

Does Socio-economic Background Influence the Competition for a REF Tertiary Scholarship?

Relevance

Since the existence of the REF Scholarship Program, the selection of its beneficiaries has been mainly based on merit. Applicants have been selected on the basis of a ranking, composed of scores given for a set of criteria that referred to applicants' academic and extra-curricular achievements. The higher an applicant's ranking in the competition, the higher the chance to eventually be among the REF scholarship beneficiaries.¹ In the last years these criteria were the average of grades from school or university, the motivation to study as described in a statement of purpose, the knowledge of Roma issues as demonstrated in an essay, the participation in extra-curricular activities both self-described and stated in reference letters, and the performance at a face-to-face interview. These criteria had different weighting, the most important being the average of grades.

The idea of adding the applicants' socio-economic background to this set of criteria has been discussed on several occasions in the past at REF Board meetings, as well as at staff meetings. Some in-country coordinators and applications evaluators also consider that the Program should have a socio-economic dimension. The argument is that if the Program considered the socio-economic background among the selection criteria, the neediest applicants would have more chances in the selection and hence the Program would be more efficient in providing help to those who would otherwise have limited opportunities to attend higher education.

In relation to this argument, the Board decided to explore whether applicants coming from relatively disadvantaged socio-economic backgrounds are systematically disadvantaged in the selection competition for a REF scholarship, assuming that their academic standing tends to be negatively affected by their socio-economic disadvantages. For this, we compared the scores obtained in the evaluation process of those applicants with measurable socio-economic disadvantages on the one hand, and the applicants not belonging to this category on the other hand. The results of this comparison are presented in this paper.

The REF Scholarship Program already conducted such an analysis for the academic year 2012–2013 and presented it to the Board meeting in October 2012. The study is also available on the REF website (available [here](#)). The analysis revealed that there was no link between applicants' socio-economic background and their chance in being selected for a scholarship. Since the last study was prepared, two more cohorts of scholarship applicants applied for REF support (i.e., for the academic years 2013–2014 and 2014–2015). Therefore, we have currently enough data to redo the study based on three academic years, in order to see whether the findings from the first study are confirmed from one year to another. The findings based on one single academic year might be simply a matter of chance, whereas

¹ The description of selection process in REF Scholarship Program can be found [here](#).

results confirmed through similar findings across several years would reveal a systematic trend.

Data Source and Indicators

The information on applicants' socio-economic background is collected every scholarship cycle through a survey incorporated within the online application system. Every applicant needs to complete fully the survey questionnaire in order to be able to submit an application (see questionnaire in Annex 1). While completing the survey is mandatory, the applicants are warned explicitly that the information provided in the survey shall not be considered for the selection and it is meant to only serve for the Program's evaluation and research purposes. For illustration, below is a relevant print-screen from the online application system.

The screenshot shows the 'Survey' page of the Roma Education Fund - Scholarship Program Online Application System (OAS). The page title is 'Roma Education Fund - Scholarship Program ~ Online Application System (OAS) ~'. The language is set to 'English'. The navigation menu includes 'Main Page', 'Personal Information', 'Survey', 'List of Applications', and 'Logout'. The survey content includes an 'Important note' stating that the information is for statistical purposes only and will not be used for selection. It also advises applicants who completed the survey in previous cycles to review and update their information. The survey questions are as follows:

- [1] Spoken Languages
 - * [1a] What is your mother tongue? (Dropdown menu: Romani)
 - * [1b] Do you speak Romani chib? (Radio buttons: Yes, No)
- Please indicate the level of your knowledge of Romani chib
- * [1b_1] Listening comprehension (Radio buttons: basic, intermediary, proficient)
- * [1b_2] Oral communication (Radio buttons: basic, intermediary, proficient)
- * [1b_3] Reading (Radio buttons: basic, intermediary, proficient)
- * [1b_4] Writing (Radio buttons: basic)

While the survey questionnaire collects various data on applicants, not all of it could be used as objective indicators for determining applicants' socio-economic status in case the Program decides to incorporate a socio-economic dimension in the selection process. For instance, family income, which is the most straightforward and valid measurement for socio-economic status, would be impossible to use in our case because collecting reliable information on this indicator would require a high administrative capacity and financial resources that REF does not have. Moreover, the REF Scholarship Program operates in many non-EU countries with important informal sector activity, which would exaggerate the number of unemployed parents and would give unreliable figures for actual monthly incomes.

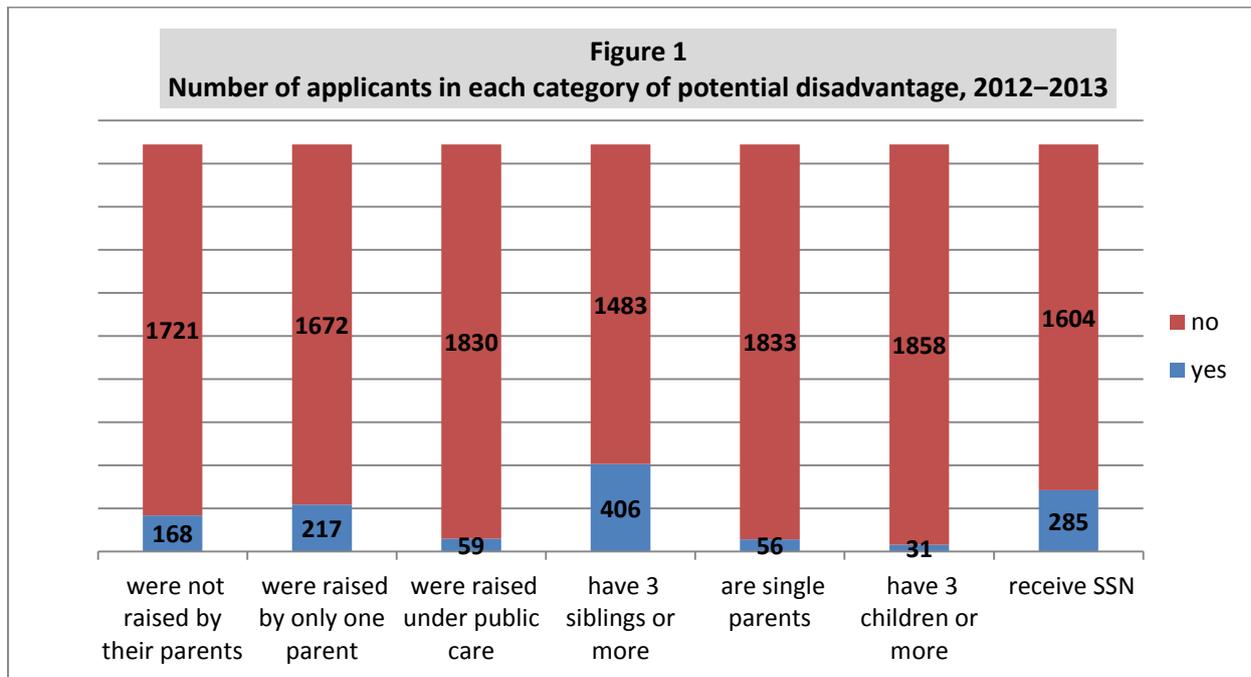
Therefore, if applied, the socio-economic criterion for selection would be based on indirect indicators that are relatively easy to verify, although with weaker validity. In our case, these indicators could be related to applicants' family characteristics, parental status, and being beneficiaries of social safety net programs. Applicants coming from relatively large families, and/or having several children, and/or being single parents, and/or having been raised in public care, by one single parent or no parents at all, and/or receiving social safety net services could be considered as socio-economically disadvantaged compared to applicants

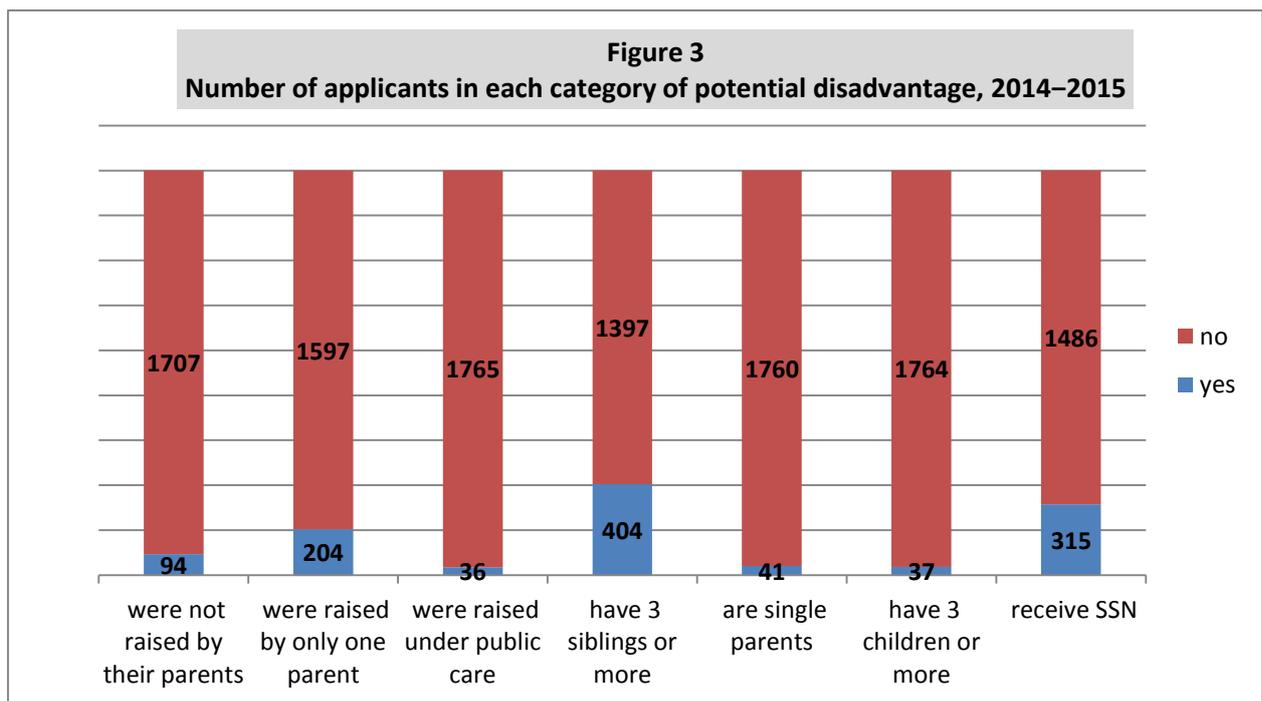
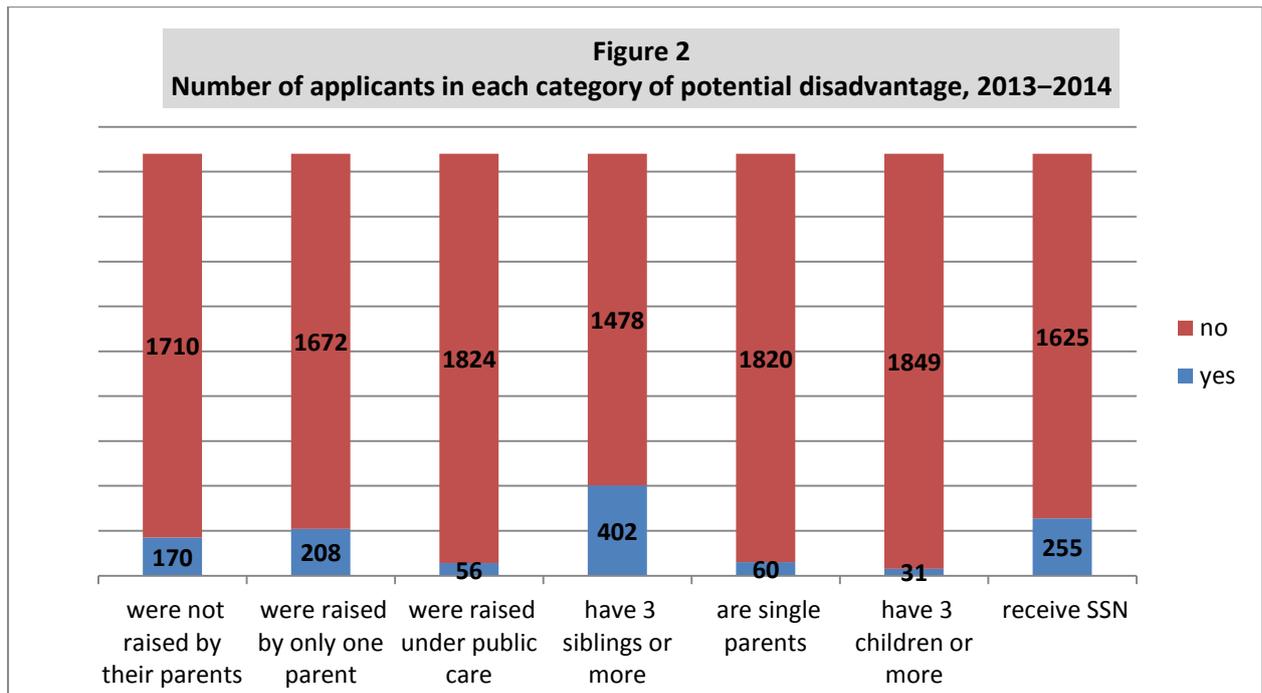
not being in these circumstances. These are all characteristics that eventually could be proven and checkable through relatively reliable official documentation.

For these reasons, in our study we consider the following criteria for determining socio-economic disadvantages:

- 1) The applicant was not raised by their parents
- 2) The applicant was raised by only one parent
- 3) The applicant was raised under public care
- 4) The applicant has 3 siblings or more
- 5) The applicant is a single parent
- 6) The applicant has 3 children or more
- 7) The applicant or his/her nuclear family is beneficiary of social safety net services

Among the RMUSP applicants for the last three years, about 45 percent (i.e., around 850 individuals) belonged to at least one of these 7 categories, and about 14 percent (i.e., around 250 individuals) belonged to at least two of these 7 categories. Figures 1–3 below show the numbers for each criterion and category, for each year analyzed.





The figures reveal that across years the most “populated” category of potentially disadvantaged is the one designating applicants’ family size: every year about 22 percent of applicants came from families with four children or more. The criterion referring to social safety nets is also among the most “populated”: about 15 percent of applicants in each year came from families benefiting from social safety nets. The least “populated” category is the one designating applicants with three or more children: only 2 percent of applicants belong to it. Therefore, while comparing averages of scores between disadvantaged applicants and the rest, these 7 categories are combined in different modes, but always with the concern for

having a sufficient sample size in each category of disadvantaged to make comparisons statistically meaningful.

For determining the difference in success in the competition between the disadvantaged and the advantaged² applicants, we compared applicants' grades from university or school, which is relevant due to the grade point average criterion's highest importance in the selection process (i.e., it weights between 35 and 40 percent), as well as their overall scores obtained in the evaluation process of the REF Scholarship Program combining the scores for all selection.

Method of Data Analysis

In our analysis we defined the category of “disadvantaged” in different ways:

- belonging to at least one of the 7 criteria of disadvantages listed above – in this case, the remaining applicants were instrumentally categorized as “advantaged”;
- belonging to at least two of the 7 criteria of disadvantages listed above – in this case, too, the remaining applicants were instrumentally considered as “advantaged”;
- belonging to particular categories among those 7 listed above – having enough representatives per country to make comparisons statistically meaningful;
- Last, we made various combinations of these categories grouping together related disadvantages, such as applicants not raised in a two-parental environment (grouping all those raised in public care, either by no parents or only one parent), or applicants having challenging parental status (grouping those having three children or more and those being single parents).

For each of these definitions of “disadvantaged”, for each country, and for each of the three academic years considered, we compared the average of school/university grades between “disadvantaged” applicants on the one hand, and their counterparts conventionally called “advantaged” applicants on the other hand. We did the same comparison for the overall score in the REF Scholarship Program selection. Once we got all needed average scores for “disadvantaged” and “advantaged” applicants, we looked for the cases when the average score for the “disadvantaged” was lower than the one for the “advantaged”. For all such cases found, we then performed a special statistical test (called t-test) to see whether the difference in average scores between “disadvantaged” applicants and “advantaged” ones is statistically significant, and not simply the result of chance.³

Findings

The data analysis revealed that with only a few exceptions, **there is no systematic difference in academic results and REF evaluation scores between the socio-economically**

² Term used for purely instrumental reasons

³ This is a standard procedure in statistical analysis when one wants to compare averages of two groups. If there is a difference in averages between 2 groups, it is necessary to check if this difference is meaningful, for which t-tests are compulsory to conduct (details on this procedure can be found [here](#)).

disadvantaged applicants on the one hand and their counterparts on the other hand. This finding does not support the expectation that applicants coming from particularly disadvantaged environments (relative to the entire group of applicants in their respective country) have lower academic or extra-curricular achievements than the applicants not facing hardships. This finding is in line with the conclusions of the previous data analysis on the topic prepared by REF Scholarship Program in 2012 (and mentioned in the first section of this paper), which also found no relevance of the socio-economic background on an applicant's chance in competition for a scholarship.

In several instances, statistically significant differences in averages have been found for particular years and or particular criteria of disadvantage. But in most cases, those differences were not reproduced systematically across years and were therefore a one-time event; in other words, they did not reveal any systematic pattern.

There were only two exceptions – Romania and Turkey – where specific patterns have been found. These cases are described below.

In **Romania**, applicants who declared that they had been **raised under public care** had lower university/school grades, on average, than their counterparts, as well as lower scores for the entire evaluation for a REF scholarship. This difference was observed through all three years, although only for two years the difference was also statistically significant (most probably, because in 2014 the number of applicants in this category was smaller than in 2013 and in 2012).

In **Turkey**, applicants being characterized by **at least one of the 7 criteria of disadvantages** listed above proved to have lower school/university grades, on average, than their counterparts. This was the case 2 years in a row (2012 and 2013), but not in the most recent year analyzed when relatively fewer students applied (2014). No pattern, however, was observed for the entire evaluation for a REF scholarship (comprising all selection criteria).

Annex 1 – Survey Questionnaire

Scholarship Applicants Survey				
question No.	mandatory/ non-mandatory	text of the question	mode of answer	choices for answers
Important note: The information requested below will serve REF for statistical purpose only. This information will be kept confidentially and will NOT be used as a criterion in the selection process.				
1	mandatory*	Spoken Languages		
1a	mandatory*	What is your mother tongue?	[dropdown menu] + [text field] if "other" is chosen as an option from dropdown menu	
1b	mandatory*	Do you speak Romani language?	[radio button]	choice 1: yes choice 2: no
	if Question 1b responded yes, then mandatory*	Please indicate the level of your knowledge of Romani		
1b_1	if Question 2 responded yes, then mandatory*	Listening comprehension	[radio button]	Choice 1: Basic Choice 2: Intermediary Choice 3: Proficient
1b_2	if Question 2 responded yes, then mandatory*	Oral communication	[radio button]	Choice 1: Basic Choice 2: Intermediary Choice 3: Proficient
1b_3	if Question 2 responded yes, then mandatory*	Reading	[radio button]	Choice 1: Basic Choice 2: Intermediary Choice 3: Proficient

1b_4	if Question 2 responded yes, then mandatory*	Writing	[radio button]	Choice 1: Basic Choice 2: Intermediary Choice 3: Proficient
1c	if Question 1b responded yes, then mandatory*	Please indicate how you learned Romani	[multiple choice] + [text field, if "other" chosen in the multiple choice list]	Choice 1: Family Choice 2: Kindergarten Choice 3: School Choice 4: Friends Choice 5: Community Choice 6: Language Courses Choice 7: Other (please specify)
1d	mandatory*	What language/languages do you speak in your family?		
1d_1	mandatory*	First language	[dropdown menu] + [text field], if "other" is chosen as an option from dropdown menu	
1d_2	optional	Second language (if applicable)	[dropdown menu] + [text field], if "other" is chosen as an option from dropdown menu	
1d_3	optional	Third language (if applicable)	[dropdown menu] + [text field], if "other" is chosen as an option from dropdown menu	
1e	optional	What other languages do you speak and at what level?		
1e_1	optional	Another Language 1	[dropdown menu] + [text field], if "other" is chosen as an option from dropdown menu	

	if 1e_1 responded, then mandatory*	Level	[radio button]	Choice 1: Basic Choice 2: Intermediary Choice 3: Proficient
1e_2	optional	Another Language 2	[dropdown menu] + [text field], if "other" is chosen as an option from dropdown menu	
	if 1e_2 responded, then mandatory*	Level	[radio button]	Choice 1: Basic Choice 2: Intermediary Choice 3: Proficient
1e_3	optional	Another Language 3	[dropdown menu] + [text field], if "other" is chosen as an option from dropdown menu	
	if 1e_3 responded, then mandatory*	Level	[radio button]	Choice 1: Basic Choice 2: Intermediary Choice 3: Proficient
2	mandatory*	Identity		
2a	mandatory*	Are you perceived by your friends as Roma?	[RADIO BUTTON]	Choice 1: By most of them Choice 2: By few of them Choice 3: Rather not Choice 4: I don't know
2b	mandatory*	What of the following characteristics do you feel as describing your affiliation to the Roma ethnic group?	[CHECK BOX + TEXT AREA]	Choice 1: Language Choice 2: Traditions and culture Choice 3: Music Choice 4: A set of values. Please mention [TEXT AREA] Choice 5: Experiences of stigma, discrimination and exclusion. Please mention [TEXT AREA] Choice 6: Other characteristics. Please mention [TEXT AREA]

2c	mandatory*	How do you prefer to identify yourself in a public context?	[RADIO BUTTON]	Choice 1: As a Roma Choice 2: As a non-Roma Choice 3: It depends on the audience Choice 4: Other. Please specify [TEXT AREA]
2d	mandatory*	How do you prefer to identify yourself in a private context (with close friends)?	[RADIO BUTTON]	Choice 1: As a Roma Choice 2: As a non-Roma Choice 3: It depends on the context Choice 4: Other. Please specify [text area]
2e	mandatory*	Please mark any Roma-related activities /projects you have been involved in:	[CHECK BOX+ TEXT FIELD]	Choice 1: I have never been involved in any Roma-related activities /project Choice 2: Roma Rights Choice 3: Roma Culture Choice 4: Roma Community Development Choice 5: Roma Youth Development Choice 6: Roma Education Choice 7: Other [TEXT AREA]
2f	if question 2e answered with choices 2,3,4,5,6,7, then question 2f should be mandatory*	Please describe your participation in Roma-related activities.	[TEXT AREA]	
3	mandatory*	Parents' Level of Education		
3a	mandatory*	Have you been raised under public care (orphanage; institution)?	[RADIO BUTTON]	choice 1: yes choice 2: no
3b	if question 3a answered "no", then question 3b mandatory*	What is the highest level of education that your mother obtained?	[RADIO BUTTON]	Choice 1: No school Choice 2: Some primary school Choice 3: Completed primary school Choice 4: Some secondary school Choice 5: Completed secondary school Choice 6: Some university Choice 7: Completed university (BA) Choice 8: Postgraduate studies (MA; PHD) Choice 9: I have not been raised by my mother

<p>3c</p>	<p>if question 3a answered "no", then question 3c mandatory*</p>	<p>What is the highest level of education that your father obtained?</p>	<p>[RADIO BUTTON]</p>	<p>Choice 1: No school Choice 2: Some primary school Choice 3: Completed primary school Choice 4: Some secondary school Choice 5: Completed secondary school Choice 6: Some university Choice 7: Completed university (BA) Choice 8: Postgraduate studies (MA; PHD) Choice 9: I have not been raised by my father</p>
<p>While completing the questions below, please keep in mind the following definition of terms:</p> <ol style="list-style-type: none"> Nuclear family - a family that may include the father, the mother, and children. Extended family - a family that may include not only parents and children but also other relatives (such as grandparents, aunts, or uncles). Social Safety Net - public or private programs seeking to prevent the poor or vulnerable population from falling below certain poverty line. In this survey "social safety net" refers to aid and social assistance programs targeting individuals or families. Dependent - a person who relies on another, especially a family member, for financial support. 				
<p>4</p>	<p>mandatory*</p>	<p>Social Safety Net</p>		
<p>4a</p>	<p>mandatory*</p>	<p>Are you or your nuclear family currently benefitting from a social safety net program?</p>	<p>[radio button]</p>	<p>choice 1: yes choice 2: no</p>
<p>4b</p>	<p>if "yes" responded in question 4a, then mandatory*</p>	<p>Is the respective safety net program provided by the public sector or the private sector?</p>	<p>[check box]</p>	<p>choice 1: Public sector (the state) choice 2: International aid. Please specify [text area] choice 3: Civil society (NGOs). Please specify [text area] choice 4: Business sector (company; firm). Please specify [text area] choice 5: Private sector (charity). Please specify [text area]</p>

<p>4c</p>	<p>if "yes" responded in question 4a, then mandatory*</p>	<p>What type of safety net benefits do you or your nuclear family receive?</p>	<p>[check box]</p>	<p>choice 1: Social welfare (money support; please specify the amount in your national currency [text field allowing only numbers] choice 2: Food-based programs choice 3: Subsidies. Please specify [text area] choice 4: Paid community work choice 5: Fee waivers and exemptions for healthcare choice 6: Fee waivers and /or scholarships for schooling choice 7: Child allocation /benefits choice 8: Other. Please specify [text area]</p>
<p>5</p>	<p>mandatory*</p>	<p>Family characteristics</p>		
<p>5a</p>	<p>mandatory*</p>	<p>Do you currently live with your family?</p>	<p>[radio button]</p>	<p>choice 1: yes, I live with my nuclear family choice 2: yes, I live with my extended family choice 3: no</p>
<p>5b</p>	<p>mandatory*</p>	<p>Were you raised by your parent(s)?</p>	<p>[radio button]</p>	<p>Choice 1: yes Choice 2: no</p>
<p>5c</p>	<p>if 5b responded with yes, then this question is mandatory*; otherwise should be invisible</p>	<p>Were you raised by one or by two parents?</p>	<p>[radio button]</p>	<p>choice 1: I was raised only by my mother choice 2: I was raised only by my father choice 3: I was raised by both my mother and my father</p>
<p>5d</p>	<p>if choice 1 in question 5c, then enable mandatory* question 5d; in this case, 5e and 5f will be invisible</p>	<p>Is your mother alive?</p>	<p>[radio button]</p>	<p>Choice 1: yes Choice 2: no</p>
<p>5e</p>	<p>if choice 2 in question 5c, then enable mandatory* question 5e; in this case, 5d and 5f will be invisible</p>	<p>Is your father alive?</p>	<p>[radio button]</p>	<p>Choice 1: yes Choice 2: no</p>

5f	if choice 3 in question 5c, then enable mandatory* question 5f; in this case, 5d and 5e will be invisible	Are your parents alive?	[radio button]	Choice 1: yes Choice 2: no Choice 3: only my mother is alive Choice 4: only my father is alive
5g	mandatory*	How many siblings do you have?	[radio button]	choice 1: 0 choice 2: 1 choice 3: 2 choice 4: 3 choice 5: 4 choice 6: 5 choice 7: other. Please specify [text field]
5h	mandatory*	How many of your siblings are currently below 18 years old?	[radio button]	choice 1: 0 choice 2: 1 choice 3: 2 choice 4: 3 choice 5: 4 choice 6: 5 choice 7: other. Please specify [text field]
5i	mandatory*	Do you have children?	[radio button]	Choice 1: yes Choice 2: no
5j	mandatory* if "yes" chosen in 5h	How many children do you have?	[radio button]	choice 1: 1 choice 2: 2 choice 3: 3 choice 4: 4 choice 5: other. Please specify [text field]
5k	mandatory* if "yes" chosen in 5h	Do you have children with disabilities?	[radio button]	Choice 1: no Choice 2: yes

5l	mandatory* if "yes" chosen in 5k	How many children with disabilities do you have?	[radio button]	choice 1: 1 choice 2: other. Please specify [text field]
5m	mandatory*	What is your marital status?	[RADIO BUTTON]	Choice 1: Single Choice 2: Married Choice 3: Separated Choice 4: Divorced Choice 5: Widowed
6	mandatory*	Housing and Facilities		
6a	mandatory*	Who owns the home in which you live?	[RADIO BUTTON]	Choice 1: owned by me Choice 2: owned by my parent(s) Choice 3: owned by a relative Choice 4: the place I live in is rented
6b	mandatory*	What is the type of your living place?	[RADIO BUTTON] + [text field]	Choice 1: flat Choice 2: house Choice 3: other: [text field]
6c	mandatory*	What is the composition of your household?	[text field]	Number of adults: [text field] Number of children under 18: [text field]
6d	mandatory*	What is the structure and size of your house?		
6d_1	mandatory*	____ rooms	[text field]	
6d_2	mandatory*	____ square meters in total	[text field]	

6e	mandatory*	Where is your household located?	[RADIO BUTTON]	Choice 1: rural area Choice 2: urban area
6e_1	this question should be activated as mandatory* if choice 1 in question 6e	Is your household located within the locality?	[RADIO BUTTON]	Choice 1: Yes. My household is located within the locality. Choice 2: No. My household is at the outskirts. Choice 3: No. My household is distanced from the locality.
6e_2	this question should be activated as mandatory* if choice 3 in question 6e_1	At what distance from the locality is your house situated (meters)?	[text field]	
6e_3	this question should be activated as mandatory* if choice 2 in question 6e	Is your household located within the city?	[RADIO BUTTON]	Choice 1: Yes. My household is located within the city. Choice 2: No. My household is at the city outskirts Choice 3: No. My household is some distance from the city
6e_4	this question should be activated as mandatory* if choice 3 in question 6e_3	At what distance from the city is your house situated (meters)?	[text field]	
6f	mandatory*	Facilities and services in the neighborhood		
6g	mandatory*	Do you have public transportation means near your household?	[RADIO BUTTON]	Choice 1: yes Choice 2: no

6h	this question should be activated as mandatory* if choice 2 in question 6g	At what distance is the nearest public transportation station from your household? (meters)	[text field]	
6i	mandatory*	Is there a medical dispensary near your household?	[RADIO BUTTON]	Choice 1: yes Choice 2: no
6j	this question should be activated as mandatory* if choice 2 in question 6i	At what distance is the nearest medical dispensary from your household? (meters)	[text field]	
6k	mandatory*	Do you have access to internet at home?	[RADIO BUTTON]	Choice 1: yes Choice 2: no
7	mandatory*	Family Income		
In the following 2 questions please indicate the amounts in your national currency				
7a	mandatory*	What is the monthly average amount of your family income?	[text field]	
7b	mandatory*	What is the monthly average amount of your family expenses?	[text field]	
7c	mandatory*	How many adults contribute to the monthly income in your nuclear family?	[text field]	
7d	mandatory*	Who in your family (nuclear and/or extended) contribute to the monthly family income?	[check box]	choice 1: grandmother choice 2: grandfather choice 3: mother choice 4: father choice 5: spouse/partner choice 6: myself choice 7: sibling(s) choice 8: uncle(s) choice 9: aunt(s) choice 10: nobody choice 11: other. Please specify [text field]

7e	mandatory*	How many adults in your family are officially employed?	[text field]	
7f	mandatory*	Is there any member of your family (nuclear and/or extended) working abroad and supporting your family?	[radio button]	Choice 1: yes Choice 2: no
7g	if question 7e responded with "yes", then this question shall be mandatory*; otherwise, it should be invisible	How many members of your family (nuclear and/or extended) are working abroad and supporting your family?	[text field]	
7h	mandatory*	How many dependents are there in your family?	[radio button]	choice 1: 0 choice 2: 1 choice 3: 2 choice 4: 3 choice 5: 4 choice 6: 5 choice 7: 6 choice 8: 7 choice 9: other. Please specify [text field]
7i	mandatory*	Do you have dependents with disabilities in your family?	[radio button]	Choice 1: yes Choice 2: no
7j	if 7i responded with "yes", then this question should appear as mandatory; otherwise it should be invisible	How many dependents (other than children) with disabilities are there in your family?	[radio button]	choice 1: 1 choice 2: 2 choice 3: other. Please specify [text field]
7k	mandatory	Has any of the members in your household received a bank loan?	[radio button]	Choice 1: No Choice 2: Yes. I currently have a bank loan. Choice 3: Yes. My spouse /my partner currently has a bank loan. Choice 4: Yes. My parent(s) currently have a bank loan. Choice 5: Yes. My sibling(s) currently have a bank loan.