Determinants of Interest Free Banking Service in Ethiopia: The Case of Commercial Bank of Ethiopia, Bale Robe, Ethiopia

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Abstract

Islamic banking system here after called Interest Free Banking (IFB) is a banking system that operates through pricing of goods and services. However, there are different determinant factors which have a contribution on the promotion and acceptance of the system. There is also a limited number of paper work that has to be investigating the factors affecting the Goodview of the system. Therefore, this study is conducted to identify the potential factors affecting IFB services and customer satisfaction under the Commercial Bank of Ethiopia (CBE) in Bale Robe, Ethiopia. Cross-sectional study designs such as quantitative and qualitative approaches were used. Cluster method and systemic random sampling methodology were also used to select IFB account holders. A total of 335 customers were interviewed. Ten branch bank managers and selected window IFB service providers were selected purposefully. The data collected through questioner and interview were analyzed and presented using descriptive statics. As a result, the study showed that the mean difference of IFB service satisfaction among age category of the study participants and the difference were attributed to in age group of 21 to 30 years and 31 to 40 years (P= 0.028). The study also revealed as there is no variation in satisfaction with IFB service across participants' occupation (F= 1.374 and P-value= 0.243). Socio-cultural factor were also identified to have a significant positive influence on IFB customer satisfaction. Governmental policy and regulation were found to be negatively significant predictor of IFB service (unstandardized beta coefficient = -0.229). In conclusion, relatively good progresses in trends of customer frequency, significant mean variation of IFB service customer satisfaction were seen across different age group of the respondents. The IFB customer satisfactions have significant strong negative correlation with governmental policy and regulation. Governmental policy as well as regulation and weighted socio-cultural factors were found to be independent and significant predictors of IFB customer satisfaction. Based on the above results the need to improve the knowledge and perception of community, expansion and sustaining of IFB service for the larger nation were forwarded as a recommendation. In addition, regarding to IFB system across the bank system of the country, the governmental policy, rule and regulation has to be revised.

Keywords: Determinants, Interest free banking, Goods and Services.

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Introduction

Banking system is one of the most important economic sectors and strongest financial intermediaries in the economies that plays a key role in economic development in societies through receiving the deposits of depositors and instead pays loans and facilities to applicants and give interest. It is difficult to conceptualize how an economy would operate and survive without the crucial services offered by the banks. Therefore, bank need to consider bank's image and performance, speed of transaction, channel of delivery system, banking convenience and product diversity to attract customers. In addition to achieve their mission and objectives, they will have to understand their customers' [4]. Such scenario had also led to the changes in the customer's taste and demand for better and high quality banking services.

Because of the financial innovation is typically associated with the production of a new financial product, interest free banking product and services are not exceptional. As indicated by [9], introduction of Interest Free Banking (IFB) does not only create inclusive financial system for the IFB customers but also has a potential to influence and enhance the economic development of the country through resource mobilization and employment creation. International experiences and theoretical literature also shows the existence of several types of IFB products. In Ethiopia, in 2013, the introduction of Islamic banking window alongside with conventional operations has generated new dimension and phenomenal in banking sector [9]. IFB system in Ethiopia needs lots of effort and resources to increase the knowledge of its adopters for proper awareness and better understanding. To collect a significant IFB deposits, banks have to attract customers since its achievement depends on customer's knowledge and perceptions towards the banks product and services. For competitive survival, understanding and adapting the innovations to customer motivation and

behavior is not an option but an absolute necessity [8].

Despite the various efforts made in providing dual banking services in Ethiopia, the implementation of IFB is not at the required level. There are different determinant factors which have contributed to the acceptance of the IFB which require in-depth investigation. However, there is very much limited published works that investigate the determinants of IFB from the viewpoint of customers in the different parts of the Ethiopia [1]. Therefore, the study will be attempted towards investigating determinant factors on IFB and other financial services customer satisfaction in Bale zone. Through the study, an attempt was made to know whether customers from different age groups, gender, educational and professional background act differently for IFB service account holder satisfaction. The research further examined how the governmental policies, rule and regulation including infrastructural development influence IFB customer satisfaction. And finally, the study aims to examine the determinant factors that may have an impact on the usage of IFB in context of in Bale zone, Ethiopia.

Materials and Methods
Description of the Study Area

Robe town is located in south eastern Ethiopia of Bale Zone, Oromia National Regional State between geographical coordinates of 7°7' N and 40°0' E with elevation of 2,492 meter (8,176 ft asl) at 430km from Addis Ababa.

Data Collection

The primary data were collected from IFB customers, employee of separated window and bank managers those are selected from the sample banks of the study area. Secondary sources were collected from recorded document of the selected banks particularly regarding the total number of IFB customers, branch managers and separate window service providers. Structured questionnaire were also used to

collect the data from selected IFB service customers. The design of the questionnaire was consider the need for both open and close-ended questions. Open-ended questions used in order to provide the respondents with an opportunity to explain their views freely.

The closed-ended questions also are necessary to cover more ground within a limited timeframe, particularly for those respondents who would have severe time constraints.

Table 1. Sampling unit, sampling technique and sample size determination

No	Sampling unit	Sample size determination	Sampling techniques
1	Commercial Bank of Ethiopia	-	Purposive
2	Bale zone	-	Purposive
3	Bank division	-	Clustering
4	IFB Account holders	$n = z2.p(1-p).N /e2 (N-1) + z2.p(1-p)$	Systematic sampling
5	Bank branch sizes	Carvalho(1984)	Simple random sampling
6	Staff window and managers	-	Purposive

Table 2. Total population and sample size of the study area.

Samples	Name of the the Banks				
	Sanate	Denbel	Sinana	Meliyu	Total
Total population of IFB custemers	487	324	1157	266	2,234
Sample population of IFBcustemers	73	49	173	40	335
Total population of manager	1	1	1	1	4
Sample population of manager	1	1	1	1	4
Total population of staff window	2	1	2	1	6
Sample population of staff window	2	1	2	1	6

Reliability of the data was check using Crombactch alpha test. Reliability refers to the level of dependability of the items in the research instrument, and the consistency of the research instruments in tapping information from more than one respondent. According to Pallant (2005), when selecting the scales to include in the study, it is critical seeing scales are reliable. The internal consistency of the scale is a means of checking the reliability which refers to the degree to which the construct of scales the same underlying attribute. A common indicator of internal consistency is Cronbach's alpha coefficient (Pallant, 2005) which is recommended to be greater than or equal to 0.7.

Data Analysis

The data gathered from primary sources through questionnaire and interviews were analyzed using descriptive methods. Linear regression analysis used to determine the extent to which independent variables affect dependent variable (IFB) and one-way ANOVA test was also used to see the variables among IFB account holders in urban and semi-urban groups. The information collected from FGD and KI were summarized and presented in descriptive way.

Result and Discussions

From the total 325 respondents, about 61.2% were IFB customers of urban CBE branches, while the rest 38.8% were from semi urban branches of CBE.

In addition, all respondents (100%) have a bank account in different branches of CBE for the purpose of saving (96.6%) and other service provided by the banks (3.4%). Data collected from questionnaires regarding the respondents characteristics including age, educational qualification, years of banking relationship and experience and window associated with were analyzed and summarized in Table 3.

Table 3. Demographic characteristics variables of Commercial Bank of Ethiopia interest free service customers, Bale zone Ethiopia 2017.

Variable	Category	Out come	
		Frequency	Percentage
Age	Less than 15	3	0.9
	15-20	74	22.8
	21-30	163	50.2
	31- 40	63	19.4
	41-50	12	3.7
	Above 50	10	3.1
Educational status	No education	7	2.2
	Primary education	26	8
	Secondary education	74	22.8
	College	144	43.3
	University	74	22.8
Types of IFB account associated with	Wadiya Amana (saving account)	314	96.6
	Qard (current account)	11	3.4
IFB relationship	Less than 1 year	206	63.4
	1-5 Years	119	36.6
Types of window associated with	Interest free banking window	307	94.5
	Both IFB & Conventional window	18	5.5

Figure 1. Religion distribution of CBE-IFB customers, Bale Robe, Ethiopia.
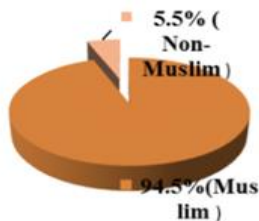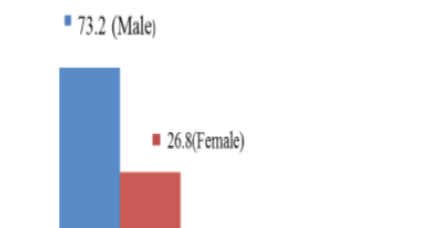

Figure 2. Gender distribution of interest CBE-IFB customers, Bale Robe, Ethiopia.

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Status of Interest Free Banking Service

This study tried to assess the status of IFB service under CBE. Therefore, majority of the result indicated that major segment of the population did not know clearly IFB service and nearly all of the current customers of the service belong to Muslim religion group. In addition, the participants stated as there is a significant variation in the utilization of the service across different education status where more educated are using more compared with their counterpart. As to the trend of customer frequency across time, it was observed as there is optimum increment of IFB service customer from time to time since the inception of the service even if it is not as planned one (Figure 3).

Figure 3. The occupation of CBE-IFB customers, Bale Robe, Ethiopia.
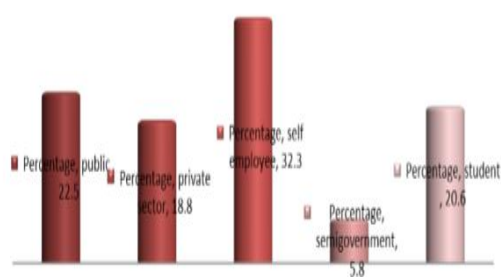
It was also suggested by a lot of respondents that there should be continuous awareness creation regarding the service and increasing its accessibility to end users. With regards to the future feat of the service, it was proposed by majority of interviewee as there is a great potential demand from the population for the service which possible ends with domination if the need of the community is properly handled by the government and each IFB service providing branches in the future.

Result of Independent T-test Analysis and One Way ANOVA

To conduct t-test and ANOVA, assumption of homogeneity of variance was checked. As part of inferential statistics, comparisons were done among the mean values of IFB service for different demographic characteristics (gender, age category, occupation and IFB accounts the customers are associated with) to find out how do customers of the service with various demographic characteristics significantly various on IFB service. As shown on the Table 3, sex of the participant were not significantly associated with IFB service satisfaction of customers (t= -1.843, P-value =0.067). The result of this study is different from other study conducted to assess factors which influence consumer choice of Islamic banking in Kenya [5].

This study identified as there are a significant differences in the mean value of IFB service of customers across different age categories of study participants (F=2.64 and p-value =0.024). As we can see from the table, there is a significant mean variation of IFB service and the agreed response of the study participants with regard to selection of the service due to religion (P =0.024,F =2.64). Since ordinary ANOVA test only tell us the presence of variation among response category of the factor, multiple comparison test was also done to locate where the variation exist.

Table 4. Comparison of interest free banking service among gender distribution

Variable	Mean		S.D		t-value	p-value
	Male	Female	Male	Female		
IFBS	2.9	3.06	0.813	0.612	-1.843	0.067

Table 5. Comparison of interest free banking service among various age groups

IFBS	Sum of squares	Df	Mean square	F	P-value
Between the group	7.55	5	1.51	2.638	0.024
Within group	182.81	319	0.573	-	-
Total	190.37	324	-	-	-

Multiple Comparison reveal that there is significant differences in the mean value of IFB service satisfaction of customers across different age categories of study participants (F=2.64 and p-value =0.024). Based on the results of multiple comparison which done to locate the exact position of mean difference of IFB service satisfaction among age category of the study participants, it was revealed as the variation was between age group of 21 to 30 years and 31 to 40 years (P-value =0.028) (Table 6).

However, there is no significant mean difference between in the other year's age category. Independent t-test analysis has showed that interest free banking service is not associated with the type of interest free banking accounts the customers are associated with (p-value = 0.37). This finding is supported by related study conducted to identify factors which affects customer satisfaction in retail banking service [6].

In contrast to this study, [6] indicated that there is significant variation in mean of IFB service satisfaction across different participants' occupation (F=1.374 and P-value =0.243). This could be attributed to contextual and study population difference. Independent t-test analysis has been done to assess whether there is variation in mean satisfaction of customers and the type of IFB accounts they are associated with.

Table 6. Multiple comparison of interest free banking service among various age groups

Respondent age (I)	Respondent age (J)	Mean difference (I-J)	SE	P-value	95% C.I	
					Lower bound	Upper bound
Less than 15 years	15-20 years	0.195	0.446	1.000	-1.12	1.51
	21-30 years	0.123	0.441	1.000	-1.18	1.43
	31-40 years	-0.151	0.447	1.000	-1.47	1.17
	41-50 years	-0.333	0.489	1.000	-1.78	1.11
	More than 50 years	-0.240	0.498	1.000	-1.71	1.23
15-20 years	Less than 15 years	-0.195	0.446	1.000	-1.51	1.12
	21-30 years	-0.071	0.106	1.000	-0.39	0.24
	31-40 years	-0.345	0.130	.123	-0.73	0.04
	41-50 years	-0.528	0.236	.386	-1.22	0.17
	More than 50 years	-0.435	0.255	1.000	-1.19	0.32
21-30 years	Less than 15 years	-0.123	0.441	1.000	-1.43	1.18
	15-20 years	0.071	0.106	1.000	-0.24	0.39
	31-40 years	-0.274	0.112	0.028	-0.61	-0.06
	41-50 years	-0.457	0.226	0.669	-1.13	0.21
	More than 50 years	-0.363	0.247	1.000	-1.09	0.37
31-40 years	Less than 15 years	0.151	0.447	1.000	-1.17	1.47
	15-20 years	0.345	0.130	0.123	-0.04	0.73
	21-30 years	0.274	0.112	0.028	0.06	0.61
	41-50 years	-0.183	0.238	1.000	-0.89	0.52
	More than 50 years	-0.089	0.258	1.000	-0.85	0.67
41-50 years	Less than 15 years	0.333	0.489	1.000	-1.11	1.78
	15-20 years	0.528	0.236	0.386	-0.17	1.22
	21-30 years	0.457	0.226	0.669	-0.21	1.13
	31-40 years	0.183	0.238	1.000	-0.52	0.89
	More than 50 years	0.093	0.324	1.000	-0.87	1.05
More than 50 years	Less than 15 years	0.240	0.498	1.000	-1.23	1.71
	15-20 years	0.435	0.255	1.000	-0.32	1.19
	21-30 years	0.363	0.247	1.000	-0.37	1.09
	31-40 years	0.089	0.258	1.000	-0.67	0.85
	41-50 years	-0.093	0.324	1.000	-1.05	0.87

Result of Pearson Correlation Analysis

Pearson correlation analysis was done to assess the presence of linear correlation between IFB service customer's satisfaction, socio-cultural factors as well as governmental regulation and policy after calculating the mean response of the participants for each variable. As per the result displayed on the table, there is a significant strong negative correlation between IFB service and governmental policy and regulation (R = -0.203). It was also seen that there is weak positive correlation between IFB service and socio-cultural factors (R = 0.094). On the other hand, governmental policy and regulation and socio-cultural factors were found to have weak positive correlation (R =0.190). This finding is in line with the study done by [2] which noted that as there are certain factors like lack of understanding of the correct nature of Islamic financing techniques which can end with unfavorable environment due to the policy and regulations stated by the government regarding the service (2).

In this study, it was also seen that there is weak positive correlation between IFB service satisfaction of customer and socio-cultural factors (R =0.094). A study done by Hanudin Amin on determinants of customers' intention to use Islamic personal financing the case of Malaysian Islamic banks showed the same result. The main socio-cultural factors which correlated with intention to use Islamic personal financing include attitude, social influence and pricing of Islamic personal financing [3]. On the other hand, governmental policy and regulation and socio-cultural factors were found to have weak positive correlation (R=0.190) which could be due to relation of governmental intervention with livelihood of the participants.

Table 7. Correlation between interest free banking service with socio-cultural factor, governmental policy and regulation

		IFBST	SCFT	GPRT
IFBST	Pearson Correlation	1	0.094	-0.203**
	P-value	-	0.091	0.000
	Sample size	325	325	325
SCFT	Pearson Correlation	0.094	1	0.190**
	p-value	0.091	-	0.001
	Sample size	325	325	325
GPRT	Pearson Correlation	-0.203**	0.190**	1
	p-value	0.000	0.001	-
	Sample size	325	325	325

*. Correlation is significant at the 0.01 level (2-tailed).

Table 8. The comparison of Interest free service with different occupation group

IFBS	Sum of squares	D.f	Mean square	F	Sig.
Between the group	3.214	4	0.804	1.374	0.243
Within group	187.161	320	0.585	-	-
Total	190.376	324	-	-	-

Multiple linear regression analysis result
The reliability of the data for regression analysis has been checked by conducting crombatch alpha test result. The reliability alpha of IFB service, socio-cultural factors and governmental policy were 0.773, 0.834 and 0.801, respectively which indicate as the scales constructed were reliable enough to be applied as a measuring tool. Pearson product-moment correlation coefficient is only tell as whether simple relationship between two or more variables. In order to investigate the influence of governmental policy and regulation and socio-cultural factors on IFB service multiple linear regression was done. Accordingly governmental policy and regulation was found to be negatively significant predictor of IFB service (unstandardized beta coefficient = -0.229). Sociocultural factor was also identified to have significant positive influence on IFB service (Table 9).

Table 9. Multiple linear regression analysis result of interest free banking service with governmental policy and regulation and socio-cultural factor.

Variables	Unstandardized coefficients		Standardized coefficients		Sign.
	Beta	Std. Error	Beta		
Constant	3.009	0.284	-	10.602	0.000
GPRT	-0.229	0.055	-0.229	-4.161	0.000
SCFT	0.192	0.077	0.137	2.496	0.013
R =0.224	R^2 =059	SEE =0.745	F=6.229	Sig . F Change =0.013	

Table 10. The comparison of Interest free service with the type of interest free banking accounts the customers are associated with of the study participants

Variable	Mean		S.D		t-value	p-value
	Wadiya	Qard	Wadiya	Qard		
IFBS	2.95	2.61	.78	.56	1.47	.37

Table 11. Alpha reliability of the scale

Variables	Alpha reliability
Interest free banking service	0.773
Socio-cultural factors	0.834
Governmental policy and regulation	0.801

Conclusions

The overall study result indicated that, majority of the study population have poor knowledge with regard to scientific meaning of interest free banking service and the service is mainly utilized by more educated segment of the population compared with their counterpart. With regard to the demographic characteristics of the study participants, most them belong to Muslim religion, male in gender and found in the age group of 21 to 30 years.

Majority of the study participant elaborated as there is a great potential demand from the population for the service. There is also result which describes the need to maintain and sustain

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the interest of the community for the service by the government as well as IFB service providing banks. These results can be seen as a positive suggestion for improvement and expansion of the service for end user which in turn enables to achieve the objective of availing the service.

The demographic characteristic of the participants shows a significant mean variation of IFB service customer satisfaction was seen across different age group of the respondents. While there is no significant mean variation of IFB service customer satisfaction gender group, occupational group and the type of IFB service the customers associated with on independent t-test and one way ANOVA. On Pearson correlation analysis, it was observed that IFB service customer satisfaction to have a significant strong negative and weak positive correlation with governmental policy and regulation and socio-cultural factors. Result of multiple linear regression analysis also showed that, governmental policy as well as regulation and weighted socio-cultural factors to be independent and significant predictors of IFB service customer satisfaction. Based on the finding of the study, the following recommendations have been forwarded which possibly improve the service: The governments as well as IFB service providing branches need to improve the knowledge of community by different awareness creation program. Expansion and sustaining of IFB service for the larger nation is expected from governing body of commercial bank of Ethiopia as great demand from the community has seen. Awareness creation intervention need to focus age group of 21 to 30 years and 31 to 40 years as a significant variation in IFB service customer satisfaction has been in the above age groups. Governmental policy and regulation with regard to IFB service need to be revised by considering the principle of Islamic financial activities

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