

# Assessing the effect of discrimination on perceived wellbeing of immigrants in Italy: A counterfactual approach

## Abstract

In this study we aim to evaluate how the status of citizenship, for the immigrants in Italy, influences their perception of wellbeing, including both cognitive and emotional domain. To this end, analysing the Eusilc-Italy data, we try to disentangle the effect of discrimination due to the citizenship status from the effect of the individual skills on the individual wellbeing. In doing this, we follow a counterfactual approach by applying the Blinder-Oaxaca decomposition. As a result, we found that the difference in wellbeing perception between immigrants and natives, favourable to the latter, is not determined, with prevalence, by the individual skills and by the related “reference labour income”, but it mainly depends on a discrimination effect due to the citizenship status.

**Key words:** Job Satisfaction, Life Satisfaction, Perceived Wellbeing, Blinder-Oaxaca Decomposition, Reference Income.

## INTRODUCTION

In the last years, analysts paid particular attention to the factors that influence the immigrants’ perception of their subjective wellbeing and position in society. To this regard, a relevant research question is to quantify to which extent the gap in subjective wellbeing between natives and immigrants, generally unfavourable to the latter, is related to the different individual skills, and to which extent is depending on the membership of the subject in one of the two sub-groups (see, among others, De Jong et al., 2002 and Bartram, 2011, Arpino and De Valk, 2018).

With regard to the present analysis, focused specifically on the first generation immigrants (regular for legal status) behavior, we assume that the individual wellbeing also depends on two components of the individual labour income: i) the individual “reference income”, and ii) the “residual income” (see Senik, 2004). The reference income is obtained as the estimate of the contribution of individual skills and socio-demographic characteristics of each subject to the production of the own earning (see, among others, Clark and Oswald, 1996; Clark et al., 2008). The reference income, in our analysis, is estimated imposing the constraint that no significant difference there exist between the two groups of natives and immigrants, respectively, in the parametric structure of the function of the individual income production. In order to take into account different psychological dimensions of wellbeing, we estimate two distinct models where the corresponding dependent variables are obtained by extracting the latent common factor from several Likert-rescaled measures of, respectively, the “cognitive wellbeing”, related to economic aspects of the life, and of the “emotional” wellbeing, related to the affective and emotional domain of wellbeing (see Diener, 2000; Diener and Ryan, 2009).

## DATA AND METHODS

We perform the empirical analysis using the data provided by Istat as part of the Eusilc Survey promoted in 2013 for Italy. We select a sample of Italian natives and regular immigrants composed by 15,527 employed subjects, aged 16-70. The subsample of natives is of 13,542 individuals, while the subsample of immigrants is of 1,715 individuals. The data of the Eusilc surveys are available on request to Istat since 2004, however a module regarding the satisfaction level information set ("Wellness Module") has been included only for the 2013 survey (this prevents us to provide an over-time differential analysis). Descriptive statistics are reported in the following table (Tab. 1).

**Tab.1 Descriptive statistics**

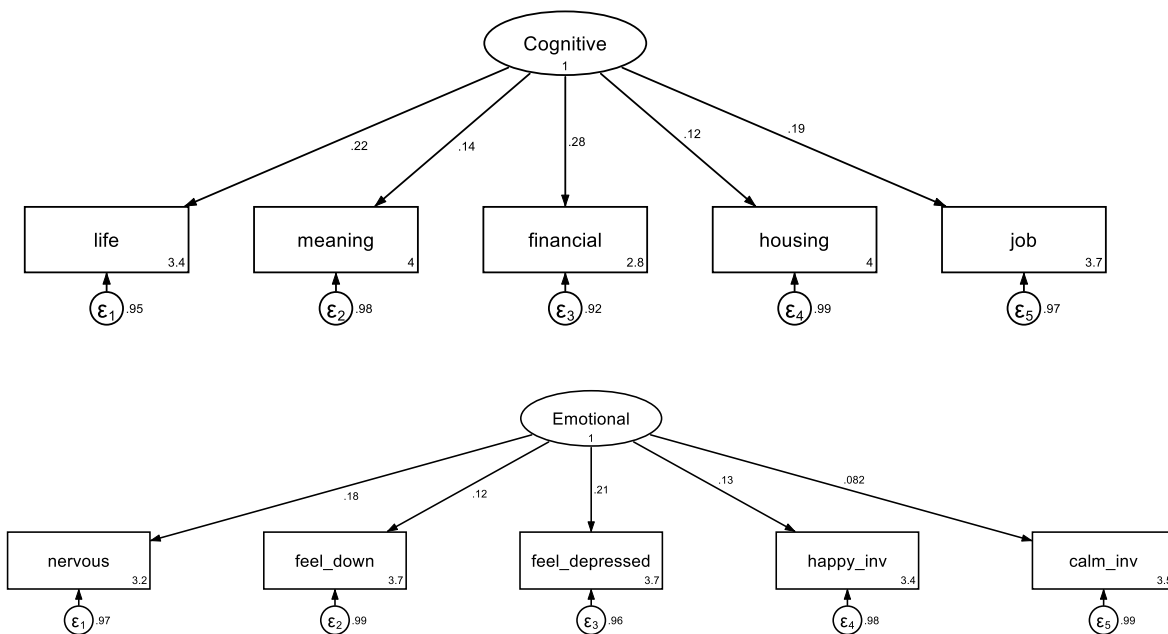
	Natives		Immigrants	
	Mean or %	SE	Mean or %	SE
Individual_income	27861.42	230.45	18574.65	470.89
(Non_discriminatory) reference_income	17996.63	68.86	16040.68	192.99
Cognitive_index	0.6163	0.0011	0.5925	0.0031
Emotional_index	0.6433	0.0009	0.6309	0.0026
Age	44.93	0.09	41.27	0.23
Work_experience	25.04	0.10	21.89	0.26
Mainjob_hours	39.66	0.10	0.33	0.01
Dummy_partime	0.1460		0.2233	
Dummy_selfemployed	0.2446		0.1423	
Permanent_job	0.6461		0.5668	
Temporary_job	0.0738		0.1067	
No_contractualized	0.2801		37.5815	
Never_married	0.3305		0.2554	
Married	0.5777		0.6251	
Union_dissolved	0.0751		0.0956	
Widowed	0.0167		0.0239	
Low_education	0.2955		0.2548	
Medium_education	0.4326		0.5190	
High_education	0.2718		0.2262	

In our study, we focus our attention on two aspects regarding, respectively, the measurement of the subjective perceived wellbeing assumed as dependent variable in the wellbeing function (see Senik, 2004; Brown et al., 2015). In this function, the dependent variable is a proxy of the individual utility, while the set of explanatory variables includes two variables obtained from the decomposition of the individual labour income and given, respectively, by the individual reference income and by the individual residual income. Demographic and psychological characteristic of the subject are also included as regressors in the right side of the welfare function.

We apply the model of decomposition proposed by Blinder (1973) and Oaxaca (1973) (B.O. decomposition) in order to evaluate whether the differences in perceived wellbeing between immigrants and Italian natives can be assessed by differences in the observable characteristics of the subjects or by the membership of each subject in one of the two groups of natives and immigrants, respectively. To this aim we apply the B.O. decomposition adopting the related "Three-Fold versions. Regarding to the perceived wellbeing's measures in cognitive and emotional domains, self-reported wellbeing may be empirically evaluated on the basis of the responses of the subject to questions regarding his/her satisfaction with several aspects of own life. Following other studies that suggest that the structure of subjective well-being and psychological well-being

also if related are two distinct constructs (Keyes et al., 2002; Biaobin, Xue, and Lin, 2004), in our study, we still adopt the definition of subjective wellbeing (SWB) as a result of the contribute of both a cognitive (i.e., life satisfaction) and an affective (positive affect and negative affect) or “emotional” component (Diener & Ryan, 2009). Therefore, to estimate the latent constructs of “Cognitive” and “Emotional” wellbeing, we fit two separated single-factor measurement model and then we calculate the factor scores. In particular, a special case of Structural Equation Model (SEM) , the Confirmatory factor analysis (CFA), was run. A measurement model, allow us to understand how a certain set of indicators fit together to create latent variables that represent an unobservable construct.

As a result, two latent variables common to the score variables in both domains of cognitive and emotional wellbeing are extracted and used, alternatively, as proxies of the individual utility (dependent variable) in welfare function. In the following graph we show the results of the two models estimated (Fig. 1), where rectangles represent measured variables, ovals represent latent variables.



## RESULTS

As a result of this analysis, we found that the impact of reference income, so as the impact of demographic and socio-economic variables characterizing the two groups (age, education, type of work, etc.), does not explain convincingly the gap in perceived wellbeing unfavorable to immigrants. This result leads us to believe that a latent discrimination effect explains the difference in perceived wellbeing between the two groups. The results of the empirical analysis show how the gap in wellbeing in is unfavourable to immigrants, both in cognitive and emotional wellbeing. The results of B.O. decomposition (Tab.2), indicates how more than 70% of the gap in wellbeing (in both cognitive and emotional domain) is due to unexplained factors determining the difference in coefficients between the two groups of natives and immigrants. The more marked differences are registered comparing coefficients of reference income in the cognitive wellbeing equation, and the coefficients of residual income in the emotional wellbeing equation.

**TAB.2 Results of the Three-Fold Blinder-Oaxaca decomposition of wellbeing indexes**

	Cognitive wellbeing ind.		Emotional wellbeing ind.	
	Coef.	<i>p</i>	Coef.	
Natives	0.619	***	0.645	***
Immigrants	0.593	***	0.631	***
Difference	0.026	***	0.014	***
endowments	0.000		0.004	
coefficients	0.019	***	0.010	***
interaction	0.007	**	0.000	
<b>Impact of structural change: (coefficients/diff. ratio)%</b>	<b>72.36%</b>		<b>72.25%</b>	

## CONCLUSION

In general, the estimation results of cognitive and emotional wellbeing equations for natives and immigrants, show that the higher coefficient of reference income, in cognitive wellbeing equation of immigrants, means that the level of their cognitive wellbeing seems to depend on their ability in income production more than that of natives. The results of Blinder-Oaxaca decomposition show how the gap in both cognitive and emotional wellbeing, penalizing for immigrants, is due with prevalence (for, at least, 70%) to latent discrimination factors ("coefficients" effect) independent on socio-demographic characteristics and individual skills. If the "coefficients" effect prevails, it implies that the effect of covariates measuring individual skills is less relevant. This means that latent factors related to the discrimination prevalently influence the gap in perceived wellbeing between natives and immigrants. In this context, integration policies are more effective if the factors related to discrimination of the more disadvantaged subjects can be recognized and corrected. These results, however, must be supported by an analysis of their robustness, being relevant information not available from the dataset, such as the immigrant's country of origin (Eusilc data indicate only if she/he comes from Europe or from countries outside Europe). In addition, it is difficult to distinguish between first and second generation immigrants.

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