory savings and fixed savings, while the calculated t-values for usage of mobile bankers and individual money lenders were less than the critical t-value. With these results, it can be established that household size significantly influences ICS usage regarding rotatory savings and fixed savings. On the other hand, household size does not influence patrons’ usage of mobile bankers and individual money lenders as form of informal credit system.

**Table 2: An independent t-test analysis of influence of household size on ICS usage**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Informal credit system** | **Household size** | **N** | **Mean** | **Std. Deviation** | **T** | **Sig** |
|  |  |  |  |  |  |  |
| Rotatory saving | Less than 10 | 462 | 1.42 | 1.01 | 3.14\* | .518 |
|  | 10 and above | 105 | 1.50 | 1.05 |  |  |
|  |  |  |  |  |  |  |
| Fixed saving | Less than 10 | 462 | 2.23 | 1.08 | 2.86\* | .303 |
|  | 10 and above | 105 | 2.34 | 0.92 |  |  |
|  |  |  |  |  |  |  |
| Mobile bankers | Less than 10 | 462 | 2.97 | 0.98 | -.65 | .002 |
|  | 10 and above | 105 | 2.64 | 1.05 |  |  |
| Individual money lenders | Less than 10 | 462 | 2.82 | 1.24 | -1.03 | .004 |
|  | 10 and above | 105 | 2.44 | 1.21 |  |  |

Source: Field data (2017) \*p<.05; df = 565; critical t = 1.97

The positive significant t-value obtained on the influence of household size on the usage of mobile bankers and individual money lenders showed that the difference in usage was in favour of the first comparison group which is household size that is less than 10. The mean values obtained are significantly higher than mean values obtained by the household size of 10 and above. This indicated that smaller household sizes differed significantly from large household sizes in their usage of mobile bankers and individual money lenders as forms of ICS in the study area.

**The influence of patrons’ level of education on ICSs usage**

Data in Table 3 presents the summaries of the results of one-way analysis of variance (ANOVA) which establishes the influence of patrons’ level of education on their ICSs usage or patronage. Table 3 indicates that at 0.5 level of significance, and degrees of freedom 5 and 561, the critical F-ratio was 2.62. The calculated F-ratios obtained in establishing the influence of level of education on usage of four types of ICS were as follows: usage of rotatory savings, F = 2.36 (P < .05); usage of fixed savings, F = 2.07 (P < .05); usage of mobile bankers, F = 3.55 (P < .05); usage of individual money lenders, F = 6.44 (P < .05). The calculated F-ratios were seen to be less than the critical F-ratio in rotatory savings and fixed savings, showing that level of education does not influence the use of rotatory and fixed savings as forms of informal credit systems. However, result was significant for mobile bankers and individual money lenders. Hence, level of education influences the use of mobile bankers and individual money lenders as forms of informal credit systems. With this result, it can be concluded that the level of education favours informal credit users categorized on group basis (ROSCA and FISCA).

**Table 3: One-Way Analysis of Variance (ANOVA) of influence of level of education on ICS usage**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Informal credit system** | **Source of variation** | **SS** | **df** | **MS** | **F** | **Sig.** |
| Rotatory saving | Between Groups | 23.18 | 3 | 7.73 | 2.36 | .000 |
|  | Within Groups | 560.34 | 563 | 1.00 |  |  |
|  | Total | 583.53 | 566 |  |  |  |
| Fixed saving | Between Groups | 10.74 | 3 | 3.58 | 2.07 | .022 |
|  | Within Groups | 620.69 | 563 | 1.10 |  |  |
|  | Total | 631.43 | 566 |  |  |  |
| Mobile bankers | Between Groups | 6.15 | 3 | 2.05 | 3.55\* | .103 |
|  | Within Groups | 557.44 | 563 | 0.99 |  |  |
|  | Total | 563.59 | 566 |  |  |  |
| Individual money lenders | Between Groups | 29.07 | 3 | 9.69 | 6.44\* | .000 |
|  | Within Groups | 847.37 | 563 | 1.51 |  |  |
|   | Total | 876.44 | 566 |   |   |   |
| Source: Field data (2017) \*p<.05; df3&566; Critical F .62 |  |  |  |

Having obtained significant F-ratios, a post-hoc test was carried out using Least Significant Difference (LSD) multiple comparison test. This was to ascertain the groups where the significance occurred by pair-wise comparison of four categories of level of education. The result is presented in Table 4.

Table 4 shows that with regard to rotatory savings, the comparison of the educational level of no formal education with those of primary and secondary education showed insignificant mean difference. This indicated that respondents in the two categories did not significantly differ in their usage of rotatory savings. The comparison of respondents with no formal education and those with tertiary education, on the other hand, showed significant mean difference that was positive. This means that the group with no formal education significantly differed from informal credit systems patrons with tertiary level of education in their usage of rotatory savings. The comparison of those with primary education with other educational levels showed that they significantly differed in their use of rotatory savings with patrons who had secondary and tertiary education. The comparison of ICSs patrons with secondary level of education and those with tertiary education showed a significant mean difference in their usage of rotatory savings.

**Table 4: Least Significant Difference (LSD) multiple comparison test of influence of educational level on ICS usage**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Informal credit system** | **Comparison group (I)** | **Comparison group** **(J)** | **Mean Difference****(I-J)** | **Sig.** |
| Rotatory saving | No formal education | Primary education | -.32909 | .111 |
|  |  | Secondary education | .06958 | .674 |
|  |  | Tertiary education | .33900\* | .037 |
|  | Primary education | Secondary education | .39867\* | .011 |
|  |  | Tertiary education | .66809\* | .000 |
|  | Secondary education | Tertiary education | .26942\* | .004 |
| Fixed saving | No formal education | Primary education | .22588 | .025 |
|  |  | Secondary education | .03942 | .821 |
|  |  | Tertiary education | .48909\* | .187 |
|  | Primary education | Secondary education | -.26321 | .007 |
|  |  | Tertiary education | -.44967\* | .105 |
|  | Secondary education | Tertiary education | .18646 | .055 |
| Source: Field data (2017) \*. The mean difference is significant at 0.05 level of significance. |

With regard to fixed savings, the multiple comparisons of patrons of informal credit groups with no formal education showed a significant mean difference. This showed that respondents with no formal education do not significantly differ from patrons with primary education in their usage of informal credit groups. This means that patrons in the two categories do not significantly differ in their usage of ICS. However, patrons of ICS with no formal education differed from those who had acquired tertiary education. This showed that more patrons with no formal education used fixed saving as form of ICS than those with tertiary education. The comparison of users with primary education and secondary education showed no significant difference in their usage, but there was significance in usage among patrons with tertiary education.

**The influence of patrons’ level of monthly income on ICSs usage**

Data in Table 5 presents the summaries of the results of one-way analysis of variance (ANOVA) which establishes the influence of patrons’ level of monthly income on their ICSs usage or patronage. Data in Table 5 show that at .05 level of significance and degrees of freedom 5 and 561, the critical F-ratio was 3.02. The calculated F-ratios obtained in establishing the influence of monthly income on ICS usage were as follows: usage of rotatory savings, F = 11.71 (P < .05); usage of fixed savings, F = 4.80 (P < .05); usage of mobile bankers, F = 4.10 (P < .05); usage of individual money lenders, F = 5.35 (P < .05). The calculated F-ratios were seen to be greater than the critical F-ratio in all the categories of ICS (rotatory, fixed, mobile bankers and individual money lenders), leading to the conclusion that patrons’ level of monthly income significantly influences and determines their usage of the various forms of informal credit groups in the study area.

**Table 5: One Way-Analysis of Variance (ANOVA) of influence of monthly income on ICS usage**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Informal credit system** | **Source of variation** | **SS** | **df** | **MS** | **F** | **Sig.** |
| Rotatory saving | Between Groups | 55.16 | 5 | 11.03 | 11.71\* | .000 |
|  | Within Groups | 528.37 | 561 | 0.94 |  |  |
|  | Total | 583.53 | 566 |  |  |  |
| Fixed saving | Between Groups | 25.89 | 5 | 5.18 | 4.80\* | .000 |
|  | Within Groups | 605.54 | 561 | 1.08 |  |  |
|  | Total | 631.43 | 566 |  |  |  |
| Mobile bankers | Between Groups | 19.86 | 5 | 3.97 | 4.10\* | .001 |
|  | Within Groups | 543.74 | 561 | 0.97 |  |  |
|  | Total | 563.59 | 566 |  |  |  |
| Individual money lenders | Between Groups | 39.92 | 5 | 7.98 | 5.35\* | .000 |
|  | Within Groups | 836.51 | 561 | 1.49 |  |  |
|  | Total | 876.44 | 566 |  |  |  |
| Source: Field data (2017) \*p<.05; df5&561; critical F 2.23 |  |  |  |

Having obtained significant F-ratios in all the categories of informal credit systems, a post-hoc test was carried out using Least Significant Difference Multiple Comparison Test. This was to ascertain the groups where the significance occurred by pair-wise comparison of six categories of monthly income of patrons of informal credit group. The results are presented in Table 6.

Data in Table 6 further show that with regard to rotatory savings, the comparison of patrons of informal credit groups whose monthly income was less than N20,000 with those of other monthly income levels: N20,000 - N40,000; N41,000 - N60,000; N61,000 - N80,000; N81,000 – N100,000; and above N100,000 all showed a significant mean difference. This means that patrons in the two categories of comparison group differed in their usage of rotatory savings. The comparison of patrons with monthly income of N20,000 - N40,000 with other categories of monthly income showed insignificant mean difference in patrons with income level of N41,000 - N60,000, N81,000 – N100,000, and above N100,000, but showed significance in patrons with income level of N61,000 - N80,000. This indicates that respondents in the two categories differ in their usage of rotatory saving at income level of N61,000 - N80,000, but do not differ in their usage in other levels of monthly income.

Also, comparison of patrons with monthly income of N41,000 – N60,000 with other categories of monthly income showed a significant difference in patrons with income level of N61,000 - N80,000, but indicated no significant difference with other income level (N81,000 – N100,000 and above N100,000). This means that they differ in their usage only at income level of N61,000 - N80,000, but do not differ in other income categories. However, the mean difference between patrons whose income level was within the range of N61,000 - N80,000 with other income categories (N61,000 - N80,000 and N100,000 and above) showed no difference in their usage of rotatory saving as a form of ICS. The level of income comparison between patrons who earned N81,000 – N100,000 with those who earned N100,000 and above also showed no significant difference. This suggests that patrons within these categories of income level were not different in their usage of rotatory savings.

Regarding fixed savings, the result of the LSD multiple comparison test for patrons with less than N20,000 monthly income with those whose monthly income fell within the income range of N61,000 - N80,000 and those above N100,000 was significant. This showed that patrons in both categories were different in their usage of fixed savings as a form of informal credit systems. However, the result showed an insignificant mean difference between patrons whose monthly income fell below N20,000 and patrons who earned within N20,000 – N40,000, N41,000 – N60,000, and N81,000 – N100,000. This insignificant mean difference showed that patrons in both categories were not different in their usage of fixed savings. The result further revealed that LSD multiple comparison test of patrons who had N20,000 – N40,000 as their monthly income and those whose monthly income was N61,000 – N80,000 and N100,000 and above was significant. This further indicates that both comparison groups differ significantly in their usage of fixed savings. But the result showed an insignificant difference with patrons whose income level fell within N41,000 – N60,000 and N81,000 – N100,000. This means that ICS patrons do not differ in their usage of fixed saving as a form of informal credit systems in the study area.

**Table 6: Least Significant Difference multiple comparison test of influence of monthly income on ICS usage**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Informal credit system** | **Comparison group (I)** | **Comparison group (J)** | **Mean Difference (I-J)** | **Sig.** |
|  |  |  |  |  |
| Rotatory saving | Less than 20,000 | 20,000-40,000 | .44150\* | .001 |
|  |  | 41,000-60,000 | .62675\* | .000 |
|  |  | 61,000-80,000 | .89358\* | .000 |
|  |  | 81,000-100,000 | .73692\* | .000 |
|  |  | 100,000 and above | .98182\* | .002 |
|  | 20,000-40,000 | 41,000-60,000 | .18525 | .123 |
|  |  | 61,000-80,000 | .45209\* | .000 |
|  |  | 81,000-100,000 | .29542 | .072 |
|  |  | 100,000 and above | .54032 | .091 |
|  | 41,000-60,000 | 61,000-80,000 | .26684\* | .023 |
|  |  | 81,000-100,000 | .11017 | .495 |
|  |  | 100,000 and above | .35507 | .264 |
|  | 61,000-80,000 | 81,000-100,000 | -.15666 | .333 |
|  |  | 100,000 and above | .08824 | .782 |
|  | 81,000-100,000 | 100,000 and above | .24490 | .467 |
| Fixed saving | Less than 20,000 | 20,000-40,000 | .03094 | .820 |
|  |  | 41,000-60,000 | .10632 | .424 |
|  |  | 61,000-80,000 | .30134\* | .024 |
|  |  | 81,000-100,000 | .18219 | .308 |
|  |  | 100,000 and above | -1.25455\* | .000 |
|  | 20,000-40,000 | 41,000-60,000 | .07539 | .558 |
|  |  | 61,000-80,000 | .27040\* | .037 |
|  |  | 81,000-100,000 | .15125 | .389 |
|  |  | 100,000 and above | -1.28548\* | .000 |
|  | 41,000-60,000 | 61,000-80,000 | .19501 | .121 |
|  |  | 81,000-100,000 | .07587 | .661 |
|  |  | 100,000 and above | -1.36087\* | .000 |
|  | 61,000-80,000 | 81,000-100,000 | -.11915 | .492 |
|  |  | 100,000 and above | -1.55588\* | .000 |
|  | 81,000-100,000 | 100,000 and above | -1.43673\* | .000 |
| Source: Field data (2017) \*. The mean difference is significant at 0.05 level of significance |

The LSD multiple comparison test further showed insignificant mean difference between patrons with N41,000 – N60,000 and other patrons with N61,000 – N80,000 and N81,000 – N100,000 as their level of monthly income. This shows that respondents in the two categories do not significantly differ in their usage of fixed savings but significantly differed from patrons whose level of monthly income fell within N100,000 and above. Patrons whose level of income fell in the first comparison group (N61,000 – N80,000) did not differ from patrons whose level of income fell within N81,000 – N100,000, but differed significantly from respondents with income levels above 100,000. Finally, there is a significant difference when one compares patrons whose monthly income fell within N81, 000 – N100, 000 and 100,000 and above. This is an indication that they do not differ in their usage of fixed saving as a form of informal credit systems.

**The influence of patrons’ occupation on ICSs usage**

Data in Table 7 presents the summaries of the results of one-way analysis of variance (ANOVA) which establishes the influence of patrons’ occupation on their ICSs usage or patronage. Data in Table 7 show that at .05 level of significance and degrees of freedom 4 and 562, the critical F-ratio is 2.23. The calculated F-ratios obtained in establishing the influence of occupation on ICS usage were as follows: usage of rotatory saving, F = 10.46 (P < .05); usage of fixed savings, F = 9.91 (P < .05); usage of mobile bankers, F = 10.99 (P < .05); and usage of individual money lenders, F = 2.47 (P < .05). The calculated F-ratios were seen to be greater than the critical F-ratio in all the categories of ICSs (rotatory, fixed, mobile bankers and individual money lenders), leading to the conclusion that patrons’ occupation significantly influences and determines their usage of the various forms of informal credit systems in the study area.

**Table 7: One-Way Analysis of Variance of influence of occupation on ICS usage**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Informal credit system** | **Source of variation** | **SS** | **df** | **MS** | **F** | **Sig.** |
| Rotatory saving | Between Groups | 40.42 | 4 | 10.11 | 10.46\* | .000 |
|  | Within Groups | 543.10 | 562 | 0.97 |  |  |
|  | Total | 583.53 | 566 |  |  |  |
| Fixed saving | Between Groups | 41.62 | 4 | 10.40 | 9.91\* | .000 |
|  | Within Groups | 589.82 | 562 | 1.05 |  |  |
|  | Total | 631.43 | 566 |  |  |  |
| Mobile bankers | Between Groups | 40.87 | 4 | 10.22 | 10.99\* | .000 |
|  | Within Groups | 522.72 | 562 | 0.93 |  |  |
|  | Total | 563.59 | 566 |  |  |  |
| Individual money lenders | Between Groups | 15.14 | 4 | 3.79 | 2.47\* | .044 |
|  | Within Groups | 861.30 | 562 | 1.53 |  |  |
|   | Total | 876.44 | 566 |   |   |   |

Source: Field data (2017) \*p<.05; df5&562; critical F = 2.23

Having obtained significant F-ratios in all the categories of informal credit systems, a post-hoc test was carried out using Least Significant Difference Multiple Comparison Test on only rotatory savings and fixed savings which were the dominant categories of interest in this study. This was to ascertain what groups the significance occurred by conducting a pair-wise comparison of the five categories of occupation notable among ICSs patrons. The result is presented in Table 8.

**Table 8: Least Significant Difference multiple comparison test of influence of occupation on ICS usage**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Informal credit system** | **Comparison group (I)** | **Comparison group (J)** | **Mean Difference (I-J)** | **Sig.** |
| Rotatory saving | Farmer | Petty trader | .11189 | .348 |
|  |  | Craftsman | .54138\* | .000 |
|  |  | Civil servant | .59160\* | .000 |
|  |  | Others | .62637\* | .000 |
|  | Petty trader | Craftsman | .42949\* | .002 |
|  |  | Civil servant | .47971\* | .000 |
|  |  | Others | .51449\* | .001 |
|  | Craftsman | Civil servant | .05022 | .713 |
|  |  | Others | .08499 | .609 |
|  | Civil servant | Others | .03477 | .813 |
| Fixed saving | Farmer | Petty trader | -.03077 | .804 |
|  |  | Craftsman | .54567\* | .000 |
|  |  | Civil servant | .55374\* | .000 |
|  |  | Others | .39658\* | .012 |
|  | Petty trader | Craftsman | .57644\* | .000 |
|  |  | Civil servant | .58451\* | .000 |
|  |  | Others | .42735\* | .006 |
|  | Craftsman | Civil servant | .00808 | .955 |
|  |  | Others | -.14909 | .389 |
|  | Civil servant | Others | -.15716 | .306 |
| Source: Field data (2017), \* The mean difference is significant at 0.05 level of significance. |  |

Table 8 shows that regarding rotatory savings, a comparison of patrons who were farmers with those who were petty traders showed insignificant mean difference. This indicates that patrons in the two categories of groups did not significantly differ in their usage of rotatory savings. A comparison of patrons who were farmers with those who had other types of occupations such as craftsman, civil servants and others (both farm and non-farm livelihood strategies) all showed significant mean difference that was positive. This means that the first comparison group, that is patrons who were farmers, differed from patrons with other types of occupation in their usage of rotatory savings, because they used it more than the latter. The comparison of patrons who were petty traders with those of other types of occupation such as craftsman, civil servants and others (both farm and non-farm livelihood strategies) also showed that they differed significantly in the usage of rotatory savings. However, the comparison of patrons who were craftsman with those of other types of occupation such as civil servants and other farm and non-farm livelihood strategies engaged in by patrons showed no significant difference in their usage of rotatory savings. The comparison of patrons who were civil servants with those who had other farm and non-farm livelihood strategies also showed no significant difference in their usage of rotatory saving.

On the other hand, the result of the LSD multiple comparison test revealed that with regards to fixed savings, the comparison of patrons who were farmers in the usage of informal credit system with those who were petty traders showed insignificant mean difference. This indicates that patrons in the two categories of comparison groups do not significantly differ in their usage of rotatory savings. The comparison of patrons who were farmers with those of other types of occupations such as craftsman, civil servant and others (both farm and non-farm livelihood strategies) all showed significant mean difference that is positive. This means that the first comparison group, which is patrons who were farmers, differs from those of other types of occupation in their usage of fixed savings, which means that they use it more. The comparison of patrons who were petty traders with those of other types of occupation such as craftsman, civil servants and others (both farm and non-farm livelihood strategies) also showed that they significantly differ in the usage of fixed savings. However, the comparison of patrons who were craftsmen with those of other types of occupation such as civil servants and other farm and non-farm livelihood strategies engaged in by patrons showed no significant difference in their usage of fixed savings. The comparison of those who were civil servants with those who had other farm and non-farm livelihood strategies also showed no significant difference in their usage of fixed savings.

**Discussion of findings**

Table 1 shows the independent t-test analysis of the influence of gender on the usage of four categories of informal credit systems in Cross River State. Patrons’ gender was significant in influencing their usage of rotatory savings as a form of informal credit system. However, patrons’ gender was not significant in influencing their usage of fixed savings, mobile banking and individual money lenders as forms of ICSs. This shows that the use of rotatory saving is determined by patrons’ gender with women having dominance over men in their patronage. The study further revealed traders’ dominance in rotatory savings as was evident in the result on the categories of ICSs patronized by users. The study also showed that the reason why patrons fix their savings is because of the difficult they encounter in keeping their money and also, due to the fact that they are frequently in need of money for business transactions. Therefore, harmonizing the saving ability of women could enhance and utilize their untapped abilities and unmet needs and demand for income which has been previously observed by researchers (Jeiyol, Akpan and Tee, 2013).

Result showing the independent t-test analysis on the influence of patrons’ household size on ICSs usage as indicated in Table 2 showed that household size significantly influenced the usage of informal credit systems for rotatory and fixed savings, but was insignificant for other categories of informal credit systems (mobile bankers and individual money lenders). This finding might have less implication for ICSs usage; however a pair-wise comparison on the dimension of household size (less than 10 and 10 and above) could influence patrons’ usage of ICSs in Cross River State. This is seen as smaller households (less than 10) differed from large households (10 and above) in their usage in all the categories of ICSs.

Result of one-way analysis of variance as shown in Table 3 exonerated patrons’ level of education from having any influence on their usage of rotatory and fixed savings, but implicated their level of education to have an influence on their usage and patronage of mobile banking and individual money lending as forms of informal credit systems. This finding indicates that ICSs organized on group basis (rotatory and fixed savings) do not require literacy for transactions to take place. There is much emphasis and reliance on other patrons who are literate enough to read and write. This is usually so in cases where some retirees and civil servants among the patrons are nominated and given the responsibility to oversee the financial records of the group. Unlike rotatory and fixed savings which are operated on group basis, mobile banking and individual money lending require adequate documentation and understanding of terms of agreement with regards to interest rate and other information necessary for servicing the transaction. Thus, there is need for patrons of informal credit groups to have the foregoing understanding in order for transactions to be done effectively.

A post-hoc test using least significant difference test showed a pair-wise comparison of the various levels of education (no-formal, primary, secondary and tertiary education) and the usage of rotatory and fixed saving as forms of informal credit systems composed on group basis. The result as indicated in Table 4 reveals that among the various levels of patrons’ education, there were differences in their association and usage. Educated patrons were longing to associate with group where other patrons were also educated, while patrons who were not educated were also attracted to patronize, use and associate with their folk. This could be the reason why informal credit groups are formed among individuals with common interest and purpose. This result corroborates Essien, Ugwu and Daasi (2012) findings that informal credit associations are formed along occupational line.

Data in Tables 5 and 6 shows the one way-analysis of variance and least significance difference multiple comparison test of influence of patrons’ monthly income on their usage of informal credit systems in Cross River State. Result as indicated in Table 5 reveals a significant influence of patrons’ level of monthly income on their usage of all the four forms of informal credit systems (rotatory savings, fixed saving, mobile banking and individual money lending). This is an indication that the amount of money available to patrons determines their patronage and the amount they contribute to the group. This can also be seen in the ranges of amount that patrons invest with and the challenge of non-repayment and defaulting in contract engagement by some patrons. To further ascertain the level of interaction of patrons’ level of income and their usage of the various forms of ICSs, a pair-wise comparison of each of the five (5) levels of income (less than ₦20,000, ₦20,000 – ₦40,000, ₦41,000 - ₦60,000, ₦61,000- ₦80,000, ₦81,000 - ₦100 000 and ₦100,000 and above) was conducted. The result showed that differences occurred among patrons in their usage of any of the forms of ICSs with regards to the amount available to them. For instance, as indicated in Table 6, the comparison of ICSs patrons whose level of monthly income was less than ₦20,000 with other patrons’ level of monthly incomes (less than ₦20,000, ₦20,000 – ₦40,000, ₦41,000 - ₦60,000, ₦61,000- ₦80,000, ₦81,000 - ₦100 000 and ₦100000 and above) all showed a significant mean difference, meaning that they differ in their usage of rotatory and fixed savings as forms of informal credit systems in Cross River State.

Finally, result on the influence of patrons’ occupation on their usage of ICSs according to data in Tables 7 and 8 reveal that patrons’ occupation had a significant influence in determining their usage of all the forms of informal credit systems (rotatory saving, fixed saving, mobile banking and individual money lending). However, the dimension of the influence of the variation of patrons’ occupation was established in Table 8 (least significant difference multiple comparison). Patrons’ usage of any form of ICSs, according to the data in Table 8, is informed by their occupation. For instance, patrons who were farmers were different from patrons with other occupation in their usage of any form of informal credit systems. This could also affect their reason for investing or saving. While a trader is more likely to prefer a rotatory form of saving due to frequency of financial demand for their business, a farmer is more likely to be interested in fixed saving with the hope of harvesting his money for farming activities in the next season of planting.

It is also necessary to point out that patrons’ occupations have an implication for the frequency, choice and demand for fund. Among patrons’ occupational variations (farmers, petty traders, civil servants and others), their income usage varies. The frequency with which a trader or farmer may require or have the demand for income is insignificant compared to a patron who may be a craftsman or civil servant. This is as a result of seasonality in income demand and spending. Patrons who are craftsmen, farmers and non-traders were found to often engage in fixed savings. Demand for their savings usually come during celebration, ceremonial and festive periods - new yam, burial, wedding, Christmas, etc. This finding corroborates the results of earlier studies (Cochrane and Thornton, 2017; Case, Garrib, Menendez and Olgiati, 2013; Gurim, D’Espallier and Venkatasubramanian, 2013).

**CONCLUDING REMARKS AND IMPLICATIONS**

Investigations on informal credit system vary within contexts. This study has critically explored the socio-economic importance of informal credit systems’ patronage among rural dwellers with implications for poverty alleviation and rural development in Cross River State. Previous studies (Essien, Ugwu and Daasi, 2012 and Daasi, 2014) on informal credit system (ICSs) have severally relied on economic analysis, thereby shrinking their social importance, the latter of which is necessary for explaining and exploring group cohesion and dynamics. Therefore, establishing a social basis for ICSs utilization and dynamics is of a high value, and it is necessary to understand the various changes, prospects and challenges the rural credit groups are faced with.

From the findings of the present study, evidence abound that the transactions of informal credit groups is necessary for group cohesion and rural development in Cross River State. This conclusion is realizable by tapping into the resources that dwell largely on ICSs members to spur participation and commitment to ICS utilization and patronage as well as identify people of integrity that can also contribute in the organization and management of informal credit groups.

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