# Does social comparison affect immigrants' happiness and life satisfaction? A European perspective

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*Abstract*

*Despite the growing number of papers which concentrate on economic and social integration of immigrants across Europe, just a few analyze their subjective wellbeing. In this paper, we focus on immigrant's life satisfaction and concentrate – for the first time in the European context – on how the social comparison with two reference groups (natives and other immigrants) within the host country may affect immigrant's life satisfaction. Using data from six rounds of the European Social Survey, we proxied the level of "social comparison" by constructing two measures of economic distance that compare each immigrant with the average of the group of natives and the group of immigrants with the same characteristics. Preliminary results indicate that as the disadvantage between the immigrant and the average value of each of the two reference groups becomes smaller (or, eventually, becomes advantage), immigrant's life satisfaction increases. The effect of the social comparison with natives appears larger than the social comparison with immigrants and, in both cases it is stronger for individuals with higher level of education.*

## 1. Introduction

The literature on economic and social integration and assimilation of immigrants across Europe is rich of contributions, exploiting in particular integration parameters as education (Dustmann *et al.*, 2012; Kunz, 2014), occupation and salary (see, e.g., Borjas, 1990; Semyonov *et al.* 2014; Margalit, 2012; Creese and Wiebe, 2012). Less attention has been paid on the topic of immigrant's happiness and subjective wellbeing (SWB hereafter), except for a few contributions (Amit, 2010; Safi, 2010; Bartram, 2011; Gelitt, 2013; Obucina, 2013; Amit and Riss, 2014). The low interest on immigrant's SWB is quite a paradox if compared to the spread of studies aiming to analyze the level of wellbeing in the different countries, but mostly not taking sufficiently in account the immigrants residing in those countries. A better understanding of to whom immigrants compare themselves in assessing their SWB is a

strategic topic also from a policy point of view, because it is strongly related to the level of integration of immigrants within the destination country.

In this work, we aim to contribute to the study of SWB across Europe by scrutinizing the determinants of immigrant's SWB and, in particular, by testing the importance of considering the relative position of immigrants compared to some relevant reference groups. In other terms, we intend to exploit − for the first time in the European context − the role of "social comparison" in shaping immigrants' SWB evaluations. To this end, we use data stemming from the European Social Survey program, which allows us to rely on a large dataset which covers several years and geographical areas.

## 2. Literature review

The seminal paper of Easterlin (1974) suggested that income plays a minor role in happiness once an individual rises above a poverty line of subsistence level (the so-called "Easterlin paradox") and, more importantly, stated that happiness is strongly influenced by the "relative status". So, we want to test the idea that immigrant's happiness is influenced more by their relative level of the identified determinant compared to the some reference groups than from the absolute level.

There are some studies in literature that focuses on the social comparison of income variables on happiness (Scoppa and Ponzo, 2008; Clark *et. al.*, 2007; Caporale *et al.*, 2009) that showed that income cannot buy happiness *per se* (Carrieri, 2011) while relative income can. Some other studies focused on how social comparison shape the effect of subjective health on happiness (Carrieri, 2011; Clark and Etilé, 2008; De Mello and Tiongson, 2009). All these papers explore the topic of social comparison focusing only on native populations.

Despite the dominant role of integration and assimilation theories in the migration literature, surprisingly little empirical research has been conducted on the question of immigrants' reference groups. An exception is the work of Gelatt (2013), where the author refers to the social comparison mechanism in order to test the transnational theories on a sample of immigrants within the United States. To the best of our knowledge, the lens of social comparison has never been used to analyze the determinants immigrants' SWB in Europe.

## 3. Data and methods

For this analysis, we rely on the cumulative dataset of the ESS (2002-2012), a repeated

cross section survey which involved 36 countries[1] conducted every two years since 2002. Due to the great effort to ensure standardization of questionnaires across countries and years, the ESS allows a comparative perspective. In the ESS, life satisfaction[2] is measured by using a standard question (available in each of the six rounds) *"All things considered, how satisfied are you with your life as a whole nowadays?"*, measured through an 11-point scale, ranging from 0 (extremely dissatisfied) to 10 (extremely satisfied).

We concentrate on the social comparison approach by scrutinizing whether immigrants' SWB is influenced by their relative status compared to reference groups of natives and immigrants residing in the same host country. Due to the fact that each one of these two groups is very heterogeneous, we decided to make the comparison with groups of the same age class to reduce biases deriving from considering the reference groups as a whole. The two references groups to which immigrant's condition is compared with:

1) natives of the same age class residing in the same host country.
2) immigrants of the same age class and the same area of origin residing in the same host country.

To explore the relationship between life satisfaction of immigrants and the social comparison with the two reference groups we adopt a linear model (ordinary least square) with robust standard errors. $LS_i$ has the following form:

$$LS_i = \alpha + \beta_1 \cdot soc\_comparison_k + \beta_2 \cdot X_i + \varepsilon_i$$

The LS of individuals is affected by the level of social comparison with the reference groups, where k=2 indicates each of the two levels of social comparison.

Each variable of social comparison is built as the distance between the decile of income in which the individual currently is and the median value of the corresponding reference group. So, each variable of social comparison assumes discrete values. Namely, growing values of the social comparison variable indicate that the disadvantage of immigrant with respect to the reference group diminishes, eventually becoming an advantage. So, each variable of social comparison expresses the relative income of each individual with respect to the relative group. But, while in some papers on social comparison, the relative income is

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[1] The countries included in the analysis are: Albania, Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Kosovo, Lithuania, Latvia, Luxembourg, Netherlands, Norway, Poland, Portugal, United Kingdom, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, Turkey.
[2] In this paper we will use the terms life satisfaction and subjective wellbeing interchangeably.

calculated as the share of income on the mean or median value of the reference group, in this paper we calculate social comparison as the distance of each individual from the median value of the reference group[3].

$X_i$ is a vector of covariates included in the model to adjust for possible confounders of the relationship between social comparison indicators and SWB:

1. demographic controls: gender, age, age$^2$;

2. family background: marital status (married, separated/divorced, widow, nubile), number of person living in the household, age of the youngest child living in the household;

3. migration experience: length of stay in the host country, area of origin;

4. socio-economic conditions: years of education, working status, number of working hours;

5. other literature-driven controls: health (5 dummies ranging from very bad to very good), level of religiosity, religion;

6. and standard controls due to the pooled nature of data: country of destination dummies, year dummies.

$\varepsilon_i$ is an error term which captures idiosyncratic shocks or unobserved respondent's characteristics. All the estimations (including descriptive findings) are properly weighted, using a combined weight resulting from the product of post-stratification weight and population weight (ESS, 2014).

## 4. Preliminary findings

As regard the dependent variable, the average value of immigrants' life satisfaction is 6.46, although it is possible to note that the modal value is at 8. Applying the empirical methods previously explained, we try to see how this level of life satisfaction is affected by the social comparison with natives and immigrants.

Table 1 reports the results of main models ran on the whole sample. In Column (1), we introduce as main explicative the social comparison with natives. It is possible to note that, as the distance between the income of the respondent and the median value of income of the natives (of the same age, in the same host country) reduces (and eventually becomes positive), his/her life satisfaction increases. A similar effect, although on a lower value, is observed for

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[3] This choice was also driven by the data available in the ESS, which provides only the deciles of income, but not the exact value.

the social comparison with immigrants (of the same age and the same geographical are, in the same host country). Both values are statistically significant at 1% and clearly indicate that the social comparison with the two reference groups is strongly related with the immigrant's life satisfaction.

Table 1. Life satisfaction of immigrants and social comparison

|  | (1) | (2) |
|---|---|---|
| Social comparison with natives | 0.1368*** |  |
|  | (0.0175) |  |
| Social comparison with immigrants |  | 0.1288*** |
|  |  | (0.0191) |
|  | (0.0858) | (0.0981) |
| Constant | 4.5231*** | 4.4398*** |
|  | (0.2076) | (0.2065) |
|  |  |  |
| Full controls | YES | YES |
| Observations | 38,230 | 38,230 |
| R-squared | 0.261 | 0.258 |
| N_clust | 36 | 36 |

Notes: The Table reports coefficients of OLS estimates based on ESS data (2002-2012). The dependent variable is "Life satisfaction". The sample is composed only of foreigners. All models control also for all the variables described in Section 3 (not reported). Robust standard errors (corrected for heteroskedasticity) are reported in parentheses. The symbols ***, **, * indicate that coefficients are statistically significant, respectively, at the 1, 5, and 10 percent level.

An important dimension to investigate may be related to gender (Table 2). Differences between the two levels of comparison are more evident for women: the coefficient for the variable of social comparison with immigrants is 0.1439 while that for social comparison with immigrants is 0.1328. Less marked differences appear for men (0.1259 the coefficient for the social comparison with natives and 0.1201 for the social comparison with natives).

Table 2. LS of immigrants and social comparison. Separate estimations by gender.

|  | Women | | Men | |
|---|---|---|---|---|
|  | (1) | (2) | (3) | (4) |
| Social comparison with natives | 0.1439*** |  | 0.1259*** |  |
|  | (0.0152) |  | (0.0211) |  |
| Social comparison with immigrants |  | 0.1328*** |  | 0.1201*** |
|  |  | (0.0169) |  | (0.0233) |
| Constant | 5.0446*** | 4.9585*** | 4.2461*** | 4.1600*** |
|  | (0.4223) | (0.4060) | (0.3217) | (0.3632) |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Full controls | YES | YES | YES | YES |
| Observations | 20,772 | 20,772 | 17,458 | 17,458 |

| | | | Total | | | | |
|---|---|---|---|---|---|---|---|
| R-squared | | | 0.267 | 0.264 | 0.265 | 0.263 | |
| N_clust | | | 36 | 36 | 36 | 36 | |

Notes: The Table reports coefficients of OLS estimates based on ESS data (2002-2012), ran separately by gender. The dependent variable is "Life satisfaction". The sample is composed only of foreigners. All models control also for all the variables described in Section 3 (not reported). Robust standard errors (corrected for heteroskedasticity) are reported in parentheses. The symbols ***, **, * indicate that coefficients are statistically significant, respectively, at the 1, 5, and 10 percent level.

Among the possible confounders of the link between social comparison and life satisfaction, education may play a very important role. Those who have achieved higher level of education may be affected more by the social comparison. This is because they may have higher expectations (related to the higher level of education) than those with low level of education. In order to investigate these differences, we have decided to ran separate models by level of education, splitting the sample between those who have achieved higher level of education and those who have lower level of education. High education is measured as those who have at least a title equal to EISCED 4.

It is possible to note (Table 3) that, for both levels of social comparison, those who have a highest level of education, "feel" more the social comparison. The results of an F-test conducted on the two models (with full controls) by level of education confirmed that the differences between the coefficients for the two subgroups with high and low education are statistically significant (at 10% level in the case of social comparison with natives and at 5% level in the case of social comparison with immigrants). This pattern is the same even in the subsamples by gender.

Table 3. LS of immigrants and social comparison. Separate estimations by level of education.

| | Total | | Women | | Men | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| | High education | Low education | High education | Low education | High education | Low education |
| Social comparison with natives | 0.1543*** | 0.1301*** | 0.1547*** | 0.1386*** | 0.1367*** | 0.1248*** |
| | (0.0105) | (0.0192) | (0.0192) | (0.0146) | (0.0144) | (0.0249) |
| Constant | 4.6235*** | 4.7712*** | 4.1621*** | 5.4260*** | 5.3116*** | 4.2377*** |
| | (0.3518) | (0.4389) | (0.5316) | (0.4124) | (0.9296) | (0.5821) |
| Full controls | YES | YES | YES | YES | YES | YES |
| Observations | 12178 | 26052 | 6591 | 14181 | 5587 | 11871 |
| R-squared | 0.239 | 0.285 | 0.258 | 0.290 | 0.246 | 0.294 |
| N_clust | 36 | 36 | 36 | 36 | 36 | 36 |
| | | | | | | |
| | Total | | Women | | Men | |
| | (7) | (8) | (9) | (10) | (11) | (12) |
| | High education | Low education | High education | Low education | High education | Low education |
| Social comparison with immigrants | 0.1533*** | 0.1174*** | 0.1608*** | 0.1177*** | 0.1300*** | 0.1183*** |
| | (0.0174) | (0.0185) | (0.0263) | (0.0102) | (0.0277) | (0.0281) |
| Constant | 4.6456*** | 4.6874*** | 4.1668*** | 5.3553*** | 5.3403*** | 4.1280*** |
| | (0.3313) | (0.4530) | (0.4917) | (0.4277) | (0.9351) | (0.6056) |
| | | | | | | |
| Observations | 12178 | 26052 | 6591 | 14181 | 5587 | 11871 |

| | | | | | | |
|---|---|---|---|---|---|---|
| R-squared | 0.238 | 0.282 | 0.259 | 0.286 | 0.244 | 0.292 |
| N_clust | 36 | 36 | 36 | 36 | 36 | 36 |

Notes: The Table reports coefficients of OLS estimates based on ESS data (2002-2012), separately for total, men and women and for two levels of education. The dependent variable in all the models is "Life satisfaction". All regressions are run with corresponding full set of controls (see Table 1 for total and Table 2 for women and men), not reported, except years of education. The symbols ***, **, * indicate that coefficients are statistically significant, respectively, at the 1, 5, and 10 percent level.

## 6. Further developments

Our next steps will aim to uncover systematic patterns of variation by country of origin and destination in how the social comparison with natives and immigrants affect immigrants' life satisfaction. We will also investigate whether there are differences between first- and second-generation immigrants.

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