Chapter 7 Multiple Discrimination and Inequalities: An Empirical Investigation

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7.1 Introduction

During the last 30 years scientific literature discrimination is widely spread over many topics and disciplines such as sociology, economics, cultural studies, statistics, health care access, human rights, education, the labour market and the welfare state. At the same time the research focus, which is very often interdisciplinary, has been increasingly targeted. This is happening mainly because no matter the background or the cause discrimination (prejudice, statistical unintentionality) there are social groups with common characteristics which are subject to discrimination on a traditional basis (Romei & Ruggieri, 2013). These similarities may vary broadly (age, gender) or may be defined narrowly (ethnic origin, religious beliefs, sexual orientation). The extent of the definition is usually the marker under law for one group or another to be listed as a protected group or a group that needs protection because it is vulnerable against discrimination. It is not surprising that many vulnerable social groups which face discrimination on one ground or another are also the research focus in inequality studies and of course not by the position of defined control groups. Especially in the form of multiple discrimination it can be argued that inequality plays a special role concerning the reproduction of vulnerability. There are lessons to be learned by the study of structural inequalities as they highlight the need for public policy addressing deprivation and exclusion in the economic, social, and cultural spheres simultaneously and over a long period (Dani & de Haan, 2008). For now, we attempt to measure discrimination as we measure inequality, because it matters. It matters, because not only are

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they unacceptable in their current level, but because things can be worse if society's tolerance against them increases over time (United Nations, 2001). Multiple inequalities can undermine many schemes of social policy, while multiple discrimination can undermine the foundations of social policy.

This paper attempts to contribute new empirical evidence calling for more fact-based investigation and more targeted policy intervention. Our analyses are based on the inequality theory, as well as on new and reliable data provided by the National Centre for Social Research in Greece (EKKE), which conducted a field study specialised in experiences and perspectives of multiple discrimination. Under the title "Tackling multiple discrimination in Greece: Delivering equality by active exploration and enabling policy interventions", a funded European research program, new data on discrimination have been made available in order to raise awareness and promote institutional innovations against discrimination on the grounds of gender, age, national or ethnic origin, religious beliefs, disability and sexual orientation. The European Union Treaty of Amsterdam in 1997 and its consequent Directives have implemented the same grounds for legal action, while EU member states carry out the ongoing task to disseminate information about specific state anti-discrimination laws and regulations (Walby, Armstrong and Strid, 2012; Sarris, 2014). This paper uses this dataset in order to explore similarities and differences among individuals who are part of vulnerable social groups while comparing them also with individuals out of this particular sample. Within the inequality framework we examine different aspects of discrimination, in its self-perceived forms; single or multiple.

Personal information, demographic characteristics and socioeconomic statuses are analysed exploring the extent of (multiple) discrimination in Greece. Data are open to interpretation, but certain trends are easily accessible. Being or being considered to be part of a vulnerable social group does not necessarily mean an experience of discrimination; especially as concerns its multiple or intersectional form. Individuals among various vulnerable social groups may have common needs, but they do not have the same kind of resources available one by one. Several critiques have already been addressed against approaches on multiple discrimination that are based on the assumption of equivalence among social groups (Verloo, 2006). Different individual characteristics and different socioeconomic backgrounds draw a picture far from uniformity. In fact, all these different patterns may deliver quite different outcomes even in the same social settings.

7.2 Sample description and data definitions

The questionnaire for this particular fieldwork was designed by EKKE's researchers in order to investigate experiences and perspectives of multiple discrimination in Greece. The sample for this exercise has two parts: one derived from participants who belong into certain Vulnerable Social Groups (VSG) and another one is used as a Control Group (CG). Participants from both subsamples filled in the same questionnaire during 2017-18 in Athens, Greece. After data cleaning procedures have been concluded, the total sample size is 615 individual respondents (VSG: 510 & CG: 105). Demographic, as well as socioeconomic characteristics, vary significantly between these two subsamples. It should be noted that this sample is not based on random selection, but it is in parallel to established procedures followed in previous surveys in the same context conducted by EKKE (Balourdos 2012; Balourdos, 2015; Tsiganou, 2015).

There are several modules in the questionnaire which we attempt to explore for the purpose of this paper. Particularly those targeted on discrimination/multiple discrimination experiences, on views or perspectives of discrimination in Greece, and, of course, those with demographic and socioeconomic characterristics. The variables we utilise in this exercise derive from the following lists:

- Gender (male, female, transgender)
- Age (16 plus)
- Marital status (single, married, separated, divorced, widowed, in civil partnership)

- Family composition (adults and children in the household)
- Number of children
- Nationality (without answer-categories)
- Religion (Christian, Muslim, Hindu, Buddhist, Jewish, atheist, other)
- Sexual orientation (heterosexual, gay/lesbian, bisexual)
- Special needs/disability (yes/no)
- Chronic condition (yes/no)
- Education (None, Primary school (6 years), Secondary school (9 years), Secondary Vocational Training, Lyceum (12 years), Post-secondary vocational training, Higher education)
- Years in Education
- Employment status (unemployed for less than 12 months, unemployed for more than 12 months, temporary job; not a stable work, part time employment, full time employment, homemaker, pensioner, other)
- Family income (up to 4,500 Euros, between 4,501 and 6,000 Euros, between 6,001 and 12,000 Euros, between 12,001 and 20,000 Euros, between 20,001 and 30,000 Euros, between 30,001 and 40,000 Euros, more than 40,000 Euros)

In the total sample, the average age of female respondents is 46.4, while the male respondent's average age is 40.6 years old; the youngest are 16 years old and the oldest 90 years old (agerelated data are available for 96% of the sample). Gender is represented almost equally in this non-random sample (females: 50.4% and males: 49.3% plus 2 transgender cases). Almost 42% of them are married, while another 42% are not married and 6.5% are divorced. According to the relevant question, 31% of the respondents have no children, while 17.4% have 3 or more children. About one fifth of the sample lives alone and another fifth lives with a spouse and two children; 6.5% of the family compositions refer to a single parent family. About 9% of the respondents have completed just primary education and 2.3% never went to school, but the mean value of the years spent in

education is 12. The majority of the sample lies heavily on long-term unemployment (25.3%), while another 9% is unemployed for less than 12 months. In the same line, almost 40% are employed (full-time, part-time, temporary jobs). Pensioners represent 13% of the sample and homemakers are less than 3%. About 60% of the respondents have pension insurance. Almost 19% of the respondents (who answered the specific question) suffer from a chronic condition, while 9% have special needs. The majority of the respondents are Christian (83.5%), Greek (81%) and Heterosexual (94%). This also means that into the total sample, and especially in the VSG subsample, there is strong evidence of out-of-the-norm individuals.

While the total sample demographics & characteristics vary between the subsamples at certain topics covered by the module about single and/or multiple interviews. the discrimination is not one of them (see below for the variables derived by these modules). In Table 7.1 half of the VSG respondents reported that they have experienced (single) discrimination without altering the frequency of the statement which stands for the total sample. Similarly, the frequency is almost identical between the VSG sample and the total sample as concerns the experience of multiple discrimination. Of course, this may be considered as an effect of the two very different subsample sizes and the absence of specific weights, but a closer examination reveals that the two groups (VSG & CG) also have very similar affirmative frequencies on the same questions: 53.1% & 48.5 respectively as concerns (single) discrimination and 26.8% & 24.5% respectively as concerns multiple discrimination.

- Respondents' experience of discrimination (yes/no)
- Respondents' experience of multiple discrimination (yes/no)
- Respondents' perspectives about occurrences of multiple discrimination in various areas of interest in Greece (employment, education, access to health services, dealing with public services, bank transactions, legal system,

- public transportation, use of common areas, use of recreational areas)
- Respondents' perspectives about the degree to which multiple discrimination problems exist in Greece (to a very small degree, to a small degree, to a moderate degree, to a large degree, to a very large degree)

Table 7.1: Respondents' experiences of discrimination and multiple discrimination

	Have been discriminated against					Have suffered multiple discrimination			
	VSG sample		Total sample		VSG sample		Total sample		
	N.	%	N.	%	N.	%	N.	%	
No	235	46.8	287	47.6	360	73.2	431	73.6	
Yes	267	53.2	316	52.4	132	26.8	155	26.4	
Total	502	100	603	100	492	100	586	100	

Multiple Discrimination Questionnaire: Total sample missing values for 12 & 29 of 615 cases

The following Figure 7.1 presents the attitudes towards multiple discrimination problems as they exist in Greece according to the respondents' statements, by three different sample groups. It is evident that no clear distinction can be made based solely on the views that the three groups have towards multiple discrimination problems in the country. The views expressed in every case acknowledge the problem as an important one in the current social circumstances without significant differences.

36,2 31,5 30,3 22,2 21.7 119.4 6,7 6,7 6,8 to a very large to a small to a moderate to a large to a very small degree degree degree degree degree ■ Total sample ■ Vulnerable Social Groups ☐ Control Group

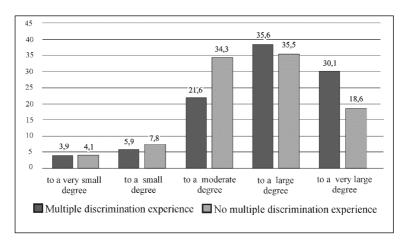
Figure 7.1: Degree to which multiple discrimination problems exist in Greece according to the respondents' perspectives (%)

Multiple Discrimination Questionnaire: N=594, N=491, N= 103 by separate sample

7.3 Research question & initial findings

The respondents' views may well be differentiated when accounting for the fact (or its absence) of multiple discrimination experienced (or not) by certain respondents. The Figure below represents an unequal degree between those who have suffered multiple discrimination and those who have not. The problem exists to a large or very large extent for almost 70% of the former and for about 55% of the latter (the difference concerning the acknowledged degree of the problem between these groups is statistically significant at 1‰).

Figure 7.2: Degree to which multiple discrimination problems exist in Greece according to the respondents' perspectives and experiences (%)



Multiple Discrimination Questionnaire: N=153, N=414 by multiple discrimination/non-experience

It should be noted that a unique definition about multiple discrimination is not a universal characteristic in the relevant literature. As an issue it has remained open to debate for many decades and by many scientific disciplines and traditions. From inequality studies to human rights advocacy and from fieldwork research to EU legislation, discrimination on more than one ground has acquired many working definitions. Very often different terms are used interchangeably, even when they differ significantly. When researchers define discrimination "multiple" or "compound" or "intersectional" or "additive" or "accumulative", they refer to a discrimination incident, which occurs due to more than one ground, context and time (Sheppard, 2011). More often than not, we found various working examples rather strict scientific definitions under the observation of multiple discrimination. Down this line, discrimination may occur individual when an discrimination on at least one ground and/or in at least one context at the same time or not, and this can be observed

separately or not. This working definition may serve the simplest research cases (single discrimination), as well as the most complex ones (multiple). Of course, it is not to be forgotten that fieldwork surveys are based on self-perceived events and that they may facilitate the research procedure in some ways (mostly technical), but may pose certain obstacles on specific policy design proposals.

The fact is that being part of a particular vulnerable social group is not self-explanatory in general as concerns certain experiences of discrimination (and much less of multiple discrimination), and stresses two important questions: (a) which factors and to what extent may they co-influence this kind of negative experience, and (b) the significance that the socioeconomic background of the individuals may have towards or out of (multiple) discrimination. Our exercise attempts to address these issues through an empirical investigation. The quantitative investigation of our research questions is based on a thorough analysis of differentiation, discrimination and inequality; in particular, group differences and group inequalities are based on selected demographic and socioeconomic characteristics. According to Table 7.2, 47.3% of the total sample has not suffered any kind of discrimination. On the opposite side, 26.5% of them suffered multiple discrimination. In between there is a 26.2%, which have been discriminated against, but have not suffered multiple discrimination. The output of this selfperceived experience solely for the VSG is identical, but for its sample size.

Table 7.2: Single and multiple discrimination experiences (%)

3		Have suffered multiple discrimination				
Have been discriminated against		No Yes Total				
No	N	276	0	276		
	%	47,3	0	47,3		
Yes	N	153	155	308		
	%	26,2	26,5	52,7		
Total	N	429	155	584		
	%	73,5	26,5	100		

Multiple Discrimination Questionnaire: Total sample missing values for 31 of 615 cases

Table 7.3: Respondents' views about occurrences of multiple discrimination in various areas of interest in Greece, by

discrimination experience (%)

"Very often" occurrence in	Have suffered multiple discrimination	Have been discriminated against	No discrimination experience	Total sample
Employment	49.0	41.8	27.0	34.4
Education	32.2	24.6	16.0	20.3
Access to health services	32.0	27.2	17.7	22.4
Dealing with public services	29.0	27.2	17.9	22.5
Bank transactions	18.4	15.3	8.6	12.0
Legal system	30.2	27.2	18.8	23.0
Public transportation	24.8	23.3	15.5	19.4
Use of common areas	20.4	20.1	9.8	15.0
Use of re- creational areas	16.9	14.0	6.5	10.6

Multiple Discrimination Questionnaire: Total sample missing values for 25 of 615 cases

To a great extent, differences in experience also lead to differences in perspective. Respondents' views about how often multiple discrimination occurs in various areas of interest in Greece is not an exception. For example, 34.4% of the sample find the labour market to be the most sensitive area in which

multiple discrimination occurs very often, but this evidence varies dramatically. Those who have suffered multiple discrimination raise this particular point of view to almost 50%, while those who have not suffered any kind of discrimination limit the same perspective to almost 25%. Table 7.3 represents these gaps among the distinct groups according to their varying (self-perceived defined) discrimination experience.

7.4 Method & empirical evidence

The first step in our empirical analysis is to estimate two maximum-likelihood probability models reporting marginal effects on selected dependent variables. The latter refer to the categorical variables self-perceived dichotomous of discrimination (single & multiple). By this approach we examine the effect in the probability for an infinitesimal change in each independent binary variable (Baum, 2016; Rabe-Hesketh and Everitt, 2004; Agresti, 2002). Table 7.4 presents two models in parallel: in each model the dependent variable is binary (yes/no), while the first examines the probability of single discrimination (Y=1) and the second the probability of multiple discrimination (Y=1).

The effect of "gender" (categorical variable, male=1, female=2, transgender=3) is one of the most significant in both cases. It affects the probability of single discrimination positively (meaning for worse in this case of negative outcome), and in the opposite direction for the probability of multiple discrimination experience. This finding becomes clearer examining the influence of the "female" variable (female=1, not female=0). The direction of the influence is altered for the gender in the specific meaning that the females in the sample are more likely to have suffered multiple (and comparatively no single) discrimination than the non-females. Age (variable with values from 16 to 90) may influence moderately the probability to have been discriminated against, but not so much in significance as concerns multiple discrimination. The same direction and significance stand for the age group of the youngest part of the sample (age group: 16-25). "Marital status" (categorical variable

for single, married, separated, divorced, widowed, in civil partnership individuals) influences the probability in the same direction in both cases; the latter categories of the variable are closer to being discriminated than the former. The "religion" variable is also used in its categorical form (Christian, Muslim, Hindu, Buddhist, Jewish, atheist, other) and, while it is not significant as concerns the probability of single discrimination, it appears to be significant as concerns multiple discrimination. The "sexual orientation" variable (also a categorical one: heterosexual, gay/lesbian, bisexual) is very significant and in positive direction for both probabilities of discrimination. The model did not fit well an exclusive "transgender" variable when tested specifically, but it is fitted well when the issue of orientation is examined in particular. The "family income" variable (used a binary one with a cut-off at "up to 4.500 Euros" against all other non-missing cases) is also significant and influences positively the probability of having discrimination experiences. The employment status of the respondents is represented by three distinct binary variables ("unemployed for more than 12 months", "temporary job or not a stable work", "pensioner"). The first two affect positively the probabilities of being discriminated in each form, but the last one has a different effect. Being a pensioner (i.e. receiving a monthly old-age benefit by the state) in this sample leads away from having a single or multiple discrimination experience. The set of variables used in these models without apparent strong effects on the selected probabilities are the number of children, (eight mutual exclusive groups of) nationality, the cases of chronic conditions, and education attainment for secondary vocational training.

The next step in this exercise is to estimate odds ratios (OR) and relative ratios (RR) for specific socioeconomic variables. The theme for this analysis is centred on two items: income scales and employment status. This way we can proceed with the estimation techniques of logistic regression and multinomial logistic regression when dealing with categorical data (Gould, 2000). These data directly refer to self-perceived single and/or multiple discrimination without interference by any other

variable as in the model above. Odds ratio is a widely acknowledged statistical technique as concerns the examination of whether or not the probability of 0 or 1 (in our analysis a negative: discrimination versus a positive: non-discrimination outcome) is the same in two distinct socioeconomic groups when being compared (Long and Freese, 2001; Tarling, 2009). Furthermore, every single OR is based on the comparison of the relative frequency of a single event (experience of discrimination) between two groups, which means that the rest of the distribution is not considered anymore.

For the estimations in Tables 7.5 and 7.6 we use logistic regressions without weights reporting odds ratios instead of coefficients. As we can see, the probability is always against the comparatively lower income groups. The higher (or lower than 1) the value of odds ratios, the greater the degree of inequality between the two groups. Its absence (i.e. equality) would mean odds ratio of 1. Nevertheless, it should be noted that as we move towards higher income cut-offs, the OR is getting lower, as well as its statistical significance. The "family income" variable we use is not a continuous one, but instead a categorical one based on the available answer categories of the questionnaire, and this poses severe limitations in the particular examination. Nonetheless it is clear that the effect of income is strong and negative for individuals with comparatively lower income (especially under the cut-off of 12,000 Euros).

Table 7.4: Estimated marginal effects on the probability of "have been discriminated against" and/or "have suffered multiple discrimination", total sample

Variables	Model 1: Y=Prob (have been discriminated against)			Model 2: Y=Prob have suffered multiple discrimination)			
	Margina l effects	Standar d Error	P> z	Margina l effects	Standar d Error	P> z	
Gender	1.0791***	0.2715	0.000	- 0.7962***	0.2074	0.000	
Female	0.8045***	0.1219	0.000	0.6806***	0.1449	0.000	
Age	-0.0075**	0.0028	0.006	-0.0016	0.0021	0.459	
Age group 16- 25	-0.2024*	0.0929	0.036	-0.0690	0.0680	0.355	
Marital status	0.0510*	0.0238	0.032	0.0454**	0.0169	0.008	
Family composition	0.0018	0.0176	0.917	0.0076	0.0143	0.598	
Number of children	-0.0005	0.0011	0.651	-0.0004	0.0009	0.666	
Religion	0.0105	0.0187	0.575	0.0277*	0.0134	0.039	
Nationality	-0.0086	0.0163	0.595	-0.0091	0.0143	0.525	
Sexual orientation	0.3455**	0.1327	0.009	0.2231**	0.0731	0.002	
Chronic condition	-0.0787	0.0730	0.281	-0.0444	0.0579	0.442	
Sec Vocational Training	0.2034	0.1350	0.178	0.1375	0.1494	0.306	
Family income up to 4,500€	0.1207*	0.0562	0.034	0.0952*	0.0479	0.041	
Long-term unemploymen t	0.1353*	0.0665	0.047	0.1334*	0.0612	0.020	
Temporary work	0.2217*	0.0826	0.016	0.1655*	0.0908	0.043	
Pensioner	-0.2344*	0.0976	0.023	-0.1637*	0.0537	0.026	
Vulnerable social group	0.0205	0.0761	0.787	-0.0322	0.0671	0.621	

Multiple Discrimination Questionnaire: Statistical significance according to p-values at 5% (*), 1% (**), 0.1% (***), N=401 & 390 respectively

Table 7.5: Multiple discrimination experience by income scale odds ratio (reference group: the lower scale), vulnerable social group and total samples

	Have suffered multiple discrimination						
Family income	'	/SG sample		Total sample			
(in Euro)	Odds ratio	Standard Error	P> z	Odds ratio	Standard Error	P> z	
Less and more than 4,500	2.119***	0.4807	0.001	1.866**	0.3941	0.003	
Less and more than 6,000	1.762**	0.4047	0.014	1.670**	0.3497	0.014	
Less and more than 12,000	1.664	0.5348	0.113	1.520	0.4031	0.114	
Less and more than 20,000	0.970	0.4184	0.944	1.045	0.3675	0.901	
Less and more than 30,000	2.247	2.4406	0.456	1.442	0.9429	0.576	

Multiple Discrimination Questionnaire: OR statistical significance according to p-values at 5% (*), 1% (**), 0.1% (***), N=407 & 483 respectively

Table 7.6: (Single) Discrimination experience by income scale odds ratio (reference group: the lower scale), vulnerable social group and total samples

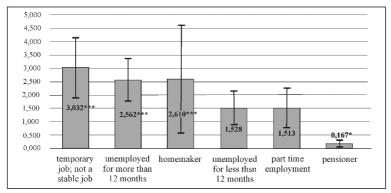
	Have been discriminated against							
Family income	VSG sample			Total sample				
(in Euros)	Odds ratio	Standard Error	P> z	Odds ratio	Standard Error	P> z		
Less and more than 4,500	2.094***	0.4351	0.000	1.838***	0.3513	0.001		
Less and more than 6,000	1.458	0.2889	0.057	1.419	0.2559	0.052		
Less and more than 12,000	1.601	0.4132	0.068	1.610**	0.3474	0.027		
Less and more than 20,000	0.973	0.3651	0.942	1.223	0.3650	0.501		
Less and more than 30,000	0.886	0.6827	0.876	1.439	0.7368	0.478		

Multiple Discrimination Questionnaire: OR statistical significance according to p-values at 5% (*), 1% (**), 0.1% (***), N=415 & 497 respectively

For the estimations in Figures 7.3 and 7.4 we use multinomial logistic regressions without weights reporting relative ratios. As in the case of OR, the focus is on two pairs of observations for each variable under examination (Hao and Naiman, 2010). The aim is to examine whether the probability of negative versus positive outcome is the same in each pair. Each RR takes values higher than 0 and lower or higher than 1 which is the focal point. As in the OR, when the RR is equal to 1, there is no significant difference between the groups as concerns the outcome in question. The values below or above 1 may also interpret the direction of the inequalities according to which group is set as the reference group in any particular exercise.

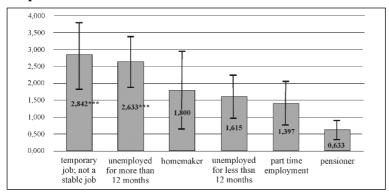
The sets of relative ratios below compare the group of individuals with full-time employment against six other groups with different employment status. The picture is very similar in both cases of multiple and single discrimination, while our focus here lies on the multiple form. Those individuals who have temporary jobs or not stable work, have very higher probabilities to experience multiple discrimination as compared to those of individuals with full-time employment. The group of individuals with long-term unemployment is second in line, but with also very high probabilities to face multiple discrimination in comparison with the reference group. The examination is inconclusive as concerns the groups of homemakers, the unemployed for less than 12 moths, and part-time employees due to low statistical significance. On the other hand, the group of pensioners in this sample has better probabilities not to be discriminated against than the reference group. These results are in line with what is already observed by the econometric models above.

Figure 7.3: Multiple discrimination experience by employment status relative ratio (reference group: full-time employment), vulnerable social group sample



Multiple Discrimination Questionnaire: RR statistical significance according to p-values at 5% (*), 1% (**), 0.1% (***), N=449

Figure 7.4: Multiple discrimination experience by employment status relative ratio (reference group: full-time employment), total sample



Multiple Discrimination Questionnaire: RR statistical significance according to p-values at 5% (*), 1% (**), 0.1% (***), N=521

7.5 Concluding remarks

In this paper we examined specific aspects of differentiation, inequalities, and discrimination among various socioeconomics

groups. The sample of individuals we analysed mainly consists of persons categorised by the sampling process as members of various vulnerable social groups. In our analyses, we argued that belonging to a vulnerable social group does not necessarily mean an experience of discrimination; let alone an experience of multiple discrimination. This was evident from the beginning and this is why it is presented as our first concluding remark. In fact, there is one more reason for this. It should be noted that discrimination experiences and specific vulnerable social groups are not a tautology. They are an issue of research interest as to when, how and under what circumstances the one relates directly or indirectly to the other. Individual characteristics and socioeconomic backgrounds play a key role especially when we put multiple discrimination in parallel to particular structures of inequality. The fieldwork conducted in Greece concerning the survey of multiple discrimination is invaluable. Nonetheless, there are at least three directions for the scientific investigation in the field to move forward. The evidence derived by the income and the labour market examination is very useful, and it would be even more useful if future quantitative surveys in the field managed to include more data in structured factors, such as wealth, debt, property, housing etc. Another way forward is perhaps a follow-up, because the need for survey discrimination is unfortunately a need with a given past and an uncertain future. Finally, cross-country comparison may be the most valuable addition to the relevant literature and examination in the future. Unfortunately, these suggestions for the future also highlight a few of the major weaknesses of this paper (for example, static, non-comparable evidence). Furthermore, we could summarise the following concluding remarks based on the evidence of our empirical investigation:

 The examination of multiple discrimination data as concerns the experiences and perspectives of the respondents reinforce the evidence that there are certain similarities, but also great differences among individuals belonging to the same social groups. While individual characteristics interplay with socioeconomic backgrounds,

- our investigation was able to grasp particular outcomes if not the processes which may lead to them.
- Physical characteristics as age and gender have a strong effect on the probabilities of (multiple) discrimination.
 The same also stands for religion, marital status and sexual orientation especially for people out of the norm.
- The socioeconomic status plays an important role in having or not having a (multiple) discrimination experience. Lower statuses cannot be expected to confront the problem effectively. The effects of income and employment are very strong especially when the lower parts of the distributions are taken into account. At the same time, the educational attainment levels seem to not affect in any direct way the probabilities for discrimination and perhaps this is the most disconcerting evidence.
- The use of self-perceived data could pose serious obstacles in the analysis of discrimination, but evidence suggests otherwise. The results are very similar to what is expected by an analysis of poverty and/or structured inequality concerning the poorer and the most disadvantaged groups.

Bibliography

Agresti, Alan (2002): *Categorical data analysis*. New York: Wiley-Interscience, (Chapter 6).

Balourdos, Dionysis (2015): "Young and Women Muslim Immigrants and Roma Entrepreneurs: Indices and Data for Testing Hypotheses". In: Balourdos, Dionysis, Tsiganou, Joanna (Eds.): Combating Discrimination in the Field of Entrepreneurship: Women and Young Roma and Muslim Immigrants (pp. 167-201). Athens: Papazisis Publishers & National Centre for Social Research.

Balourdos, Dionysis, (2012): "Theories of Discrimination". In: Balourdos, Dionysis, Mouriki, Aliki (Eds.): *Combating Discrimination in Greece: State of the Art, Challenges and Policy Interventions* (pp. 23-50). Athens: Papazisis Publishers & National Centre for Social Research.

- Baum, Christopher (2006): An Introduction to Modern Econometrics Using Stata. Texas: Stata Press, (Chapter 10).
- Dani, Anis, de Haan, Arjan (2008): "Social Policy in a Development Context: Structural Inequalities and Inclusive Institutions". In: de Haan, Arjan, Dani, A. (Eds.): *Inclusive States: Social Policy and Structural Inequalities*. Washington DC: World Bank Publications, (Chapter 1).
- Hao, Lingxin, Naiman, Daniel (2010): Assessing Inequality. California: Sage, (Chapter 4).
- Gould, William (2000): "Interpreting logistic regression in all its forms". In: *Stata Technical Bulletin*, STB- 53, pp. 19-29.
- Long, Scott, Freese, Jeremy (2001): Regression Models for Categorical Dependent Variables using Stata. Texas: Stata Press, (Chapter 4).
- Rabe-Hesketh, Sophia, Everitt, Brian (2004): *A Handbook of Statistical Analyses using Stata*. Florida: CRC Press Company, (Chapter 6).
- Romei, Andrea, Ruggieri, Salvatore (2013): "A multidisciplinary survey on discrimination analysis". In: *The Knowledge Engineering Review* 29, pp. 582-638.
- Sarris, Nikos (2014): "Evaluation of the legislative framework for combating discrimination in Greece, with emphasis to discriminations in the labour market". In: Balourdos, Dionysis et al. (Eds.): *Vulnerable Social Groups and discrimination in the labour market*. (pp. 181-231). Athens: Papazisis Publishers & National Centre for Social Research.
- Sheppard, Coleen (2011): Multiple Discrimination in the World of Work, Global Report on Equality at Work. Geneva: International Labour Organization.
- Tarling, Roger (2009): Statistical Modelling for Social Researchers: Principles and practice. London: Routledge, (Chapter 5).
- Tsiganou, Joanna (2015): "The Subject Matter of Research". In: Balourdos, Dionysis, Tsiganou, Joanna (Eds.): Combating Discrimination in the Field of Entrepreneurship: Women and Young Roma and Muslim Immigrants. (pp. 61-100). Athens: Papazisis Publishers & National Centre for Social Research.

- United Nations (2001): *Human Development Report 2001*. New York: Oxford University Press, (Chapter 1).
- Verloo, Mieke (2006): "Multiple Inequalities, Intersectionality and the European Union". *European, Journal of Women's Studies*. SAGE Publications, 13 (3), pp.211-228.
- Walby, Sylvia, Armstrong, Jo, Strid, Sofia (2012): "Intersectionality: Multiple Inequalities in Social Theory". In: *Sociology* 46 (2), pp. 224 –240.