

Sustainable Banking - Assessment of the Awareness and the Needs of Individual Clients and the Public at General in Macedonia

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Abstract

The main goal of this paper is to assess whether the information, products/services and behaviour presented and communicated by Macedonian banks reflect the awareness and the needs of Macedonian individual clients and society at large about the banks' contribution towards sustainability. This goal was achieved through conducting a survey in the capital city of Macedonia, Skopje. The survey included 256 respondents, interviewed by two pollsters during the last week of January and the first two weeks of February 2008. The research took place in the central part of the city of Skopje. The results showed that: 1) Macedonian individual clients do not know what sustainability refers to. 2) The clients do not focus only on the economic features of the products and services. 3) The banks in Macedonia have to modify their behaviour.

Keywords: sustainable development, environmental service and products, banks, developing countries.

Introduction

As today's clients become more conscious of sustainable development issues, these issues are also gaining in importance for the companies, which in response have begun to modify their own strategies and activities in an attempt to address the clients' concerns. This is especially applicable to financial institutions because financial services are about money, and people's attitude towards money is highly emotional. For the individual clients emotions can be critical when choosing a bank (Ehrlich, E. and Fanelli, D. 2004).

In recent years, in order to satisfy the different wishes, banks have tried to cope with this dilemma by offering clients information about their activities for sustainability and offering a choice for new unconventional products and services. Whether a bank can take advantage of the opportunity to satisfy the constantly rising needs of its clients depends on the knowledge, creativity and experience of its managers and employees (Jeucken, M.H.A. 2001).

Like every other business, banks are responsible for enhancing the care for every aspect of sustainability: economy, society and environment.

If too much emphasis is placed on environmental or social activities while not safeguarding economic activities, the bank may be eliminated by its competitors. If too much emphasis is placed on economic activities while ignoring environmental and social care, then the public reaction may be unsatisfactory. This again can lead to the same final result – market elimination. In terms of the bank's image, it is important to clearly communicate the steps being taken, since there is always a risk of negative publicity (Jeucken, M.H.A. 2001).

Many banks from the developed countries make significant progress towards sustainable development. They offer new, more environmentally and socially friendly products and commit themselves to take care of the environment and society, along with making profit. This progress is supported by clear and consistent external communication. Compared to them, the biggest banks in Macedonia, with some exceptions, offer insufficient information about the same issues.

Survey

Problem and goal

The hypothesis for this behaviour of the Macedonian banks is that Macedonian clients and the public in general are not conscious about the meaning of sustainability. The level of public awareness is low, and the clients focus on the economic features of the products and services, ignoring the other aspects. Hence, banks feel comfortable in their surrounding and do not feel any need to modify their behaviour.

The main goal of this paper is to assess whether the information, products/services and behaviour presented and communicated by Macedonian banks reflect the awareness and the needs of Macedonian individual clients and society at large about the banks' contribution towards sustainability. This goal was achieved by conducting a survey in the capital city of Macedonia, Skopje. In particular, this questionnaire evaluates whether individual clients take into account:

- environmental and social activities of the bank when choosing a product (service) offered by different banks;
- environmental and social aspects of the products (services) when choosing a product (service) offered by the same bank.

Data collection and limitations

The research included 256 respondents, interviewed by two pollsters during the last week of January and the first two weeks of February 2008. The margins of sampling error were estimated to be ± 6.1 at a 95% confidence level. The research took place in the central part of the city of Skopje, more precisely in the City Trade Centre (CTC). CTC was chosen as an appropriate location because there one could meet people with high potential to be clients of a bank, concerning the fact that the three biggest and other smaller banks have their branches or sub-branches within the trade centre's area. At the same time, CTC presents a place where people of different demographic characteristics can be met.

The survey was conducted in the Macedonian language. Respondents were chosen randomly by pollsters who were standing next to the two main entrances/exits of the CTC. The survey methodology required that the pollsters respect the following principles:

- To approach every eight passer after the previous one completed the questionnaire (or refused to answer it);
- To approach passers older than 17 years of age;
- To present the introduction of the survey to every respondent;
- To read the questions slowly and if necessary to read them twice;
- To omit reading the options "do not know", "refuse to answer" and "spontaneous answer";
- To explain the meaning of the scale from 1 to 7;
- To greet the respondent and to be open to additional comments.

Due to time and financial limitations, the questionnaire included 256 respondents which may not constitute a representative survey sample. An additional limitation, due to the same reasons, is the fact that the survey was conducted only in the city area. Nevertheless, this survey provides sufficient data for an initial assessment of the topic and provides a basis for further statistical analysis and discussion.

Sample distribution

This part provides demographic details regarding the profile of the interviewed participants:

D1. Gender: Male = 45.7% (117),
Female = 54.3% (139)

D2. Age: In accordance with the obtained results, a separation of the respondents in three groups, as presented in Table 1, proved to be appropriate for further analysis of the data.

		Frequency	Percent
Valid	18 - 30 years	99	38,7
	31 - 49 years	104	40,6
	50+ years	53	20,7
	Total	256	100,0

Table 1: D2 - Age of respondents

D3. Number of members within your household including you: Respondents, according to the number of members within the households, are separated in five groups. See Table 2.

		Frequency	Percent
Valid	1 member	12	4,7
	2 members	39	15,2
	3 members	73	28,5
	4 members	99	38,7
	5+ members	33	12,9
	Total	256	100,0

Table 2: D3 - Members within household

D4. Marital status: Single = 40.5% (104),
Married = 57.0% (146),
Divorced/ Separated/ Widow = 2.3% (6)

D5. Do you have any children below 18 years of age within your household?
Yes = 31.3% (80), No = 68.8% (176)

D6. Households with children below 18 years of age:

1 child = 19.1% (49), 2 children = 10.9% (28),
3 children = 1.2% (3),

D7. Education: Secondary = 48.8% (125),
Higher = 51.2% (131)

D8. Employment status: The majority of the respondents are full time employed (69%), and smallest portion is retired (5.5%). See Table 3.

		Frequency	Percent
Valid	Employed - full time	177	69,1
	Employed - part time	15	5,9
	Unemployed, laid off	23	9,0
	Housewife/ househusband	2	,8
	Student	25	9,8
	Retired	14	5,5
	Total	256	100,0

Table 3: D8 - Employment status: categorized in six groups

If we make summarize the data on the employment status of respondents, the following results, as presented in Table 4, are obtained.

		Frequency	Percent
Valid	Do not have working status (unemployed, housewife/ househusband, student, retired)	64	25,0
	Have working status (full time or part time employed)	192	75,0
	Total	256	100,0

Table 4: D8 - Employment status: categorized in two groups

D9. Total monthly household income: Dividing respondents in three groups, as presented in Table 5, proved to be most appropriate for further analysis.¹

		Frequency	Percent
Valid	Up to 15.000 Den	25	9,8
	15.001 - 30.000 Den	113	44,1
	30.001 + Den	89	34,8
	Total	227	88,7
Missing	System	29	11,3
Total		256	100,0

Table 5: D9 - Monthly household income

D10. Clients of any bank: 88.3% (226) of the respondents are clients of a bank, 11.7% (30) are not clients of a bank.

D11. Please state the name of the bank(s) which products/ services you use: Respondents were offered to name maximum three banks which service they use. The three largest banks Komercijalna Banka AD – Skopje (KB), Stopanska Banka AD – Skopje (SB) and NLB Tutunska Banka AD – Skopje (TB), as presented in Table 6, serve most of the respondents.

Bank	Frequency
Komercijalna Banka AD – Skopje	114
Stopanska Banka AD – Skopje	98
NLB Tutunska Banka AD – Skopje	63
ProCredit Bank AD – Skopje	17
UNI Bank AD – Skopje	16
IK Bank - Export and Credit Bank AD – Skopje	15
Alpha Bank AD – Skopje	9
Investbanka AD – Skopje	3
Ohridska Banka AD – Skopje	2
Sileks Banka AD – Skopje	1
Ziraat Bankasi – Skopje	1

Table 6: D11 - Banks which products/ services are used by the respondents

D12. Please share any additional comment(s): Table 7 shows the respondents' comments, of which 20 relate to the banks' corporate social responsibility and 5 to the costs of the banks' products/services.

		Frequency	Percent
Valid		231	90,2
	Banks in Macedonia care only about their profit, they do not care about other issues	6	2,3
	Interest rates are too high	5	2,0
	Not enough information about banks' environmental and social activities	14	5,5
	Total	256	100,0

Table 7: D12 - Comments of the respondents

Data analysis

Meaning of sustainability

T1. Recently, the issue of sustainability / sustainable development has gained increasing importance. Could you please tell me what you think sustainability is about?

At the beginning of the analysis of question T1, the reliability (Cronbach's alpha) of the six statements is checked.

The obtained result is 0.83. Since the result is higher than 0.7, it can be concluded that the battery of statements is reliable for a description of the variable "meaning of sustainability", and it will be used for further analysis.

All 256 respondents answered this question. More than half, as presented in Table 8, do not know whether sustainability refers to the given statements from T1_1 to T1_6.

T1. Could you please tell me what you think sustainability is about?	Percentage (%)					
	T1_1 more jobs	T1_2 stable incomes	T1_3 affordable health care	T1_4 affordable education	T1_5 clean air	T1_6 caring about nature
7 Completely agree	23,4	28,1	19,1	23	23	27,7
6 Agree	9,4	10,5	12,5	10,9	11,3	7,8
5 Partly agree	4,7	1,2	4,7	4,3	2,3	3,1
4 Neither agree nor disagree	2	1,2	2,3	2,7	2	1,6
3 Partly disagree	0	0,4	1,2	0,4	1,6	1,6
2 Disagree	2	1,2	2,3	2	2,3	1,6
1 Completely disagree	3,5	3,1	1,6	1,2	2,3	2,3
9 DK/ref	55,1	54,3	56,3	55,5	55,1	54,3
Total	100	100	100	100	100	100

Table 8: T1 - Extent of agreement with each of the six statements

In order to assess the awareness of respondents regarding the three aspects of sustainability, every statement is placed in a group representing a specific aspect / dimension of sustainability. The first (T1_1) and the second (T4_2) statements are placed in a group representing the economic aspect of sustainability, the third (T4_3) and the fourth (T4_4) statements are placed in a group representing the social aspect of sustainability and the fifth (T4_5) and the sixth (T4_6) statements are placed in a group representing the environmental aspect of sustainability.

The analysis of the awareness of respondents regarding sustainability is conducted:

- through tests which assess whether there is a statistically significant difference (extent of agreement) as regards the mean values of the respondents from different demographic groups, and
- through tests which assess the association between the level of agreement/disagreement and demographic characteristics.

1) Significance of differences as regards the mean values of respondents from different demographic groups.

In order to determine the mean value of every aspect of sustainability, the answers of respondents who state *do not know* as an answer on maximum two statements are recoded, and instead of *do not know* answers they are marked as *neither agree nor disagree* answers. Those respondents with more than two *do not know* answers are excluded from the analysis, leaving 113 (44%) valid respondents for analysis.

Table 9 shows that there is no significant difference as regards the mean values of the economic aspect (ECO Aspect), the social aspect (SOC Aspect), and the environmental aspect (ENV Aspect).

Since the histograms (See Figure 1) depict asymmetric distributions of the answers, nonparametric statistical tests are used to determine whether there is a statistically significant difference as regards the mean values of respondents from different demographic groups.

For each of the three aspects of sustainability (through a Mann-Whitney Test) it is confirmed that there is no statistically significant difference in the mean values among the respondents with respect to the following independent factors: gender (D1), children below 18 years of age within the household (D5), education (D7),² and working status (D8 – categorized in two groups, as presented in Table 4).

For each of the three aspects of sustainability (through a Kruskal-Wallis Test) it is determined that there is no statistically significant difference among the respondents with respect to the following independent factors: age (D2 – categorized in three groups, as presented in Table 1), number of members within the household (D3 – categorized in 5 groups, as presented in Table 2) and total monthly household income (D9 – categorized in 3 groups, as presented in Table 5).

2) Association between the level of agreement or disagreement and demographic characteristics.

With respect to the answers for each of the statements, respondents are separated on:

- **Respondents who agree (with the statements)** - those who *completely agree*, *agree* or *partly agree* with the two statements for all three aspects of sustainability (economic, social and environmental).
- **Respondents who are neutral** - those who *completely agree*, *agree* or *partly agree* with the two statements on one or two aspects.
- **Respondents who disagree (with the statements)** - those who did not state that they *completely agree*, *agree* or *partly agree* with the two statements on any of the three aspects.

Table 10 shows that 56% of the respondents disagree, 17% are neutral, and 27% agree with the statements. Through a cross-tabulation (Chi Square test - χ^2), it is determined which demographic factors influence the responders to agree/disagree with the offered statements. The following results are obtained:

- There is no association between the level of agreement / disagreement and the respondents' gender (D1), i.e. gender is not an influencing variable. Furthermore, the following factors have no influence: age (D2), number of members within the household (D3), marital status (D4), children below 18 years of age within the household (D5) and working status (D8). For all stated independent factors the χ^2 is statistically insignificant.
- There is association between the level of agreement/disagreement and respondents' education level (D7), where $\chi^2 = 24.7$, $df = 2$ and $P < 0.05$.

The results presented in Table 11 show that approximately 72% of the respondents who disagree with the statements have secondary education, and approximately 41% have higher education. Concerning the respondents who agree with the statements approximately 17% have secondary education, while 37% have higher education.

		ECO Aspect	SOC Aspect	ENV Aspect
N	Valid	113	113	113
	Missing	143	143	143
Mean		5,9513	5,8009	5,8540
Std. Deviation		1.5014	1.4874	1.7096

Table 9: T1 - Sustainability aspects - statistics

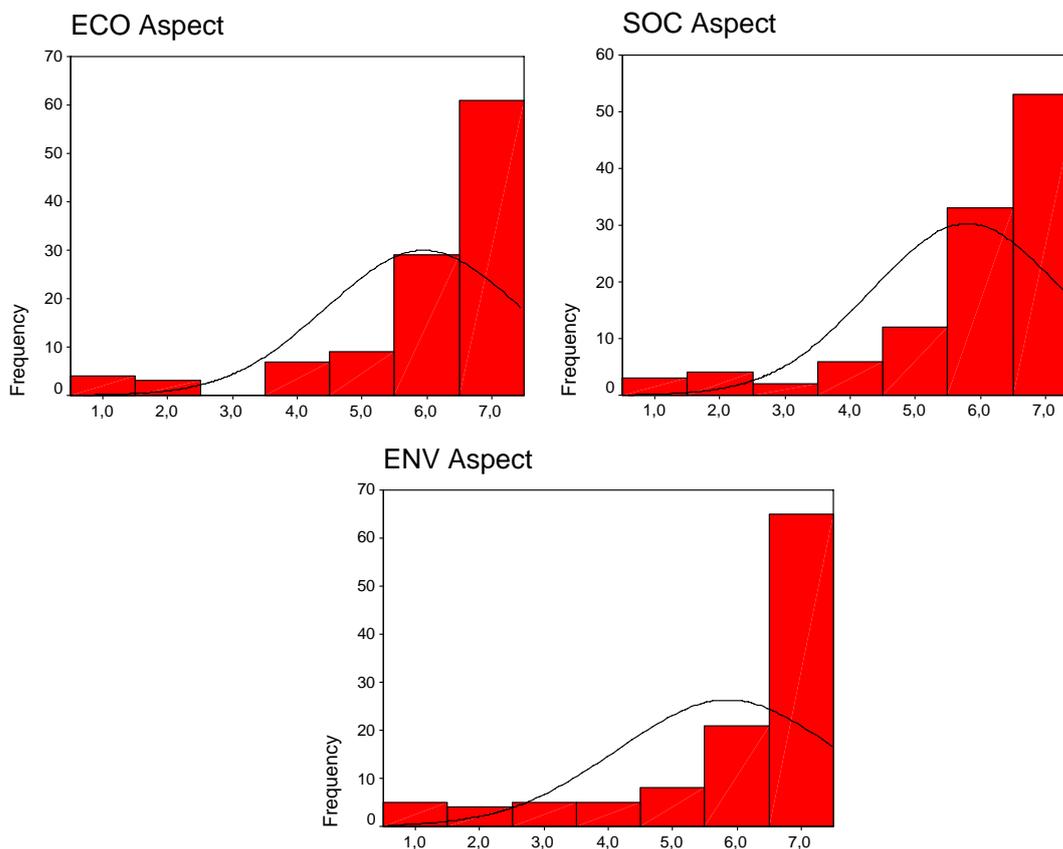


Figure 1: T1 - Distribution of answers

		Frequency	Percent
Valid	Respondents who disagree	144	56,3
	Respondents who are neutral	43	16,8
	Respondents who agree	69	27,0
	Total	256	100,0

Table 10: T1 – Level of agreement / disagreement with the statements

% within D7 Education

		D7 Education		Total
		Secondary	Higher	
	Respondents who disagree	72.0%	41.2%	56.3%
	Respondents who are neutral	11.2%	22.1%	16.8%
	Respondents who agree	16.8%	36.6%	27.0%
Total		100.0%	100.0%	100.0%

Table 11: T1 – Level of agreement / disagreement and education

- A factor which also influences the level of agreement/disagreement is the total monthly household income (D9), where $\chi^2 = 13.4$, $df = 4$ and $P < 0.009$. The results presented in Table 12 show that as income increases also the percentage of the responders who agree with the statements is increasing. From Table 12 it is also evident that as income decreases the percentage of the responders who disagree with the statement is increasing.

Stakeholders responsible for enhancing sustainability

T2. *Who do you perceive to be responsible for enhancing sustainability (i.e. enhancing the care for every aspect of sustainability: environment, society and economy)?* (Several answers are possible)

- T2_1 1. The Government
- T2_2 2. The municipality
- T2_3 3. The non-governmental organizations
- T2_4 4. Every individual
- T2_5 5. Every public or private institution/
business

T2_6 6. Only businesses in certain industrial sectors
(if the answer is "6" → go to T3, if not → skip T3).

T2_8. Refuse to answer, no answer

T2_9. Do not know, I haven't thought about it

T3. *Please state which certain industrial sector you think of:*

(Several answers are possible)

T3_1 1. Oil refining industry

T3_2 2. Mining industry

T3_3 3. Chemical industry

T3_4 4. Textile industry

T3_5 5. Food industry

T3_6 6. Transport industry

T3_7 7. Agriculture industry

T3_8 8. Telecommunication industry

T3_9 9. Financial sector

T3_10 10. Construction industry

T3_11 11. Other: _____

T3_99. Do not know, refuse to answer, no answer

Question T2 is analyzed with respect to the percentage of respondents who agree that the stated option (stakeholder) is responsible for enhancing sustainability. Table 13 shows that the largest percentage of respondents (90%) state that *the government* is responsible and the smallest percentage (5%) state that *only businesses in certain industrial sectors* are responsible for enhancing sustainability.

If the question is analyzed concerning the total number of options, 40% of the respondents mention all five options (from 1 to 5) as responsible for enhancing sustainability. None of the respondents who choose option 5 also selected option 6 (taking a contradiction into account).

For question T3, which is a filtered question of T2_6, 13 respondents state that *only businesses in certain industrial sectors* are (also) responsible for enhancing the sustainability.

All 13 respondents mention the *oil refining industry* and *the chemical industry* as responsible for enhancing sustainability.

% within D9CRR Approximately, what is your total monthly family (house income)? It is not necessary to answer precisely. Please, just state the category where you belong.

		Up to 15.000 Den	15.001 - 30.000 Den	30.001 + Den
	Respondents who disagree	72.0%	61.9%	44.9%
	Respondents who are neutral	8.0%	11.5%	28.1%
	Respondents who agree	20.0%	26.5%	27.0%
Total		100.0%	100.0%	100.0%

Table 12: T1 - Level of agreement / disagreement and monthly household income

Stakeholder	The Government	The municipality	The NGOs	Every individual	Every institution/ business	Only businesses in certain industrial sectors
(Also) responsible for enhancing the sustainability	89.8%	71.9%	44.9%	80.9%	73%	5.1%

Table 13: T2 - Stakeholders responsible for enhancing the sustainability

(one answer for each row)	Completely agree	Agree	Partly agree	Neither agree nor disagree	Partly disagree	Disagree	Completely disagree	Don't know (do not read)
<i>T4 While choosing a product/ service offered by different banks I give importance to the....</i>								
<i>T4_1. ... distance to the bank.</i>	7	6	5	4	3	2	1	9
<i>T4_2. ... costs/ conditions of the bank's product.</i>	7	6	5	4	3	2	1	9
<i>T4_3. ... professional relation the employees of the bank have with the clients.</i>	7	6	5	4	3	2	1	9
<i>T4_4. ... ethical and professional treatment of the bank towards their employees.</i>	7	6	5	4	3	2	1	9
<i>T4_5. ... membership of the bank in organizations that promote economic development, social development and environmental protection.</i>	7	6	5	4	3	2	1	9
<i>T4_6. ...public commitment of the bank to taking care of society.</i>	7	6	5	4	3	2	1	9
<i>T4_7. ...public commitment of the bank to taking care of the environment.</i>	7	6	5	4	3	2	1	9
<i>T4_8. ... contribution of the bank to social development (implementation and support of educational/ health/ humanitarian projects).</i>	7	6	5	4	3	2	1	9
<i>T4_9. ... contribution of the bank to environmental protection (implementation and support of ecological projects).</i>	7	6	5	4	3	2	1	9

Table 14: Criteria of importance to individual clients

Prior to analyzing question T4 a reliability check is conducted, assessing the importance of the statements on the choice of a product. The obtained result (Cronbach's alpha) is 0.81. This value is higher than 0.7 which implies that the nine statements reliably describe the importance of each statement for the choice of a product.

Analysis of the extent of agreement with each statement is conducted. The following results, as presented in Table 15, are gained.

<i>T4. While choosing a product / service offered by different banks I give importance to the:</i>	Completely agree (%)	Agree (%)	Partly agree (%)	Neither agree nor disagree (%)	Partly disagree (%)	Disagree (%)	Completely disagree (%)	Total (%)
T4_1 distance to the bank	34,4	13,3	10,5	9,8	6,6	9,8	15,6	100
T4_2 costs/ conditions of the banks product	80,9	15,2	3,1	0,8	0,0	0,0	0,0	100
T4_3 professional relation the employees of the bank have with the clients	82,4	10,9	4,7	1,2	0,4	0,0	0,4	100
T4_4 ethical and professional treatment of the bank towards their employees	35,9	14,8	13,7	18,8	1,6	4,3	10,9	100
T4_5 membership of the bank in organizations that promote economic development, social development and environmental protection	27,3	15,6	14,8	21,9	4,7	5,1	10,5	100
T4_6 public commitment of the bank to taking care of society	21,5	14,1	14,5	22,7	7,4	6,3	13,7	100
T4_7 public commitment of the bank to taking care of the environment	21,9	15,2	12,9	23,8	7,4	4,7	14,1	100
T4_8 contribution of the bank to social development (implementation and support of educational/ health/ humanitarian projects)	37,9	21,5	16,8	14,1	1,2	3,5	5,1	100
T4_9 contribution of the bank to environmental protection (implementation and support of ecological projects)	37,5	19,9	16,8	14,1	2,0	3,5	6,3	100

Table 15: T4 – Extent of agreement with each statement

With respect to the extent of agreement with each statement, respondents are separated in three groups. The first group comprises respondents who *completely agree*, *agree* or *partly agree*, i.e. those who give high importance to the statements. To the second group belong those who *neither agree nor disagree*, i.e. respondents who are neutral. To the third group belong those who *partly disagree*, *disagree* or *completely disagree*, i.e. respondents who give low importance to the statements.

Table 16 presents the percentage of respondents belonging to each group. It can be noticed that the majority gives high importance to statements T4_2 (99%) and T4_3 (98%), and that 32% of respondents gives the lowest importance to statement T4_1. In the literature the *distance to the bank* is indicated as one of the main factors influencing the choice of a product, which in this case proved to be invalid (See Stamenkovski, A. 2006).

<i>T4. While choosing a product/ service offered by different banks I give importance to the:</i>	High importance (%)	Neutral (%)	Low importance (%)	Total (%)
T4_1 ...distance to the bank	58,2	9,8	32,0	100
T4_2 costs/ conditions of the banks product	99,2	0,8	0,0	100
T4_3 ...professional relation the employees of the bank have with the clients	98,0	1,2	0,8	100
T4_4 ...ethical and professional treatment of the bank towards their employees	64,5	18,8	16,8	100
T4_5 ...membership of the bank in organizations that promote economic development, social development and environmental protection	57,8	21,9	20,3	100
T4_6 ...public commitment of the bank to taking care of society	50,0	22,7	27,3	100
T4_7 ...public commitment of the bank to taking care of the environment	50,0	23,8	26,2	100
T4_8 ...contribution of the bank to social development (implementation and support of educational/ health/ humanitarian projects)	76,2	14,1	9,8	100
T4_9 ...contribution of the bank to environmental protection (implementation and support of ecological projects)	74,2	14,1	11,7	100

Table 16: T4 - Level of importance of each statement

An analysis of question T4 is performed in order to check whether there is a statistically significant difference as regards:

- the mean values of the respondents from different demographic groups concerning each statement;
- the mean values of the statements separated in three groups which denote the three aspects of sustainability.

1) Comparison of the mean values of the respondents from different demographic groups concerning each statement.

Table 17 shows that the highest importance (6.76) is given to the statement T4_2: "...costs/ conditions of the bank's product", and the lowest importance (4.46) is given to the statement T4_6: "...public commitment of the bank to taking care of society".

In this case there is an asymmetric distribution of the answers (the values of the skewness and kurtosis are bigger/smaller than zero). Hence, for the analysis nonparametric tests are used.

- With respect to gender (D1), there is a statistically significant difference between males and females only regarding the statement T4_4: "*While choosing a product... I give importance to the: ethical and professional*

treatment of the bank towards their employees" ($z = -3.514$, $P < 0.05$). Females give a higher importance to this statement (5.50) than males (4.58).

- The mean values of the respondents from different age groups (D2) are compared, uncovering a statistically significant difference concerning statements T4_1 ($\chi^2 = 16.46$, $df = 2$, $P < 0.05$), T4_6 ($\chi^2 = 9.92$, $df = 2$, $P < 0.007$) and T4_7 ($\chi^2 = 11.66$, $df = 2$, $P < 0.003$). Table 18 presents the mean values of the respondents separated by age groups, where one can notice that the older respondents (the third group) give a higher importance to T4_1: "...*the distance to the bank*" than the younger (the first group) and mid-age respondents (the second group). Concerning the statements T4_6: "... *public commitment of the bank to taking care of society*" and T4_7: "...*public commitment of the bank to taking care of the environment*", respondents older than 50 years give a higher importance (5.21 and 5.30) to these statements than respondents from the first group (4.47 and 4.52), and respondents from the second group (4.07 and 4.08).

- There is no statistically significant difference as regards the mean values of respondents with respect to the number of members within the household (D3), marital status (D4), children below 18 years of age within the household (D5), education (D7), working status (D8) and clients of a bank (D10).
- With respect to the monthly household income (D9), a statistically significant difference exists among the respondents concerning statement T4_2 ($\chi^2 = 9.72$, $df = 2$, $P < 0.008$). In this case, those with low and medium income give a higher importance (6.8 and 6.87) to statement T4_2: “While choosing a product... I give importance on the: costs/conditions for the banks product” than those with higher income (6.67).

	ALL RESPONDENTS					
	Mean	N	Std. Error of Mean	Std. Deviation	Skewness	Kurtosis
T4_1 distance to the bank	4.67	256	.14	2.27	-.456	-1.322
T4_2 costs/ conditions of the banks product	6.76	256	3.38E-02	.54	-2.512	6.720
T4_3 professional relation the employees of the bank have with the clients	6.72	256	4.55E-02	.73	-3.752	18.980
T4_4 ethical and professional treatment of the bank towards their employees	5.08	256	.12	2.00	-.818	-.457
T4_5 membership of the bank in organizations that promote economic development, social development and environmental protection	4.82	256	.12	1.94	-.590	-.686
T4_6 public commitment of the bank to taking care of society	4.46	256	.12	2.00	-.354	-.979
T4_7 public commitment of the bank to taking care of the environment	4.50	256	.13	2.00	-.391	-.938
T4_8 contribution of the bank to social development (implementation and support of educational/ health/ humanitarian projects)	5.50	256	.10	1.68	-1.184	.773
T4_9 contribution of the bank to environmental protection (implementation and support of ecological projects)	5.41	256	.11	1.75	-1.111	.457

Table 17: T4 - Means of each statement

Group	Age	T4_1... distance to the bank	T4_6... public commitment of the bank to taking care of society	T4_7... public commitment of the bank to taking care of the environment
1	18 - 30	4,33	4,47	4,52
2	31 - 49	4,51	4,07	4,08
3	50+	5,62	5,21	5,30

Table 18: T4 - Statistical significance – age

2) Comparison of the mean values of the three aspects of sustainability

In order to confirm which aspect of sustainability has the highest importance for the choice of some bank's products/ services, the statements are grouped in a way which best depicts the economic, social and environmental dimension of sustainability.

The statements are grouped in three ways as presented in Table 19. The first group includes all nine statements separated in order depicting the three aspects of sustainability. With respect to the second group, the economic aspect is expressed through one clear economic statement, while the social and the environmental aspects are expressed through three

similar statements for each aspect. In the third group the economic aspect of sustainability is presented through the statements which describe the direct influence of the bank over the client (BANK-CLIENT) and the bank's indirect influence over the client presented through bank-society and bank-environment. Further in the analysis (using a Friedman test) it is evaluated whether there is a statistically significant difference among the mean values of the three aspects in each group.

The analysis of the first group shows that the difference as regards the mean values of the economic (ECO), the social (SOC) and the environmental (ENV) aspect is statistically significant ($\chi^2 = 62.1$, $df = 2$, $P < 0.05$). See Table 20.

The analysis of the second group shows that there is a statistically significant difference as regards the mean values of the economic aspect (6.8), the social (4.9) and the environmental aspect (4.9), where $\chi^2 = 329.3$, $df = 2$, $P < 0.05$. See Table 21.

Furthermore, the analysis of the third group indicates that there is a statistically significant difference as regards the mean values of the economic aspect (5.5), the social (5.0) and the environmental aspect (4.9), where $\chi^2 = 39.2$, $df = 2$, $P < 0.05$. See Table 22.

Interest in unconventional credit cards

The primary goal with respect to question T5 is to assess whether credit cards with environmental and/or social benefits would be interesting for individual

Group	ECONOMIC ASPECT / Bank-client relations	SOCIAL ASPECT/ Bank-society relations	ENVIRONMENTAL ASPECT/ Bank-environment relations
1	T4_1, T4_2, T4_5	T4_3, T4_4, T4_5, T4_6, T4_8	T4_5, T4_7, T4_9
2	T4_2	T4_5, T4_6, T4_8	T4_5, T4_7, T4_9
3	T4_1, T4_2, T4_3	T4_4, T4_5, T4_6, T4_8	T4_5, T4_7, T4_9

Table 19: T4 - Aspects of sustainability

Group 1		ECO	SOC	ENV
N	Valid	256	256	256
	Missing	0	0	0
Mean		5,4167	5,3164	4,9102
Median		5,3333	5,4000	5,0000
Std. Deviation		1,0782	1,2590	1,6129
Skewness		-,409	-,762	-,599
Std. Error of Skewness		,152	,152	,152
Kurtosis		-,339	,215	-,284
Std. Error of Kurtosis		,303	,303	,303
Minimum		3,00	1,00	1,00
Maximum		7,00	7,00	7,00

Table 20: T4 - Significance among means (Group 1)

Group 2		ECO	SOC	ENV
N	Valid	256	256	256
	Missing	0	0	0
Mean		6,7617	4,9258	4,9102
Median		7,0000	5,0000	5,0000
Std. Deviation		,5404	1,5824	1,6129
Skewness		-2,512	-,596	-,599
Std. Error of Skewness		,152	,152	,152
Kurtosis		6,720	-,245	-,284
Std. Error of Kurtosis		,303	,303	,303
Minimum		4,00	1,00	1,00
Maximum		7,00	7,00	7,00

Table 21: T4 - Significance among means (Group 2)

Group 3		ECO	SOC	ENV
N	Valid	256	256	256
	Missing	0	0	0
Mean		5,5052	4,9648	4,9102
Median		5,6667	5,2500	5,0000
Std. Deviation		1,0635	1,5071	1,6129
Skewness		-,448	-,705	-,599
Std. Error of Skewness		,152	,152	,152
Kurtosis		-,328	-,020	-,284
Std. Error of Kurtosis		,303	,303	,303
Minimum		3,00	1,00	1,00
Maximum		7,00	7,00	7,00

Table 22: T4 - Significance among means (Group 3)

clients in Macedonia. The secondary goal is to inform respondents about the existence and benefits of these credit cards.

In total 256 respondents answered question T5. The majority (67%) completely agrees with the statement: *I would be interested to use credit card with environmental and/or social benefits ... if its costs are lower or same with the costs of the other credit cards.* With respect to the second statement, 33% of respondents completely disagree with the statement: *I would be interested to use credit card with environmental and/or social benefits ... if its costs are a bit higher than the costs of the other credit cards.* Table 23 presents the extent of agreement with statements T5_1 and T5_2.

Question T5 is analyzed in the same manner as question T1:

- by assessing the significance of differences as regards the mean values of the respondents from different demographic groups, and

- by assessing the level of interest of the respondents with specific demographic characteristics.

1) Significance of differences as regards the mean values of the respondents from different demographic groups.

If the respondents who give *do not know* answers are excluded from the analysis, and the results are presented on a histogram, for both statements, an asymmetric distribution of the answers is obtained. See Figure 2.

T5. I would be interested to use credit card with environmental and/or social benefits:	Percentage (%)	
	T5_1 if its costs (membership or provision) are lower or same with the costs of the other credit cards	T5_2 even if its costs (membership or provision) are a bit higher than the costs of the other credit cards
7 Completely agree	67,2	10,5
6 Agree	18,4	8,6
5 Partly agree	2,7	11,3
4 Neither agree nor disagree	4,3	16,8
3 Partly disagree	0,0	5,1
2 Disagree	0,8	8,6
1 Completely disagree	2,0	33,2
9 DK/ref	4,7	5,9
Total	100	100

Table 23: T5 - Extent of agreement/ disagreement with the statements

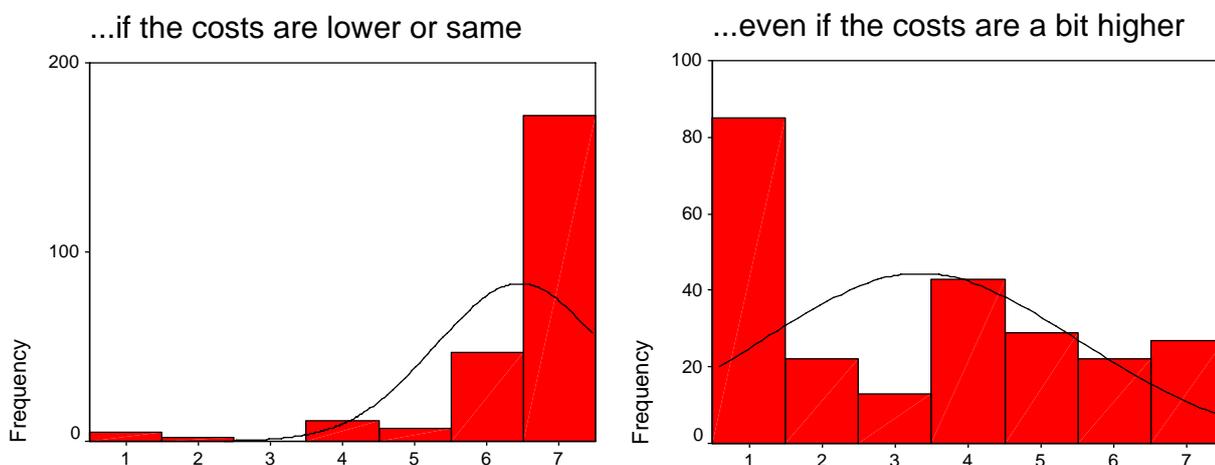


Figure 2: T5 - Distribution of answers – recoded

The extent of interest for unconventional credit cards, expressed as a mean value, would be higher (6.45) if the costs of these credit cards are lower or the same with the costs of the other credit cards. If the unconventional credit cards have somewhat higher costs than the conventional credit cards, the interest to use these cards would be lower (3.34). See Table 24

In this case also, through nonparametric tests, it is checked whether there is a statistically significant difference as regards the mean values of the respondents with different demographic characteristics.

Through the Mann-Whitney Test it is confirmed that:

- There is no statistically significant difference with respect to the following independent factors: gender (D1), children below 18 years of age within the household (D5), working status (D8 – categorized in two groups) and clients of the bank (D10).

- There is a statistically significant difference as regards the mean values of the respondents with different levels of education with respect to statements T5_1 ($z = -3.130$, $P < 0.002$) and T5_2 ($z = -3.259$, $P < 0.001$). From Table 25 one can notice that respondents with secondary education have a lower interest in using unconventional credit cards than those with higher education.

Through the Kruskal-Wallis Test it is confirmed that:

- There is no statistically significant difference with respect to the following independent factors: number of members within the household (D3), marital status (D4), number of children below 18 years of age within the household (D6), and working status (D8 – categorized in six groups, as presented in the Table 3).

		T5_1R ...if its costs (membership or provision) are lower or same with the costs of the other credit cards	T5_2R ...even if its costs (membership or provision) are a bit higher than the costs of the other credit cards
N	Valid	244	241
	Missing	12	15
Mean		6,45	3,34
Std. Deviation		1,17	2,16

Table 24: T5 - Extent of interest to use unconventional credit cards

D7 Education	T5_1R if its costs (membership or provision) are lower or same with the costs of the other credit cards	T5_2R even if its costs (membership or provision) are a bit higher than the costs of the other credit cards
Secondary	6,25	2,90
Higher	6,64	3,75

Table 25: T5 - Statistical significance by education

D2 Age	T5_1R ...if its costs (membership or provision) are lower or same with the costs of the other credit cards	T5_2R ...even if its costs (membership or provision) are a bit higher than the costs of the other credit cards
18 – 30	6,61	3,84
31 – 49	6,38	3,12
50+	6,29	2,88

Table 26: T5 - Statistical significance by age

- There is a statistically significant difference only among the respondents from different age groups (D2) with respect to the statement T5_2 ($\chi^2 = 8.39$, $df = 2$, $P < 0.015$). It follows that age influences the level (extent) of interest, as an independent factor. Table 26 presents the mean values for each statement given by different age group. One can notice that younger respondents are the most interested, while the older respondents are the least interested to use unconventional credit cards. With respect to statement T5_1 there is no statistical significance as regards the mean values of the respondents who belong to different age groups.
 - There is a statistically significant difference among the respondents with different monthly household incomes only relating to statement T5_2 ($\chi^2 = 7.58$, $df = 2$, $P < 0.023$). In this case those respondents with low and medium incomes are less interested (3,17 and 2,98) to use unconventional credit cards than those with higher incomes (3,79). Table 27 presents the mean values for each statement by monthly household income.
- 2) Association between the level of interest and demographic characteristics.
- Respondents who *completely agree*, *agree* and *partly agree* with the statements of the question T5 are placed in a group which refers to interested respondents. Those who *neither agree nor disagree* are placed in a group which refers to neutral respondents; and those who *partly disagree*, *disagree* and *completely disagree* are placed in a group which refers to uninterested respondents. The results presented in Table 28 show that 88% of the respondents would be interested in using unconventional credit cards with *lower* or *same* costs as the conventional credit cards. However, 47% of the respondents would not be interested in using unconventional credit cards if their costs are a bit *higher* than the conventional ones. Respondents who give a *do not know* answer are excluded from the analysis and presented as “missing” in the Table.

D9 Monthly income	T5_1R ...if its costs (membership or provision) are lower or same with the costs of the other credit cards	T5_2R ...even if its costs (membership or provision) are a bit higher than the costs of the other credit cards
Up to 15.000 Den	6,21	3,17
15.001 - 30.000 Den	6,35	2,98
30.001 + Den	6,56	3,79

Table 27: T5 - Statistical significance by monthly income

T5. I would be interested to use credit card with environmental and/or social benefits ...	Percentage (%)	
	T5_1 ... if its costs (membership or provision) are lower or same with the costs of the other credit cards	T5_2 ... even if its costs (membership or provision) are a bit higher than the costs of the other credit cards
Uninterested	2,7	46,9
Neutral	4,3	16,8
Interested	88,3	30,5
Missing	4,7	5,9
Total	100	100

Table 28: T5 - Level of interest

The method of cross-tabulation checks whether there is an association between the level of interest to use unconventional credit cards (level of interest) and the respondents with specific demographic characteristics. From the findings the following is evident:

- There is no association between the level of interest and: the gender (D1), number of members within the household (D3), marital status (D4), children below 18 years of age within the household (D5), number of children below 18 years of age within the household (D6), and working status (D8 – categorized in six and in two groups) and clients of the bank (D10).
- Age is a factor which influences the level of interest of the respondents to use unconventional credit cards with a bit higher costs than the conventional one ($\chi^2 = 11.18$, $df = 4$ and $P < 0.025$). Table 29 shows that the largest portion (44%) of the interested respondents is younger, a smaller portion (29%) is mid-age and the smallest portion (20%) is older.
- The opposite trend is found concerning uninterested respondents. In this case the biggest part (63%) is older and the smallest part (38%) is younger respondents.
- Education is also a factor which influences the level of interest of the respondents concerning the statement T5_2 ($\chi^2 = 8.01$, $df = 2$ and $P < 0.018$). Table 30 shows that the bigger portion (41%) of the interested respondents is with higher education and a smaller portion (24%) is with secondary education. The opposite trend is present in the group of uninterested respondents. There are more respondents (56%) with secondary than with higher education (44%).
- As shown in Table 31, the monthly household income is also a factor which influences the level of interest of the respondents concerning the statement T5_2 ($\chi^2 = 10.91$, $df = 4$ and $P < 0.028$). The largest number of interested respondents (44%) has higher incomes, while for individuals with lower incomes the largest number is found in the uninterested category.

		D2 Age		
		1 18 - 30	2 31 - 49	3 50+
T5_2	uninterested	38,0%	54,1%	62,7%
	neutral	18,5%	17,3%	17,6%
	interested	43,5%	28,6%	19,6%

Table 29: T5_2 - Level of interest by age

		D7 Education	
		2 Secondary	3 Higher
T5_2	1 uninterested	55,7%	44,4%
	2 neutral	20,9%	15,1%
	3 interested	23,5%	40,5%

Table 30: T5_2 - Level of interest by education

		D9 Monthly family (household) income		
		1 Up to 15.000 Den	2 15.001 - 30.000 Den	3 30.001 + Den
T5_2	1 uninterested	45,8%	57,5%	43,7%
	2 neutral	25,0%	19,8%	12,6%
	3 interested	29,2%	22,6%	43,7%

Table 31: T5_2 - Level of interest by monthly household income

Banks that best satisfy clients' banking needs

T6. Which bank in Macedonia best satisfy your banking needs?
(One answer is possible)

T6_1 1. Bank's name: _____

97. No, there is no such a bank in Macedonia

98. No answer, refuse to answer

99. Do not know

With respect to question T6, the respondents are asked to choose only one bank in Macedonia which best satisfies their needs. KB is mentioned by 20% of the respondents, followed by TB (18%) and SB (14%). However, 28% of the respondents give a spontaneous answer that in Macedonia there is no such a bank, and 11% state that they *do not know/are not sure* which bank best satisfies their banking needs.

Banks which distinguish in terms of their care for the environment, society and economy

T7. Could you state one or more banks in Macedonia which can be distinguished from the others in terms of its care for the environmental protection, social development and economic development?
(Several answers are possible)

T7_1 1. Bank's name: _____

T7_2 2. Bank's name: _____

T7_3 3. Bank's name: _____

97. No, there is no such a bank in Macedonia

98. Refuse to answer, no answer

99. Do not know

With respect to the question T7 the respondents have the possibility to name several banks in Macedonia which can be distinguished from the others in terms of their care for environmental protection, social development and economic development. In this case TB is mentioned 11 times: six times as no.1, twice as no.2 and three times as no.3 – thus standing out from the others. It is followed by KB (mentioned 10 times) and by SB (mentioned 8 times). However, a significant percentage of respondents (53%) state that *they do not know/cannot mention a bank*, and 38% stated that there is *no such bank in Macedonia*.

Discussion of the results and recommendations

Regardless of the demographic criteria, statement T4_3: "... professional relation the employees of the bank have with the clients" is very important for individual clients. Hence the suggestion is for the banks to treat their employees ethically and to invest in their education and further professional development. In this way banks could have direct influence on the motivation and the job satisfaction of their employees,⁴ and could have indirect influence on the employee-client relation.

Female respondents in contrast to male respondents give higher importance to statement T4_4: "... ethical and professional treatment of the bank towards their employees". Besides the suggestion to treat their employees ethically and to invest in their professional development, banks should communicate these issues since they are from interest to their clients, especially to female clients.

Respondents give the highest importance (6.76) to statement T4_2: "... costs/conditions of the bank's product". This criteria is most important (6.87) for respondents with medium household income, and slightly less significant (but still very important) for respondents with lower (6.8) and higher (6.67) income. Hence, banks should constantly improve the economic performance of their products/services. The economic characteristics of the products are especially important for clients between 31- 49 years of age. However, when clients older than 50 years are considered, besides the economic characteristics of the product, they also show an interest in the public commitment of the bank to taking care of society and environment. The suggestion is for banks in their communication with older clients to communicate their environmental and social efforts, principles and policies.

If the "... distance to the bank" is considered, this criteria has the biggest importance (5.62) for older clients. Because banks have insight in the individual clients' age it would be useful for the banks when they open new branches, sub-branches, ATMs or similar, to pay particular focus on communicating this information to their older clients.

If banks in Macedonia offer a new product – a credit card with social and /or environmental benefits, significant number of clients would be interested to use it especially if the associated costs of this credit card are lower or similar to the costs of the other cards. As mentioned before, in developed countries the costs of these credit cards are not born by the individual clients. It is recommended that the banks conduct further analysis concerning the way this product could be developed and introduced to the market, to explore the possibility for cooperation with other organizations (for e.g. NGOs), and to assess the eventual costs. The most interested parties for this product are the younger generations and those with higher household incomes. If a bank decided to create this kind of product, the main target group should be the clients with these characteristics. In addition, the experience of the banks from developed countries confirms that the main users of this product are the younger generations.

It can be observed that more than a half of the respondents (56%) disagree that sustainability is about more jobs, affordable education, clean air, etc.³ These findings confirm that Macedonian clients do not know what sustainability is referring to. But, even though the biggest number of respondents do not agree that sustainability refers to the offered statements, a significant number of respondents (73%) state that they hold all companies (regardless the industrial sector they belong to) to be responsible for enhancing the care of environment, society and economy.

Hence, it would be recommendable for companies (including banks) in the frame of their possibilities, strategies, and in accordance with the law, to find a way to enhance sustainability and to adequately inform the citizens about these activities. Since respondents do not know the meaning of sustainability, it is recommended that companies use a broader explanation of the term "sustainability" in this communication - i.e. to use the terms environmental protection, economic development, and social development.

The findings also indicate that the economic aspect of the products/services is more important to the respondents than the social and environmental aspects. However, the mean values of the social and environmental aspects are about 5 (See Tables 20, 21, 22) which indicate that clients are partly interested about these two aspects. Hence, banks should also consider the social and environmental aspects in addition to the economic aspect of their products/services. Moreover, findings indicate that approximately 75% of the respondents (See Table 16) place high importance on the banks' support of social and environmental projects. Hence, it would be useful for banks to communicate information concerning implementation and support of educational/health/humanitarian and ecological projects, and thus influence the perception and satisfaction of their clients.

One of the biggest Macedonian banks which is a signatory of the UN Global Compact does not even communicate its membership within this organization. At the same time 65% of respondents (See Table 16) place high importance on the statement "... membership of the bank in organizations that promote the economic development, social development and environmental protection". The suggestion would be for banks to communicate information concerning their membership/cooperation with other national or international organisations which promote economic development, social development and environmental protection. From the analysis it can be noticed that a large portion of respondents (39%) cannot identify a bank which best satisfies their banking needs. At the same time, the majority of respondents (91%) cannot identify any bank in Macedonia which distinguishes itself from the others in terms of its care for environmental protection, social development and economic development. The hypothesis that banks are comfortable in their surrounding and do not have to modify their behaviour is not supported by the findings of this survey. As these companies operate in the competitive environment of an open economy it would be useful for the banks to conduct an in-depth and more representative analysis in order to evaluate the possible gains resulting from investing in sustainable banking, and from communicating the implemented activities.

Conclusion

It can be observed that the main target group of this survey (citizens who are clients of banks in Macedonia) disagree that sustainability is about more jobs, affordable health care, clean air, etc. These findings confirm that Macedonian clients do not know what sustainability refers to. However, a significant number of respondents state that they hold all companies to be responsible for enhancing the care for environment, society and economy. The hypothesis that clients focus only on the economic features of the products and services is not supported by the findings. Even though priority is given to the economic aspect, the mean values of the social and environmental aspects are high and indicate that these two aspects should also be considered by the banks during their decision making process. In the analysis it is noticeable that a large part of the respondents have said that there is none or they cannot state a bank which best satisfies their banking needs. At the same time, the majority of respondents cannot state any bank or have stated that in Macedonia there is no bank which distinguishes itself from others in term of its care for environmental protection, social development and economic development. Hence, the hypothesis that banks are comfortable in their surrounding and do not have to modify their behaviour is not supported.

Notes

1. Average net paid wage per employee for 2007 is approximately 15.000 Denars. With food and drink costs totaling 11,000 Denars, a meager 4,000 Denars is left for providing for other needs. See: State Statistical Office of Republic of Macedonia:
http://www.stat.gov.mk/english/glavna_eng.asp, February 2008.
2. Although the question D7 has three variables, none of the respondents mention that he/she has "primary" education. Because there are only two variables "secondary" and "higher", Two-Independent-Samples Tests are used.
3. See question T1.
4. See Herzberg, F. (1968), p. 53-62.

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