CHAPTER 8

PERCEPTION AND IMPLEMENTATION OF SUSTAINABILITY IN ISLAMIC FIRMS: A SURVEY ON INSTITUTIONAL CUSTOMERS OF ISLAMIC BANKS IN TURKEY

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Abstract

The negative externalities of the capitalist paradigm and irresponsible financial system have boosted the demand for integrating sustainability into the economic system as a key component and led to the development of new financial products and structures to achieve sustainable development goals. This global trend, in fact, facilitates a convergence towards the Islamic principles in economics and finance. Islamic economics, in essence, ensures such a production and distribution mechanism that the sources are not exhausted at the cost of other regions and future generations. The crucial question is, however, whether those firms that are supposed to comply with the principles of Islamic economics have really understood and adopted the concept of sustainability. Since the majority of customers of Islamic banks consist of such firms, we in this study attempt to reveal the current perception and implementation of sustainability from the perspective of institutional customers of Islamic banks in Turkey. Our findings show that while the basic goals set forward by sustainability, such as social equity, just income distribution, good governance, and preserving the resources and environment are conceptually embedded in Islamic finance, the institutional customers of Participation Banks cannot sufficiently integrate these principles into their business processes. In addition, firms' approaches and practices toward the sustainability differ depending on their ownership structure, operational quality, and number of employees. Those firms whose ownership and operations are more international and have a number of employees greater than 50 comply with sustainability considerably more than others.

Keywords: Islamic finance, Islamic banking, Islamic firms, sustainability, sustainable development goals

1. Introduction

The idea that firms should operate in a manner that provides a dignified living to people and contributes to the ability to meet the needs of next generations has become widespread, especially in last two decades. Termed as the ‘stakeholder approach,’ this understanding has contributed to pave the way to the notion of ‘sustainability,’ which calls for taking measures to solve fundamental problems such as poverty, corruption, unemployment, income inequality, climate change, and the disappearance of animal species. This call is addressed not only to the real sector but to the finance sector that provides funds required to operate real economic activities. As a result of increasing consciousness of sustainability and public pressure, the finance sector has begun to consider the social and environmental concerns more seriously as well. Banks, in addition to reporting their own compliance with sustainability, have also begun reporting the compliance with sustainability of the corporations and industries that they fund.

In this context, Islamic, or so-called ‘Participation’ banks in Turkey, occupy an important position as the very understanding in their foundation necessitates the principles of sustainability.¹ These banks are primarily expected to develop strategies to adopt sustainable development goals and to implement them. In doing so, Participation Banks should adopt a holistic manner that observes the compliance with sustainability not only in their own products and services but also in the operations of their customers that they fund. In other words, the firms that are supposed to comply with the principles of Islamic economics should not be limited to banks. All firms that are known for their observance of Islamic values are expected to actually adopt and practice the concept of sustainability. Since the majority of customers of Islamic banks are expected to consist of such firms, we in this study attempt to reveal the current perception and implementation of sustainability from the perspective of institutional customers of Islamic banks in Turkey. So far, there is no an empirical study investigating the compliance of participation banks’ institutional customers with sustainability.

The aim of this paper is basically to reveal the approaches and practices of institutional customers of participation banks in Turkey with regard to sustainability and develop suggestions that would help them comply with sustainability that also coincides with the very principles necessitated by their foundations. The research questions of this paper can be expressed as follows:

1 Islamic economics embeds a “circular manner”, contrary to the capitalist economics which is known for its “linear” process that cause the exhaustion of the resources. As well elaborated by Khan (2019), the paradigm of Islamic economics is guided by the motivation of comprehensive human development and its preservation as manifested in the objectives (Maqasid) of Sharia. However, the real world free-market economies are driven by the linear economy paradigm in which the ecological environment is not recognized as a resource.

- What does sustainability mean for corporate customers of participation banks?
- What are the motivations of corporate customers of participation banks towards the implementation of sustainability?
- Which social and environmental management tools do corporate customers of participation banks use in their efforts to achieve sustainability?

2. Previous Studies

There is a quite large literature of empirical research on sustainability since this concept has been studied in multiple disciplines, such as economics, management, and finance.

Yu's study, which involved 58 small and medium-size enterprises (SMEs) in China, showed that although these firms are interested in sustainability, their efforts towards minimizing the negative impacts of their operations on the social and natural environment (Yu, 2007).

Hahn and Scheermesser examined firms' compliance with sustainability over a sample of 195 German firms. Their hierarchical clustering analysis revealed three clusters called "sustainability leaders," "environmentalists," and "traditionalists". The sustainability leaders, the smallest one, is distinguished with their tendency towards integrating social management tools into their operations. The source of their motivation for sustainability is ethical concerns. The prominent characteristic of environmentalists is their emphasis on the use of environmental management tools, such as EMAS, ISO 14000, etc. In general, this cluster consists of big size firms. The traditionalists separate with their limited use of management tools in sustainability. The main source of motivation of these firms towards sustainability is rather public relations and reputation concerns (Hahn and Scheermesser, 2006).

In 2009, William and Schaefer made in-sept interviews with top managers of SMEs that operate in East Britain and are well-known for their compatibility to the environment. Their research concluded that managers of environment-compatible firms have holistic views on climate change and environmental issues and the basic motivation behind the activities of their firms for the sake of the environment arises from the personal value judgements and beliefs of the managers (William and Schaefer, 2013).

One of the prominent studies in Turkey with regard to this matter is the report prepared by Borsa Istanbul (BIST -Istanbul Stock Exchange), The Association of Sustainable Development, and Price Waterhouse together in 2011. The research was based on a survey of 215 firms traded in BIST. Most firms declared that sustainability is related to their business manner and investments for the sake of sustainability has a positive impact on their financial

performances. However, only 62% stated that they had a strategy on the matter of sustainability. The findings showed that the first three factors that led the firms towards sustainability considerations were reputation, regulation, and competition while public pressure was among those at the bottom of the list (IMKB, 2011).

Another important study in Turkey is the one made involving over 350 SMEs by Tuna. The findings showed that 97.1% of the firms stated that sustainability was related to their business manner. Similar to the findings of research referred above, the degree of the firms' compatibility to sustainability was found to be extremely low. The first three factors that led the firms towards sustainability considerations were reputation, cost decrease, financing opportunities and incentives (Tuna, 2014).

The literature on the perception and practice of sustainability in Islamic finance is rather new and showing a developing process. Some prominent papers such as Dusuki (2008), Nor and Asutay (2011), and Agriyanto (2015) focus on the stakeholders of Islamic banks and indicate how to integrate the sustainability of society.

In 2009, Dinar Standard and Dar Al-Istithmar prepared a detailed study on the perception and practices of social responsibility of Islamic finance institutions (IFIs). 13 questions were derived from the standard number 7 of AAOIFI, titled "the announcement and practice of corporate social responsibility of IFIs," and were asked to 29 IFIs. The results showed that more than 76% of the IFIs indicated an ownership policy in customer satisfaction, employee satisfaction, and charities while only 52% of them announced the ownership of proactive policies to minimize environmental impact.

According to other several empirical studies done in Malaysia and Bahrain, the vast majority of Islamic banks do not have a sufficient operation of corporate social responsibility and preservation of the environment although these banks have an awareness of these issues (Nor and Hashim, 2014; Adnan, 2015; Aribi and Arun 2015; Wan Jusoh and Ibrahim, 2017).

Khan recently addressed the circular nature of Islamic economics in theory, then explores the flaws of the current practice of Islamic finance in this regard, and finally proposes a comprehensive set of paradigmatic and regulatory reforms to enhance the actual effectiveness of Islamic finance in achieving the ideals of SDGs at large (Khan, 2019).

Several recent papers analyzed Islamic banks in Turkey within the general concept of sustainability and provided comparisons with conventional banks. Most of them show that conventional banks have better environmental and sustainability points than participation banks (Şendurur & Temelli, 2018).

3. The Methodology

The research population consists of the institutional customers of the Participation (Islamic) Banks in Turkey. We picked such firms located in Istanbul through the convenience sampling method. Because Istanbul is considered as the most important hub of the country both in terms of domestic and international economic activities (Bilim, Sanayi ve Teknoloji Bakanlığı, 2013), the sampling universe is limited to firms located in Istanbul.

Minimum sample size for such a population is calculated as 384 at a confidence level of 95%, according to Yazıcıoğlu and Erdoğan (2004). While the initial number of firms that successfully responded to our questionnaire is 437, we excluded 37 firms due to their outlier characteristics. Under the circumstances, our sample size of 400 is reasonably above the minimum level. We used the face-to-face survey method. The respondents consisted of the top managers who were responsible for their firm's strategies and policies.

The questions and scales used in the survey are derived from Tuna (2014), Hahn and Scheermesser (2006), Yu (2007), and IMKB (2011). There are four scales considered: 'The Meaning Attributable to Sustainability,' 'The Motivations for Sustainability Practices,' 'Use of Environmental Management Tools,' and 'Use of Social Management Tools.' Ten questions were derived from the principles of the Global Reporting Initiative (GRI). Five-point Likert Scale was used with appropriate wordings for each of the four scales.

The Bartlett's Test of Sphericity (BTS) and Kaiser-Mayer-Olkin Tests (KMO) were used to determine the factorability of the scales. Since the null hypothesis of BTS that requires the correlation matrix to be an identity matrix (Bartlett, 1950) is rejected here and the KMO values are found higher than 0.5 (Hair, 2009), the explanatory factor analysis was employed.

The scale that indicates the incentives for sustainability practices originally consisted of 14 statements. As a result of the factor analysis, 2 statements (question 10 and 11) were excluded from this scale. The factor analysis has also caused the exclusion of one statement (question 6) from the social management tools scale. Based on the remaining questions, the Cronbach's Alpha coefficients were calculated. All Cronbach α coefficients were found between 0.8 and 1 for each scale. Since the minimum level of acceptable internal consistency is 0.7, the scales used in the research were highly reliable.

Since the Kolmogorov-Smirnov test of normality revealed that the continuous variables did not comply with normal distribution, non-parametric tests were used. The Spearman correlation analysis was used to measure the covariation of the variables; Mann Whitney U test was used for two-group comparisons and Kruskal Wallis test for higher number of

groups. When a statistically significant difference was found in the latter type group comparison, the Bonferroni adjusted Mann Whitney U test was applied to find the source of the difference. The criterion of statistical significance was considered $p < 5\%$.

4. Empirical Findings

4.1. Descriptive Statistics

Out of the 400 firms, local firms constituted 67% of the sample, while those firms with local-foreign partnership were 11.5% and firms with full foreign ownership 21.5%. 76.5% operated for more than 10 years, and 48.7% had 250 or more employees. As for the sectoral distribution of the sample, the trade sector (total of retail and wholesale) was 31%, industry 14.7%, construction 12%, and transportation and storage 11.3% (Table 1).

Table 1. Basic descriptive statistics of the sample		
CATEGORY	FREQUENCY	PERCENTAGE
Ownership structure		
Local	268	67.0
Local – foreign partnership	46	11.5
Full foreign	86	21.5
Sector		
Retail and wholesale trade	124	31.0
Industry	59	14.7
Construction	48	12.0
Transport and storage	45	11.3
Accommodation and catering	21	5.3
Finance and insurance	15	3.8
Scientific and technical services	15	3.8
Education	13	3.3
Information and communication	12	3.0
Real estate	8	2.0
Health and social services	8	2.0
Agriculture, forestry and fishing	5	1.3
Administrative services	5	1.3
Public administration and defense	2	0.5
Other	20	5.0
Age (Years)		
1-5	27	6.7
6-10	67	16.8
11-15	97	24.2
16-20	80	20.0
21 and above	129	32.3
Number of employees		
0-9	113	28.3
10-49	92	23.0
50-249	146	36.5
250 and above	49	12.2
Operation sphere		
Domestic	277	69.3
International (import and export)	108	27.0
Multinational (investment in foreign countries)	15	3.7
TOTAL	400	100.0

As for the quality management certificates that the firms hold, the first three consisted of the ISO certificates, as seen on Table 2. 70% of the surveyed firms had at least one quality management certificate.

Table 2. The distribution of the quality management certificates that the firms hold *		
Name of the Document	Frequency	Percentage
ISO 9001:2000 / Other QMC	183	47.1
ISO 14001	64	16.5
OHSAS 18001	18	4.6
EMAS	4	1.0
EFQM	7	1.8
SA 8000	4	1.0
The training certificate for working with hazardous materials	21	5.4
ISO 22000 Food Safety	59	15.2
HACCP	4	1.0
ISO/IEC 27001 information security management system	13	3.3
AA1000	5	1.3
Other	7	1.8
TOTAL	389	100.0
<i>*A firm can hold more than one type of certificate</i>		

Table 3. The sectoral distribution of the firms that holds at least one QMC		
Sector	Frequency	Percentage
Agriculture, forestry and fishing	4	1.4
Industry	40	14.4
Construction	30	10.8
Retail and wholesale trade	112	40.4
Transport and storage	39	14.0
Accommodation and catering	13	4.7
Information and communication	5	1.8
Finance and insurance	9	3.2
Real estate	8	2.9
Scientific and technical services	5	1.8
Administrative services	2	0.7
Public administration and defense	2	0.7
Education	5	1.8
Health and social services	2	0.7
Other	2	0.7
TOTAL	278	100.0

As can be seen in Table 3, having at least one QMC seemed to be more common in retail, trade, industry, transport, storage, and accommodation and catering sectors compared to others.

Table 4 shows that training services on sustainability was provided by mostly Istanbul Chamber of Commerce (İTO) (60.4%), Small and Medium Enterprises Development Organization of Turkey (KOSGEB) (17.7%), and The Scientific And Technological Research Council Of Turkey (TÜBİTAK) (9.5%).

Table 4. The distribution of institutions that provide the training on sustainability		
Institution that provides training	Frequency	Percentage
Istanbul chamber of commerce	184	60.4
Small and medium enterprises development organization of Turkey	54	17.7
The scientific and technological research council of turkey	29	9.5
Consultancy firms	25	8.2
The association of sustainable development	8	2.6
Other	5	1.6
Total*	305	100.0
<i>*The total number of the firm is more than 278 because firms can take training from more than one institution</i>		

66.5% of the sample firms have taken training at least from one institution. As can be seen from Table 5, the sectoral distribution with regard to sustainability training indicates that trade sector had the leading position with the share of 39.9%, transportation and storage came second with 15%, and industry and construction shared the third place with 10.9% and 10.5%, respectively.

Table 5. The sectoral distribution of the firms that had training at least once		
Sector	Frequency	Percentage
Agriculture, forestry and fishing	4	1.5
Industry	29	10.9
Construction	28	10.5
Retail and wholesale trade	106	39.9
Transport and storage	40	15.0
Accommodation and catering	8	3.0
Information and communication	7	2.6
Finance and insurance	13	4.9
Real estate	7	2.6
Scientific and technical services	3	1.1
Administrative services	2	0.8
Public administration and defense	2	0.8
Education	5	1.9
Health and social services	5	1.9
Other	7	2.6
Total	266	100.0

Table 6 exhibits the distribution of the departments that implemented the sustainability activities in the sample firms. The top three departments were top management (41.2%), accounting (26.8%), and human resources (13.8%) while 10.2% of the sample firms undertook no activity in terms of sustainability.

Table 6. Distribution of the departments that implement the sustainability activities		
Department	Frequency	Percentage
Top management	165	41.2
Accounting	107	26.8
Human resources	55	13.8
Marketing	16	4.0
Production	9	2.2
R&D and technology	7	1.8
No activities for sustainability	41	10.2
TOTAL	400	100.0

4.2. Analyses and Interpretations on the Scales

4.2.1. Explanatory Factor Analysis

Factor analysis involves grouping similar variables into dimensions. This process was used to identify latent variables or constructs. The purpose of factor analysis is to reduce many individual items into a fewer number of dimensions (<https://www.statisticssolutions.com/factor-analysis-2>). In order to implement the factor analysis, several conditions are required to be met. First, the correlation matrix is analyzed through Bartlett Test of Sphericity, of which the null hypothesis assumes that the correlation matrix is an identity matrix. The null hypothesis must be rejected in order to apply the factor analysis Bartlett (1950). Another condition involves the Kaiser-Mayer-Olkin (KMO) test, which provides the information with regard to the sampling adequacy. The indicator of this test takes a value from 1 to 0. The closer to 1, the more adequacy of the sample. A KMO value of less than 0.5 leads to the idea that the data is not appropriate for factor analysis (Hair, 2009).

The Bartlett tests revealed the rejection of the null hypothesis, and KMO values were found higher than 0.8 for all the scales used in this study, as can be seen in Table 7. Therefore, the scales were considered as factorable and the sampling met the adequacy criteria.

Table 7. The KMO values of the scales and results of Bartlett test of sphericity		
The meaning attributable to sustainability		
KMO value		0.833
Bartlett test of sphericity	Chi-square test statistic	882.404
	Degree of freedom	15
	Probability	0.00
The motivations for sustainability practices		
KMO value		0.878
Bartlett test of sphericity	Chi-square test statistic	1472.326
	Degree of freedom	66
	Probability	0.00
Use of environmental management tools		
KMO value		0.866
Bartlett test of sphericity	Chi-square test statistic	1788,902
	Degree of freedom	45
	Probability	0.00
Use of social management tools		
KMO value		0.830
Bartlett test of sphericity	Chi-square test statistic	2375.546
	Degree of freedom	78
	Probability	0.000

The Kaiser-Guttman rule was employed to decide on the number of common factors. Therefore, the number of common factors for each scale happened to be as much as the number of eigenvalues of 1 or greater in the correlation matrix. Through the Varimax method of rotation, those statements/matters affecting more than one factor were excluded from the scales. The factors and factor weights derived from the analysis are exhibited in Table 8.

Table 8. Exploratory factor analysis	
Scales	Factor Weights
The meanings attributable to sustainability	Factor 1
- Sustainability is related to the business manner of our firm	0.726
- Our firm follows the sustainability activities	0.707
- Sustainability has become more important for the main operations of firms	0.689
- Sustainable firms are interested in environmental and social issues in addition to economic activities	0.743
- All firms should be responsible for the society	0.781
- All firms should be responsible for preserving the environment	0.822
Total variance explained	55.65%
The motivations for sustainability practices	Factor 2 Factor 3
- Reputation	0.565 0.502
- Cost savings	0.780
- Low financing cost and incentives	0.790
- Legal regulation	
- Advertisement & PR	0.586 0.620
- Investor Demands	0.738 0.566
- Competition	0.718
- Ethical Reasons	
- Public Pressure	
- Customer Expectations	0.597
- Media	0.674
- NGOs	0.617
Total variance explained	47.35%
Use of environmental management tools	Factor 4 Factor 5
- EMAS Certificate	0.844
- ISO 14001 Certificate	0.866
- Energy saving endeavors	0.636
- Minimizing waste and more consideration for recycling	0.749
- Activities for preserving the natural environment	0.792
- Endeavors to find environment-friendly suppliers to work with	0.709
- Operating in accordance with legal regulations.	0.732
- Considering the environmental impacts in product development process (investing in clean technology).	0.788
- Providing suppliers, customers and general public with clear and adequate information on the environmental impact of the products and services of the firm.	0.761
- Adopting the end-of-pipe method (removing already formed contaminants)	0.776
Total variance explained	62.11%

Use of social management tools	Factor 6	Factor 7	Factor 8
- OHSAS 18001 Certificate			0.883
- SA8000 Certificate			0.953
- AA1000 Certificate			0.901
- Supporting the employees to participate the social activities		0.641	
- Providing regular financial support to social activities and projects (sponsorships)		0.772	
- Improving the workplace conditions to ensure the security and healthcare of the employees.	0.709		
- Supporting the flextime or work-at-home practices for the employees to ensure a fair balance between work and life		0.701	
- Taking measures against all types of discrimination in the recruitment process and thereafter.	0.698		
- Supporting the employees to participate in decision-making process	0.765		
- Holding regular meetings with employees	0.761		
- Providing the local community with education and training opportunities		0.709	
- Having an open dialog with local community in problematic issues between firm and community		0.747	
- Preferring the local suppliers in purchasing policy	0.665		
Total variance explained		63.86%	

Factors are defined as the following: Factor 1: The Meaning Attributable to Sustainability, Factor 2: Management of Stakeholder Perception, Factor 3: Adaptation to Compelling Factors, Factor 4: Environment-friendly Activities, Factor 5: Certificates of Environmental Management System, Factor 6: Considering the Stakeholders in Business Processes, Factor 7: Supporting the Stakeholders, Factor 8: Certificates of Social Management System.

4.2.2. Reliability Analysis

As can be seen in Table 9, the Cronbach's alpha values (α) calculated for each scale range from 0.8 to 1.00. A scale is accepted internally consistent if the α calculated is 0.7 or greater. The internal consistency of all scales used in the study are hereby proven.

Table 9. Cronbach's Alpha values of the scales*		
Scales	Number of statements	Cronbach's α
The meaning attributable to sustainability	6	0.832
The motivations for sustainability practices	12	0.859
Use of environmental management tools	10	0.852
Use of social management tools	13	0.829
<i>*Analyses are based on remaining statements after the factor analysis.</i>		

4.2.3. Test of Normality Based on Factors

Since the findings of Kolmogorov-Smirnov test of normality indicated the rejection of null hypothesis that assumes the normal distribution, the data used in the study was not normally distributed. Therefore, non-parametric tests were employed in the study from this point on.

Table 10. Normality test			
Factors	Kolmogorov-Smirnov		
	Test statistic value	N	Probability
The meaning attributable to sustainability	0.209	400	0.000
Management of stakeholder perception	0.157	400	0.000
Adaptation to compelling factors	0.165	400	0.000
Environment-friendly activities	0.187	400	0.000
Certificates of environmental management system	0.235	400	0.000
Considering the stakeholders in business processes	0.230	400	0.000
Supporting the stakeholders	0.159	400	0.000
Certificates of social management system	0.268	400	0.000

4.2.4. Correlation Analysis

Table 11 shows the results of Spearman-Correlation analysis for the variables used in the study. The correlation table provides a very useful framework in forming the sets of testable hypotheses for each factor. That is, only those firm characteristics that have significant correlation with the factors are included in hypothesis tests. For instance, because ‘Firm’s Age’ is not significantly correlated with Factor 1, it was excluded from the list of hypotheses tested for Factor 1 whereas it was included in the hypothesis test for Factor 4, due to its significant correlation with that factor.

Table 11. Correlations between the variables

	Ownership structure	Age	Number of employees	Operation sphere	Having training on sustainability	Sector	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
Ownership structure	1.000													
Age	0.095	1.000												
Number of employees	.436**	.367**	1.000											
Operation sphere	.356**	0.043	.160**	1.000										
Having training on sustainability	.364**	.247**	.537**	.112*	1.000									
Sector	-0.059	-0.017	-0.017	-.121*	-0.024	1.000								
Factor 1	.302**	0.067	.375**	.114*	.326**	-0.020	1.000							
Factor 2	.263**	-0.080	.263**	.139**	.256**	.098*	.461**	1.000						
Factor 3	.237**	0.068	.287**	.138**	.258**	0.035	.396**	.470**	1.000					
Factor 4	0.091	.209**	.261**	.117*	.216**	-.104*	.227**	.140**	.181**	1.000				
Factor 5	.185**	0.023	.228**	.173**	.180**	-.110*	.230**	.225**	.224**	.132**	1.000			
Factor 6	-0.041	.133**	0.064	-0.015	0.081	-0.036	0.089	-0.003	0.037	.463**	-.112*	1.000		
Factor 7	.214**	.215**	.351**	0.080	.301**	0.093	.243**	.190**	.169**	.591**	-0.012	.517**	1.000	
Factor 8	.223**	0.010	.154**	.167**	.202**	-0.026	.267**	.232**	.215**	.125*	.646**	-0.056	0.037	1.000

Note 1: ** Correlation significant at 1% level. * Correlation significant at 5% level
Note 2: Factor 1 indicates The Meaning Attributable to Sustainability, Factor 2: Management of Stakeholder Perception, Factor 3: Adaptation to Compelling Factors, Factor 4: Environment-friendly Activities, Factor 5: Certificates of Environmental Management System, Factor 6: Considering the Stakeholders in Business Processes, Factor 7: Supporting the Stakeholders, Factor 8: Certificates of Social Management System

4.2.5. Findings on the Perceptions on Sustainability

Table 12 shows the percentage distribution of the responses to each statement in *The Meaning Attributable to Sustainability* scale. When “Strongly Agreed” and “Agreed” responses are combined for the first three statements, it can be said that 96% of the participants agree that firms should be responsible for preserving the environment, 93.8% saw the sustainability concept related to the business manner, 93.5% thought that firms should be responsible for society. In addition, the total share of strongly agreed and agreed responses for the other statements was also around 90%. Therefore, it is obvious that the firms generally had a positive perception of sustainability.

Table 12. Percentage distribution of the responses to each statements in the meaning attributable to sustainability scale					
	Strongly agree	Agree	No idea	Disagree	Strongly disagree
Sustainability is related to the business manner of our firm	25.3%	68.5%	2.3%	3.5%	0.5%
Our firm follows the sustainability activities	16%	76.8%	2.5%	4.3%	0.5%
Sustainability has become more important for the main operations of firms	32.3%	57.5%	7.3%	2%	1%
Sustainable firms are interested in environmental and social issues in addition to economic activities	16.3%	73.3%	5.3%	5%	0.3%
All firms should be responsible for the society	16%	77.5%	2.5%	4%	0%
All firms should be responsible for preserving the environment	16.5%	79.5%	2.3%	1.5%	0.3%

In order to find out whether the perception of the participants on sustainability differed with respect to their characteristics, the following research hypotheses were tested:

- H_{1-1} : The meaning attributable to sustainability significantly differs with respect to ownership structure of the firms.
- H_{1-2} : The meaning attributable to sustainability significantly differs with respect to number of employees in the firms.
- H_{1-3} : The meaning attributable to sustainability significantly differs with respect to operational sphere of the firms.
- H_{1-4} : The meaning attributable to sustainability significantly differs with respect to whether the firm had any training from at least one institution.

The Kruskal Wallis Chi-Square and Mann Whitney U Tests were used to test the above hypotheses. Table 13 reveals the results.

Table 13. Result of the Kruskal Wallis Chi-Square and Mann Whitney U tests for the meaning attributable to sustainability scale

	N	Avg. Rank	Chi-Sq	DF	P (K-W)	Diff.
Ownership structure			38.167	2	0.000*	
Local	268	176.07				
Local – foreign partnership	46	251.88				2 > 1
Full Foreign	86	249.15				3 > 1
Number of employees			67.644	3	0.000*	
0-9	113	146.28				1 < 3
10-49	92	142.35				2 < 4
50-249	146	220.21				3 > 2
250 and more	49	256.74				4 > 1
Operational sphere			5.157	2	0.076	
National	277	192.06				
International	108	218.29				
Multinational	15	228.30				
	N	Avg. Rank	Mann Whitney	Z	P (M-W)	Diff.
Had any training?			10898.500	-6.507	0.000*	
Yes	266	226.53				1 > 2
None	134	148.83				

According to the results, the null hypotheses of H_0-1 , H_0-2 and H_0-4 were rejected, meaning that the alternative hypotheses was accepted. Namely, the groups differed significantly in terms of the ownership structure, number of employees, and training experience from at least one institution. The operational sphere was not a discriminating factor in this matter ($p=0.076$). The directions of the differentiation are elaborated as follows:

- Firms with local-foreign co-ownership or sole foreign ownership had a more positive approach to sustainability than those firms with local ownership ($p<0.05$).
- Firms with a number of employees of 50 or more had a more positive approach to sustainability than those firms with a number of employees 49 and less ($p<0.05$).
- Firms that had training on sustainability at least once had a more positive approach to sustainability than those firms that had not taken any training ($p<0.01$).

4.2.6. Findings on the Motivations for Sustainability Practices

The percentage distribution of the responses given to the questions exploring the motivations behind the sustainability practices is exhibited in Table 14. When the responses of “definitely effective” and “effective” are combined, it can be said that the most powerful five motivations were “reputation (96.6%),” “cost reduction (91.1%),” “customer expectations (90.6%),” “competition (89.8%),” and “legal regulation (89.3%),” respectively. Public pressure appeared at the bottom of the list with 71.8%.

Table 14. Motivations for sustainability practices					
How effective are the following factors in motivating your firms towards sustainability practice?	Definitely effective	Effective	Partially effective	Not effective	Definitely ineffective
Reputation	22.8	73.8	2.3	1.3	0
Cost reduction	18.3	72.8	4.5	4.5	0
Customer expectations	21.3	69.3	5	4	0.5
Competition	19.5	70.3	6.3	3.5	0.5
Legal regulation	25.3	64	8.8	2	0
Advertisement & PR	19.8	66.8	8	4.5	1
Ethical reasons	20.5	65.8	8.5	5	0.3
Financial incentives/low-cost financing	25.3	59	12.5	3.3	0
NGOs	12.3	68.3	8.3	11	0.3
Media	16.5	64	8.3	10	1.3
Investor expectations	21	59	12.8	7	0.3
Public pressure	17.3	54.5	14.8	13	0.5

In exploring whether these motivations significantly differed among the firms with respect to their characteristics, the related scale was split into two factors called ‘*managing the perceptions of stakeholders*’ and ‘*adaptation to compelling factors*.’ Then certain hypotheses were developed for each of the two sub-factors and tested. The results are shown in Table 15 and 16, respectively.

- ***List of hypotheses tested to explore how managing the perception of stakeholders differs with respect to the firm characteristics***
 - H₁-5: Managing the perception of stakeholders significantly differs with respect to ownership structure of the firms.
 - H₁-6: Managing the perception of stakeholders significantly differs with respect to the sector in which the firms operate.
 - H₁-7: Managing the perception of stakeholders significantly differs with respect to the number of employees working in the firms.
 - H₁-8: Managing the perception of stakeholders significantly differs with respect to operational sphere of the firms.
 - H₁-9: Managing the perception of stakeholders significantly differs with respect to whether the firm has had any training from at least one institution.
- ***List of hypotheses tested to explore how adaptation to compelling factors differs with respect to the firm characteristics***
 - H₁-10: Adaptation to compelling factors significantly differs with respect to ownership structure of the firms.

- H₁-11: Adaptation to compelling factors significantly differs with respect to the sector in which the firms operate.
- H₁-12: Adaptation to compelling factors significantly differs with respect to number of employees working in the firms.
- H₁-13: Adaptation to compelling factors significantly differs with respect to operational sphere of the firms
- H₁-14: Adaptation to compelling factors significantly differs with respect to whether the firm had any training from at least one institution.

Table 15. Kruskal Wallis and Mann Whitney U test results for how managing the perception of stakeholders differ with respect to the firm characteristics						
	N	Avg. Rank	Chi-Sq	DF	P (K-W)	Diff.
Ownership structure			28.070	2	0.000	
Local	268	179.35				
Local – foreign partnership	46	239.97				2 > 1
Full foreign	86	245.31				3 > 1
Number of employees			45.606	3	0.000	
0-9	113	170.68				
10-49	92	156.05				2 < 3
50-249	146	245.23				3 > 1
250 and more	49	219.44				4 > 2
Operational sphere			7.704	2	0.021	
National	277	190.18				
International	108	221.64				2 > 1
Multinational	15	238.97				
Sector			10.505	5	0.062	
Industry	59	169.89				
Construction	48	187.03				
Trade	124	203.77				
Transportation and storage	45	240.06				
Accommodation and catering	21	203.79				
Other	103	202.43				
	N	Avg. Rank	Mann Whitney	Z	P (M-W)	Diff.
Had any training?			12329.00	-5.108	0.000	
Yes	266	221.15				1 > 2
None	134	159.51				

The results indicated that there was a significant difference between the groups with respect to ownership structure ($p < 0.01$), number of employees ($p < 0.01$), operational sphere ($p < 0.05$), and training experience ($p < 0.01$) while no significant difference was found in terms of sector ($p > 0.05$). Which group was superior to which group in these respects are explained below:

- Firms with local and foreign partnership and firms with sole foreign ownership managed the stakeholder perception better than those firms with local ownership ($p<0.05$).
- Firms with a number of employees more than 50 managed the stakeholder perception better than firms with those number of employees 49 or less ($p<0.05$).
- Firms operating in the international sphere managed the stakeholder perception better than those firms operating in the national scale ($p<0.05$).
- Firms that had had at least one training of sustainability managed the stakeholder perception better than those firms that had had no training of sustainability ($p<0.01$).

Table 16. Kruskal Wallis And Mann Whitney U test results for adaptation to the compelling factors						
	N	Avg. Rank	Chi-Sq	DF	P (K-W)	Diff.
Ownership structure			22.577	2	0.000	
Local	268	181.75				
Local – foreign partnership	46	230.04				2 > 1
Full foreign	86	243.13				3 > 1
Number of employees			36.185	3	0.000	
0-9	113	160.01				1 < 3
10-49	92	177.30				2 < 4
50-249	146	234.41				3 > 2
250 and more	49	236.41				4 > 1
Operational sphere			10.067	2	0.007	
National	277	190.82				
International	108	215.14				2 > 1
Multinational	15	273.77				
Sector			9.650	5	0.086	
Industry	59	180.71				
Construction	48	214.65				
Trade	124	195.39				
Transportation and storage	45	239.61				
Accommodation and catering	21	170.07				
Other	103	200.51				
	N	Avg. Rank	Mann Whitney	Z	P (M-W)	Diff.
Had any training?			12306.00	-5.150	0.000	
Yes	266	221.24				1 > 2
None	134	159.34				

Significant differences were found with respect to the ownership structure ($p<0.01$), number of employees ($p<0.01$), operational sphere ($p<0.01$), and training experience ($p<0,01$). Sector was not a factor that significantly differentiated the groups ($p=0.086$) in this regard. The directions of the inequalities are explained as follows:

- Firms with local and foreign partnership and firms with sole foreign ownership showed better adaptation to compelling factors than those firms with local ownership ($p<0,05$).
- Firms with a number of employees more than 50 showed better adaptation to compelling factors than those firms with a number of employees 49 or less ($p<0,05$).
- Firms operating in the international sphere showed better adaptation than those firms operating in the national scale ($p<0,05$).
- Firms that had had at least one training of sustainability showed better adaptation than those firms that had had no training of sustainability ($p<0,01$).

4.2.7. Findings on the Environmental Management Tools Used in Sustainability Practices

As can be seen in Table 17, participants thought that the most effective tool used in minimizing the environmental impacts is ‘operating in compliance with the legal regulation.’ The cumulative percentage of “definitely effective” and “effective” responses was 85.5% for this statement. It is followed by ‘Providing suppliers, customers, and the general public with clear and adequate information on the environmental impact of the products and services of the firm’ with 80.5%, and then ‘consideration of environmental impacts in product development process (investing in clean technology)’ with 80.1%.

How effective are your activities in minimizing the negative impacts of operations on the environment?	Definitely effective	Effective	Partially effective	Not effective	Definitely ineffective
Having EMAS certificate	1	17.8	17.3	50.8	13.3
Having ISO 14001 certificate	2.5	23.5	14	45.8	14.3
Energy saving endeavors	9.3	60.5	15	12.8	2.5
Minimizing waste and more consideration for recycling	12.5	67.3	9.3	9	2
Activities for preserving the natural environment	7.8	67.8	11.8	10.5	2.3
Endeavors to find environment-friendly suppliers to work with	17.5	52	13.8	14	2.8
Operating in accordance with legal regulations.	14.5	71	8.3	4.3	2
Considering the environmental impacts in product development process (investing in clean technology).	11.3	68.8	9.8	7.8	2.5
Providing suppliers, customers and general public with clear and adequate information on the environmental impact of the products and services of the firm.	9	71.5	11	6.3	2.3
Adopting the end-of-pipe method (removing already formed contaminants)	5	72	10.3	9.8	3

Since the factor analysis split the ‘environmental management tools used for sustainability’ scale into two factors called ‘environment-friendly activities’ (Factor 4) and ‘having certificates of environmental management system’ (Factor 5), two sub-sets of hypotheses were developed for each factor to test whether environmental management tools used for sustainability differed with respect to firm characteristics. The results of the tests are exhibited in Table 18 and Table 19, respectively.

- ***List of hypotheses tested to explore whether ‘environment-friendly activities’ factor differs with respect to firm characteristics***
 - H₁-15: Environment-friendly activities factor significantly differs with respect to the sector in which the firm operated.
 - H₁-16: Environment-friendly activities factor significantly differs with respect to the duration of the operation of the firm.
 - H₁-17: Environment-friendly activities factor significantly differs with respect to the number of employees in the firm.
 - H₁-18: Environment-friendly activities factor significantly differs with respect to the operational sphere of the firm.
 - H₁-19: Environment-friendly activities factor significantly differs with respect to whether the firm had taken any training on sustainability.
- ***List of hypotheses tested to explore whether ‘having certificates of environmental management’ factor differs with respect to firm characteristics***
 - H₁-20: Having certificates of environmental management factor significantly differs with respect to the ownership structure of the firm.
 - H₁-21: Having certificates of environmental management factor significantly differs with respect to the age of the firm.
 - H₁-22: Having certificates of environmental management factor significantly differs with respect to the number of employees in the firm.
 - H₁-23: Having certificates of environmental management factor significantly differs with respect to the operational sphere of the firm.
 - H₁-24: Having certificates of environmental management factor significantly differs with respect to whether the firm had taken any training on sustainability.

Table 18: Kruskal Wallis and Mann Whitney U test results for environment-friendly activities factor						
	N	Avg. Rank	Chi-Sq	DF	P (K-W)	Diff.
Age of the firm			19.725	4	0.001	
1-5 years	27	151.44				1 < 4
6-10	67	178.60				2 < 5
11-15	97	178.81				3 < 4
16-20	80	220.52				4 > 2
21 and more	129	226.04				5 > 1
Number of employees			27.492	3	0.000	
0-9	113	164.43				1 < 4
10-49	92	184.55				
50-249	146	221.40				3 > 1
250 and more	49	251.35				4 > 2
Operational sphere			5.456	2	0.065	
National	277	191.68				
International	108	219.08				
Multinational	15	229.67				
Sector			47.620	5	0.000	
Industry	59	166.66				1 < 4
Construction	48	210.23				2 > 6
Trade	124	239.72				3 > 6
Transportation and storage	45	249.38				4 > 5
Accommodation and catering	21	173.62				5 < 3
Other	103	152.26				6 < 4
	N	Avg. Rank	Mann Whitney	Z	P (M-W)	Diff.
Had any training?			13162.00	-4.308	0.000	
Yes	266	218.02				1 > 2
None	134	165.72				

The results indicated that environment-friendly activities factor significantly differed with respect to the sector in which the firm operated ($p < 0.01$), duration of operation ($p = 0.034$), number of employees ($p < 0.01$), and training experience ($p < 0.01$). These differences are elaborated as the following:

- Those firms operating in transportation and storage sector put more emphasis on environment-friendly activities compared to those firms in other sectors ($p < 0.05$).
- Those firms with an age of 16 years and higher put more emphasis on environment-friendly activities compared to younger firms ($p < 0.05$).
- Those firms with a number of employees of 50 or more put more emphasis on environment-friendly activities compared to those firms a number of employees less than 50 ($p < 0.05$).
- Those firms that had had training on sustainability at least from one institution put more emphasis on environment-friendly activities compared to those firms that had had no training ($p < 0.01$).

Table 19. Kruskal Wallis and Mann Whitney U test results for ‘certificates of environmental management’ factor						
	N	Avg. Rank	Chi-Sq	DF	P (K-W)	Diff.
Ownership structure			13.666	2	0.001	
Local	268	186.30				
Local – foreign partnership	46	220.80				2 > 1
Full foreign	86	233.88				3 > 1
Duration of oper. (age of the firm)			5.760	4	0.218	
1-5 years	27	192.28				
6-10	67	177.68				
11-15	97	216.29				
16-20	80	210.33				
21 and more	129	196.10				
Number of employees			22.708	3	0.000	
0-9	113	162.65				
10-49	92	195.30				
50-249	146	225.26				3 > 1
250 and more	49	223.79				4 > 1
Operational sphere			12.868	2	0.002	
National	277	188.21				
International	108	223.07				2 > 1
Multinational	15	164.83				3 > 1
	N	Avg. Rank	Mann Whitney	Z	P (M-W)	Diff.
Had any training?			14060.00	-3.586	0.000	
Yes	266	214.64				1 > 2
None	134	172.43				

The results indicated that ‘certificates of environmental management’ factor significantly differed with respect to ownership structure ($p < 0.01$), number of employees ($p < 0.01$), operational sphere ($p = 0.002$), and training experience ($p < 0.01$). These differences are elaborated as the following:

- Those firms with full or partial foreign ownership put more emphasis on certificates of environmental management compared to those firms with local ownership ($p < 0.05$).
- Those firms with a number of employees 50 or more put more emphasis on certificates of environmental management compared to those firms with a number of employees less than 50 ($p < 0.01$).
- Those firms operating in the international or multinational sphere put more emphasis on certificates of environmental management compared to those firms operating locally ($p < 0.05$).
- Those firms that had had training on sustainability from at least one institution put more emphasis on certificates of environmental management compared to those firms that had had no training ($p < 0.01$).

4.2.8. Findings on the Social Management Tools Used in Sustainability Practices

When the “Definitely Effective” and “Effective” responses were combined, the most effective tool happened to be ‘Improving the workplace conditions to ensure the security and healthcare of the employees’ with 83.1% while ‘holding periodic/regular meetings with the employees’ came second with 80.8% and ‘supporting the purchase from local suppliers’ in third with 80%. Having OHSAS 1800, SA8000 and AA1000 certificates are considered as the least effective tools (See Table 20).

Table 20. Findings on the use of social management tools					
How effective are the activities used to develop your social performance	Definitely effective	Effective	Partially effective	Not effective	Definitely ineffective
Having OHSAS 1800 certificate	2.3	14.3	15.3	52.8	15.5
Having SA8000 certificate	1.3	10.5	17.5	56.3	14.5
Having AA1000 certificate	2	12.3	20	51.8	14
Supporting the employees to participate to the local operations	8.3	64.5	13.3	10.8	3.3
Supporting the local operations and projects through regular financial aid.	13.3	52.8	13	18.3	2.8
Developing the working conditions to ensure the health and security of employees.	12.8	70.3	11.5	4.3	1.3
Supporting the flextime and working at home practices to provide better work life balance for employees.	10.3	58.5	12.8	15.8	2.8
Taking precaution against all discriminations at the hiring process.	14.3	64.8	13.8	5.5	1.8
Supporting the proposal system to participate the employees into decision making process.	11.8	68	14	4.3	2
Organizing periodic meetings with employees.	10.3	70.5	13	4.8	1.5
Providing education opportunities to the local public.	9.3	59	14.3	14.8	2.8
Having an open dialog with local public in polemic. sensitive or contrarian issues against the firm interests.	8.5	59	12.5	16.3	3.8
Supporting the purchase from local suppliers.	6	74	11	7.3	1.8

The following hypotheses were constructed to determine whether the social management tools used in sustainability activities differentiated with respect to firm characteristics. The scale was separated into two significant factors that proved meaningful correlations, namely “supporting the stakeholders” and “certificates of social management system.” Table 21 and 22 show the analysis results.

- ***List of hypotheses tested to explore whether ‘supporting the stakeholders’ factor differs with respect to firm characteristics***
 - H₁-25: The supporting the stakeholders significantly differs with respect to firm ownership structure.
 - H₁-26: The supporting the stakeholders significantly differs with respect to sector in which the firm operated.
 - H₁-27: The supporting the stakeholders significantly differs with respect to the duration of the operation of the firm.
 - H₁-28: The supporting the stakeholders significantly differs with respect to the number of employees of the firm.
 - H₁-29: The supporting the stakeholders significantly differs with respect to whether the firm had taken any training on sustainability.
- ***List of hypotheses tested to explore whether ‘having certificates of social management’ factor differs with respect to firm characteristics***
 - H₁-30: Having certificates of social management system factor significantly differs with respect to the ownership structure of the firm.
 - H₁-31: Having certificates of social management system factor significantly differs with respect to the number of employees in the firm
 - H₁-32: Having certificates of social management system factor significantly differs with respect to the operational sphere of the firm.
 - H₁-33: Having certificates of social management system factor significantly differs with respect to whether the firm had taken any training on sustainability.

Table 21. Kruskal Wallis and Mann Whitney U test results for supporting the stakeholders’ factor						
	N	Avg. Rank	Chi-Sq	DF	P (K-W)	Diff.
Ownership structure			20.138	2	0.000	
Local	268	182.57				
Local – foreign partnership	46	244.23				2 > 1
Full foreign	86	232.99				3 > 1
Duration of oper. (age of the firm)			19.794	4	0.001	
1-5 years	27	169.57				1 < 4
6-10	67	165.49				2 < 5
11-15	97	182.37				3 < 4
16-20	80	218.68				4 > 2
21 and more	129	227.52				5 > 1
Number of employees			49.761	3	0.000	
0-9	113	151.48				1 < 3
10-49	92	178.29				2 < 4
50-249	146	230.80				3 > 2
250 and more	49	264.98				4 > 1

Sector			59.332	5	0.000	
Industry	59	126.64				
Construction	48	181.26				2 > 1
Trade	124	241.76				3 > 1
Transportation and storage	45	262.68				4 > 1
Accommodation and catering	21	179.93				5 > 1
Other	103	179.13				6 > 1
	N	Avg. Rank	Mann Whitney	Z	P (M-W)	Diff.
Had any training?			11317.50	-6.007	0.000	
Yes	266	224.95				1 > 2
None	134	151.96				

The significant differences were found between groups with respect to ownership structure ($p<0.01$), sector ($p=0.000$), the age of the firm ($p=0.001$), number of employees ($p<0.01$), and status of training ($p<0.01$). These differences are elaborated as the following:

- Those firms with full or partial foreign ownership put more emphasis on supporting the stakeholders ($p<0.05$).
- Those firms in the industry sector put more emphasis on supporting the stakeholders than other sectors ($p<0.05$).
- Those firms with an age of 16 years and higher put more emphasis on activities of supporting the stakeholders ($p<0.05$).
- Those firms with a number of employees of 50 or more put more emphasis on the activities of supporting the stakeholders than those firms with less than 50 employees ($p<0.05$).
- Those firms that had had training on sustainability from at least one institution put more emphasis on activities of supporting the stakeholders than those firms that had had no training ($p<0.01$).

Table 22. Kruskal Wallis and Mann Whitney U test results for ‘certificates of social management system’ factor

	N	Avg. Rank	Chi-Sq	DF	P (K-W)	Diff.
Ownership structure			20.066	2	0.000	
Local	268	183.96				
Local – foreign partnership	46	216.80				
Full foreign	86	243.31				3 > 1
Number of employees			13.607	3	0.003	
0-9	113	175.63				
10-49	92	190.58				2 < 3
50-249	146	224.65				3 > 1
250 and more	49	204.52				

Operational sphere			11.188	2	0.004	
National	277	188.31				2 > 1
International	108	226.59				
Multinational	15	237.80				
	N	Avg. Rank	Mann Whitney	Z	P (M-W)	Diff.
Had any training?			13627.50	-4.037	0.000	
Yes	266	216.27				1 > 2
None	134	169.20				

All alternative hypotheses based on the certificates of social management system were accepted; that is, there were significant differences between the groups with respect to ownership structure ($p<0.01$), number of employees ($p<0.01$), operational sphere ($p=0.004$), and having training experience ($p<0.01$). These differences are elaborated as the following:

- Those firms with full foreign ownership put more emphasis on certificates of social management system than those firms with partial foreign and local ownership ($p<0.05$).
- Those firms with a number of employees of 50 or more put more emphasis on certificates of social management system than those firms with a number of employees of 49 or less ($p<0.05$).
- International firms put more emphasis on the certificates of social management system than those firms with national operations only ($p<0.05$).
- Those firms that had had training on sustainability from at least one institution put more emphasis on the certificates of social management system than those firms that had had no training ($p<0.01$).

5. Conclusions and Suggestions

This study has aimed to connect the concept of sustainability with Islamic business and finance through empirical research on corporate customers of Islamic banks in Turkey. The analysis based on a sample of 400 clients located in Istanbul have provided useful findings and implications.

The examinations indicated that client firms generally accepted the importance of sustainability, its relationship with their business manner, and their responsibility to society and the environment. Nevertheless, it was detected that firms were weak in terms of the execution of their operations in accordance with international standards. 70% of the firms were observed as having at least one management quality certificate while 30% had no such document. Those firms that operated in the sectors of wholesale and retail trade, transportation, and storage had a better position in terms of having quality certificates compared to other sectors.

As for the causes motivating the sustainability practices of firms, it was seen that the most effective factors were reputation (96.6%), cost reduction (91.1%), competition (89.8%), and legal regulation (89.3%). The least effective factor was observed as the public pressure, with a level of 71.8%.

A significant positive relationship was detected between experience of training, meaning attribution on sustainability, the impacts of the factors causing the sustainability on firms, and the emphasis of the firms on the practices of environmental and social matters (see Table 23). On the other hand, the ratio of those firms that had taken the training were only 66.5%. The most active training institutions were the Chamber of Trade (60.4%) and Small and Medium Enterprises Development Organization of Turkey (17.7%).

The other important characteristics of the firms in terms of sustainability that positively impact were the ownership structure, number of employees, and operational sphere. As seen in Table 23, those firms that had fully or partial foreign ownership, international operations, and a number of employees of at least 50 and more showed better acceptance and practice of sustainability compared to other characteristics.

Table 23 indicates which type of corporate customers of Participation Banks in Turkey should be developed in terms of sustainability. As a general definition, young firms owned by local capitalists, employers of less than 50 people, and those operating within industry sector at national level must be conveyed to a much better awareness and practice of sustainability. Although the emphasis on sustainability is a general political & economics issue of a government and regulators, the finance sector plays an internal role in the success of this fact. In this regard, the participation banks operating in Turkey are recommended to take the following actions to contribute sustainability:

- Determining the priorities in sustainability through revision of all end-to-end processes and developing strategies,
- Sharing the strategies with society through effective reporting techniques
- Concentrating on the green financing instruments in Islamic finance to contribute to the economy of recycling.

Table 23. How does the adoption and practice of sustainability differentiate in institutional customers of participation banks with respect to certain characteristics?

Characteristics	The meanings attributable to sustainability	The motivations for sustainability practices		Use of environmental management tools		Use of social management tools		
	F1	F2	F3	F4	F5	F6	F7	F8
Ownership Structure								
Local								
Local–foreign partnersh	✓	✓	✓		✓		✓	
Full foreign	✓	✓	✓		✓		✓	✓
Sector								
Industry								
Construction			✓				✓	
Trade			✓				✓	
Transportation storage			✓				✓	
Accommodation&catering							✓	
Other							✓	
Age of The Firm								
1-5 years								
6-10								
11-15								
16-20				✓				
21 and above				✓				
Number of Employees								
0-9								
10-49								
50-249	✓	✓	✓	✓	✓		✓	✓
250 and above	✓	✓	✓	✓	✓		✓	
Operational Sphere								
National								
International		✓	✓		✓			✓
Multinational					✓			
Had Any Training?								
Yes	✓	✓	✓	✓	✓		✓	✓
None								

✓ (The check sign): Indicates the higher positive point compared to other groups.

Names of each factors are as follows: Factor 1 indicates The Meaning Attributable to Sustainability, Factor 2: Management of Stakeholder Perception, Factor 3: Adaptation to Compelling Factors, Factor 4: Environment-friendly Activities, Factor 5: Certificates of Environmental Management System, Factor 6: Considering the Stakeholders in Business Processes, Factor 7: Supporting the Stakeholders, Factor 8: Certificates of Social Management System.

Source: Constructed by the authors.

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