

Migrant-family background and subjective well-being: Evidence using Blinder-Oaxaca decomposition

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Migrant-family background and subjective well-being: Evidence using Blinder-Oaxaca decomposition

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Abstract

The paper examines the subjective well-being of individuals with migrant-family background and individuals with no migrant-family background. The subjective well-being of the former group is on average lower than the latter group. Blinder-Oaxaca decomposition finds that the gap in their subjective well-being is not explained by differences in socioeconomic profile and social context. Rather the gap is mainly due to the unexplained component of the analysis, which the paper interprets in two ways. First, the unexplained component represents the latent social biases against individuals with migrant heritage. Second, the unexplained component also represents the overall effect of personality, attitude, and migrant culture on the subjective well-being of individuals with migrant heritage.

Keywords: Migration; subjective well-being; decomposition

JEL Classification: D60; I31; J15; F22

1. INTRODUCTION

This paper is yet another study on migration and subjective well-being.¹ It takes the lead of Betz and Simpson (2013), Nowok et al. (2013), and Senik (2014), among others, in analyzing the subjective well-being of individuals with migrant-family background and those with no migrant-family background. Like earlier studies, the paper finds that the former group shows on average lower subjective well-being than the latter group. In contrast to earlier studies, it argues that the gap in subjective well-being is an outcome of factors that are not measurable in a direct way, albeit apparent like discrimination against individuals with migrant-family background (Card and Krueger 1992; Safi 2010; Angelini et al. 2015) or an ethnic penalty on individuals with migrant heritage (Hughes and Thomas 1986; Carmichael and Woods 2000; Heath and Cheung 2006). In addition, it also points out that other factors like personality and attitude (Boneva and Frieze 2001; Safi 2010; Voicu and Vasile 2014) and migrant culture (Cohen and Sirkeci 2011; Benson, and O'Reilly2012, Headey et al. 2014) contribute to the gap in subjective well-being-they, too, are not measurable in a direct way but evident for individuals with migrant-family background. The paper is thus able to establish that migrant heritage in general carries with it long-lasting effects on subjective well-being even with real advances in socioeconomic status and social position.

The paper is in four parts. Part 2 describes the methodology. Part 3 discusses the results. The last part of the paper is the conclusion.

2. METHODOLOGY

Empirical Framework

The paper examines the subjective well-being (SWB) of two groups: individuals with migrant

¹ Simpson (2013), Bartram (2015), and Hendriks (2015) review the studies on migration and subjective well-being.

family background and individuals with no migrant-family background. Here, SWB refers to a personal appraisal of the state of well-being (Kahneman et al. 1997).² Conceptually, SWB accounts for the present situation, the experiences in the past, and the expectations for the future.

In this paper, the identification procedure is through parentage—that is, the mother was a migrant, the father was a migrant, or both parents were migrants. Since longitudinal data on SWB and other variables are not readily available, the study resorts to a decomposition procedure developed by Blinder (1973) and Oaxaca (1973) as a way to side-step the problems of self-selection and endogeneity inherent in the analysis of the relationship between migration and SWB. In so doing, the study is able to see the relative shares of the components of decomposition in order to establish which one is a more relevant determinant of the gap in SWB.

In particular, the decomposition analysis proceeds as follows. First, define a structural model like

$$SWB_{YM} = \alpha_{YM} + \beta_{YM}X_{YM} + e_{YM}$$
(1a)

$$SWB_{NM} = \alpha_{NM} + \beta_{NM} X_{NM} + e_{NM}$$
(1b)

where X is a set of determinants of SWB and e is error term. The subscripts YM and NM are notations for migrant-family background and no migrant-family background, respectively. Equations (1a) and (1b) use the same set of variables for X. The gap in SWB is simply

² Studies find a high correlation between self-reports of well-being and successes in life domains like family (Lyubomirsky et al. 2005), engagement in society (Guven 2011), and health (Weinman et al. 2008), among others. Individuals who report high-level of subjective well-being are rated as such by their spouses, relatives, and friends (Costa and McCrae 1988). Studies also find that self-reports of well-being are relatively stable and consistent across time (Andrews and Withey 1976) as long as no extraordinary or serious life events occurred to undermine well-being (Diener and Larsen 1984; Costa and McCrae 1988). Evaluations about life exhibit more stable properties than affections do (Krueger and Schkade 2008). Discrepancies between the internal situation of an individual and the external articulation of subjective well-being are due to human error and assumed random.

 $(SWB_{NM} - SWB_{YM}).$

The next step is to use a counterfactual for the group that is presumably in a disadvantaged position. By assumption, individuals with migrant-family background form such a group; thus, they take on the profile of the group with no family-migrant background. As such, Equation (1a) turns into

$$SWB_{YM} = \alpha_{NM} + \beta_{NM}X_{YM} + e_{YM}$$
(1c)

Substituting Equations (1a), (1b), and (1c) into $(SWB_{NM} - SWB_{YM}^* + SWB_{YM}^* - SWB_{YM})$ then grouping the terms obtains

$$SWB_{NM} - SWB_{YM} = \beta_{NM}(X_{NM} - X_{YM}) + [(\alpha_{NM} - \alpha_{YM}) + (\beta_{NM} - \beta_{YM})X_{YM}] + \varepsilon$$
(2)

From Equation (2), the output of the Blinder-Oaxaca decomposition procedure is in two parts: $\beta_{NM}(X_{NM}-X_{YM})$ is called the explained component and $[(\alpha_{NM}-\alpha_{YM})+(\beta_{NM}-\beta_{YM})X_{YM}]$ is called the unexplained component.³ The composite error term is ε with $E(\varepsilon) = 0$.

Data and Data Sources

The paper covers the period 2005 to 2014. Its raw data are from the 5th and 6th rounds of the World Values Survey (WVS). Andorra, Australia, Canada, Cyprus, Estonia, Germany, Netherlands, New Zealand, Singapore, Slovenia, Sweden, Switzerland, Trinidad and Tobago, and United States form a convenient list of high-income countries with large migrant families

³ Equation (3) is a twofold decomposition procedure. A threefold decomposition procedure is possible, and it simply introduces an interaction term as a third component:

 $SWB_{NM} - SWB_{YM} = \beta_{NM}(X_{NM} - X_{YM}) + [(\alpha_{NM} - \alpha_{YM}) + (\beta_{NM} - \beta_{YM})X_{YM}] + [(\beta_{NM} - \beta_{YM})(X_{NM} - X_{YM})] + \epsilon (\beta_{NM} - \beta_{YM})(X_{NM} - X_{YM}) + \epsilon (\beta_{NM} - \beta_{YM})(X_{NM} - \beta_{YM})(X_{NM} - \beta_{YM})(X_{NM} - \beta_{YM})(X_{NM} - \beta_{YM}) + \epsilon (\beta_{NM} - \beta_{YM})(X_{NM} -$

relative to their sample sizes in the WVS.⁴

Subjective Well-being

The study uses life satisfaction as a proxy measure for subjective well-being. The raw data are replies to the WVS query: "*All things considered, how satisfied are you with your life as a whole these days*?" The responses take values from 1 (completely dissatisfied) to 10 (completely satisfied). The analysis treats life satisfaction as a continuous variable.

Migrant-family Background

The WVS query is: "*Are your mother [and] father immigrants to this country*?" The response is "Yes" if the mother was an immigrant and "No" otherwise. The setup is the same for the father. If both parents were immigrants, then essentially there are two "Yes" answers. Notice that the design of the WVS query is more about the first-generation immigrants.

Individual Socioeconomic Profile

Data for gender, age, marital status, work status, education, and income are available in the WVS. Gender takes the value of 1 for male and 2 for female. Age is reported in years. The analysis includes age-square to control for the U-shaped relationship between subjective well-being and age.

For marital status, the reference category is single or unmarried status. The value of 1 is for ex-married status (i.e., divorced, separated, or widowed/er) and 2 is for married or living as

⁴ The earlier rounds of the World Values Survey (WVS) did not include queries on the migrant-family background. The raw data for Italy and Spain in the 5th and 6th waves of WVS contain few responses on the mother being a migrant or on the father being a migrant. Both countries are not included in the final dataset of this paper. There are no data on the migrant-family background for France and United Kingdom.

married status. For work status, the reference category is unemployed status. The value of 1 is for individuals who are not in the labor force and 2 is for individuals with work. Marital status and work status are categorical variables with ordinal setup—that is, category 1 is better than the reference status and category 2 is better than category 1.

Education takes the values of 1 (no or incomplete primary schooling), 2 (primary schooling), 3 (secondary schooling), or 4 (tertiary schooling or above). Income takes the values from 1 to 10, which are recoded to form proxy measures for income quintiles. Education attainment and income are treated as continuous variables in the analysis.

3. RESULTS

The results are to be read with caution because the dataset used in the study included few high-income countries and the analysis used life satisfaction as a proxy measure for subjective well-being (SWB). The paper still obtains an interesting finding about SWB in the context of migration.

Table 1 shows that SWS is on average lower for individuals with migrant-family background relative to individuals with no such background. The gap in SWB is statistically significant (mother $\Delta H_{NM-YM} = 0.144$, p < 0.05; father $\Delta H_{NM-YM} = 0.120$, p = 0.06; both $\Delta H_{NM-YM} = 0.159$, p < 0.05). The finding is consistent with the literature.

Notice in the upper panel of Table 1 that the difference in socioeconomic profile and context between the two groups do not lead to a meaningful explanation for the gap in SWB (mother: 0.008, father: 0.001, both: 0.001; all p = n.s.), at least for the dataset used in the study. Indeed, a more interesting finding is that the gap in SWB is mainly about the unexplained component of the decomposition analysis (mother: 0.138, p < 0.05; father: 0.119, p < 0.05; both: 0.157, p < 0.05). Such finding suggests that the two groups exhibit divergent patterns in their SWB

notwithstanding the possibility that they share the same opportunities because they live in the same area. All the same, Table 1 suggests that a convergence in SWS is a challenge for the group with migrant heritage and less so for the other group given that the latter serves as a norm of the former (Voicu and Vasile 2014, and Safi 2010).

How can one make sense of the finding in Table 1 that the unexplained component of the decomposition analysis is the key determinant for the gap in SWB? Following the tradition of Blinder (1973) and Oaxaca (1973), this paper interprets the unexplained component in two ways. The first is to infer that the unexplained component represents the effect of a latent factor like discrimination on SWB for individuals with migrant heritage (Card and Krueger 1992; Safi 2010; Angelini et al. 2015). A related inference is to say that it is the effect of an ethnic penalty on SWB also for individuals with migrant heritage (Hughes and Thomas 1986; Carmichael and Woods 2000; Heath and Cheung 2006). In other words, discrimination and ethnic penalty are factors that are beyond what can be accounted for by the effect of variations in socioeconomic profile and social context on SWB. In a way, the unexplained component relates to something benign like teasing someone about skin color, religion, or ethnicity. The finding therefore points to the effect an external bias against individuals with migrant-family background.

The second way to make sense of the finding is to infer that the unexplained component of the decomposition analysis represents the effect on SWB of something internal to individuals with migrant heritage. Such factors include personality and attitude (Boneva and Frieze 2001; Safi 2010; Voicu and Vasile 2014) and migrant culture (Cohen and Sirkeci 2011; Benson and O'Reilly2012; Headey et al. 2014). Again, taking the lead of studies that find personality is stable across time (Caspi and Roberts 2001; Harris et al. 2016) and that attitudes are heritable or, at the least, transmittable from one generation to another (Cohen and Sirkeci 2011; Benson and O'Reilly 2012; Headey et al. 2014), the inference is that individuals with migrant-family

background on average value more the material goods, focuses more on achievements, and emphasizes more the work successes but undermine SWB in the process (Frank 1985; Kasser and Ryan 1993; Boneva and Frieze 2001). Arguably, such pattern is persistent across time regardless of the change in socioeconomic profile and social context (Angelini et al. 2015). Arguably, too, their effect on SWB complements the effect of external factors on SWB (Safi 2010; Voicu and Vasile 2014). The finding therefore points to the implication of migrant heritage in terms of the SWB of individuals with migrant-family background.

[INSERT TABLE 1]

4. CONCLUSION

The paper analyzed the gap in subjective well-being between individuals with migrant-family background and individuals with no migrant-family background. Data from the World Values Survey indicated that individuals with migrant heritage had on average lower subjective well-being than individuals with no migrant heritage. Blinder-Oaxaca decomposition found that the gap in subjective well-being was mainly due to the unexplained component of the analysis. The paper in turn argued that discrimination or, broadly, ethnic penalty is an external factor that undermined the subjective well-being of individuals with migrant-family background. It further argued that personality and attitude as well as migrant culture form an internal factor that also undermined the subjective well-being of subjective well-being of individuals with migrant-family background.

The basic finding of this paper did not differ much from studies which reported that migrants in general or individuals with migrant heritage in particular experienced lower subjective wellbeing than those with no such background. However, the specific finding in this paper differs from the literature because it found that the unexplained component of the decomposition analysis is the key determinant for the gap in subjective well-being between the two groups of individuals (c.f., Senik 2014). Thus, given the inference on the finding, the policy implication of the paper is that societies need go beyond providing equal opportunities for everyone but also to consider getting rid of social biases and cultural narrow-mindedness in order that a convergence in subjective well-being is possible for both groups.

Appendix:

Table 2 shows the mean of life satisfaction as a proxy measure of subjective well-being (SWB). The figures support a quadratic relationship between age and SWB between age 18 and age 74 but a cubic relationship when the consideration extends to age 75 and beyond.

Table 2 also shows that SWB is on average lower for males. The same applies for individuals with limited or no schooling relative to those with tertiary or higher-level schooling; and for individuals in the lower income quintiles relative to the higher income quintiles. SWB is on average higher for individuals who are married (but lower for ex-married individuals) and for individuals with work or not in the labor force.

Notice in Table 2 that there is the same average for unmarried individuals regardless of the family background. The same for individuals with no or limited schooling. So being unmarried and having no adequate schooling affect SWB in a fundamental way. Notice, too, that there is the same average for individuals in the fourth income quintile regardless of family background. The observation is the same for the fifth income quintile. The figures suggest that income standing matters less to SWB once individuals reach higher income status. Notice, further, that SWB of the unemployed with migrant-family background is on average higher that of the unemployed with no migrant-family background. Perhaps, social network help relieve the impact of unemployment on individuals who share a migrant heritage.

[INSERT TABLE 2]

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Socioeconomic Profile	Mother	p-value	Father	p-value	Parents	p-value
Overall:						
Group 1 = Not Migrant	7.335	< 0.01	7.332	< 0.01	7.332	< 0.01
Group 2 = Yes Migrant	7.191	< 0.01	7.211	< 0.01	7.174	< 0.01
Difference	0.144	0.03	0.120	0.06	0.159	0.03
Explained component	0.008	0.77	0.001	0.97	0.001	0.97
Unexplained component	0.138	0.03	0.119	0.04	0.157	0.02
Explained:						
Age	-0.097	0.09	-0.084	0.18	-0.098	0.15
Age-squared	0.093	0.11	0.082	0.20	0.097	0.15
Gender: Male	-0.001	0.37	-0.002	0.20	-0.002	0.26
Marital: Ex-married	-0.001	0.45	-0.001	0.48	-0.002	0.41
Marital: Married	0.010	0.15	0.007	0.43	0.004	0.65
Work: Not in Labor Force	0.024	0.13	0.026	0.09	0.031	0.09
Work: Employed	-0.017	0.30	-0.022	0.17	-0.025	0.19
Education	0.003	0.47	0.003	0.53	0.006	0.30
Income	-0.008	0.67	-0.007	0.69	-0.010	0.58
Unexplained:						
Age	-0.628	0.05	-0.482	0.41	-0.789	0.16
Age-squared	0.357	0.07	0.201	0.50	0.417	0.15
Gender: Male	0.042	0.28	0.078	0.05	0.052	0.21
Marital: Ex-married	0.023	0.47	0.034	0.14	0.042	0.14
Marital: Married	0.118	0.18	0.105	0.24	0.128	0.21
Work: Not in Labor Force	0.021	0.71	0.102	0.08	0.112	0.03
Work: Employed	0.112	0.18	0.223	0.03	0.261	0.00
Education	0.330	0.09	0.183	0.36	0.312	0.18
Income	-0.187	0.06	-0.119	0.36	-0.243	0.04
Constant	-0.050	0.88	-0.205	0.66	-0.135	0.79
Pooled:						
Age	-0.044	< 0.01	-0.044	< 0.01	-0.044	< 0.01
Age-squared	0.000	< 0.01	0.000	< 0.01	0.000	< 0.01
Gender: Male	-0.106	< 0.01	-0.106	< 0.01	-0.106	< 0.01
Marital: Ex-married	-0.093	< 0.01	-0.092	0.03	-0.093	0.03
Marital: Married	0.417	< 0.01	0.418	< 0.01	0.418	< 0.01
Work: Not in Labor Force	0.647	< 0.01	0.648	< 0.01	0.647	< 0.01
Work: Employed	0.611	< 0.01	0.612	< 0.01	0.612	< 0.01
Education	0.083	< 0.01	0.083	< 0.01	0.081	< 0.01
Income	0.185	< 0.01	0.185	< 0.01	0.185	< 0.01
Migrant-family	-0.138	< 0.01	-0.119	< 0.01	-0.157	< 0.01
Constant	6.256	< 0.01	6.249	< 0.01	6.255	< 0.01

Fable 1: Result	ts Blinder-Oaxao	ca decomposition

Socioeconomic Profile	Mother = Yes	Father = Yes	Parents = Yes	Not migrant
Age: 18-24	7.27	7.21	7.22	7.37
Age: 25-34	7.25	7.29	7.29	7.36
Age: 35-44	7.12	7.19	7.16	7.30
Age: 45-54	7.06	7.12	7.02	7.22
Age: 55-64	7.17	7.13	7.13	7.32
Age: 65-74	7.36	7.33	7.34	7.44
Age: 75-84	7.18	7.25	7.00	7.46
Age: 85 and above	7.19	7.17	7.16	7.31
Gender: Female	7.24	7.28	7.22	7.34
Gender: Male	7.13	7.12	7.11	7.33
Marital: Single	7.06	7.07	7.07	7.06
Marital: Ex-married	6.68	6.69	6.57	6.85
Marital: Married	7.37	7.39	7.35	7.55
Work: Unemployed	6.41	6.57	6.60	6.31
Work: Not in Labor Force	7.29	7.29	7.22	7.38
Work: Employed	7.23	7.24	7.21	7.41
School: Primary or less	7.09	7.09	7.08	7.12
School: Secondary	7.19	7.21	7.18	7.32
School: Tertiary and above	7.33	7.37	7.31	7.65
Income: Quintile 1	6.35	6.40	6.28	6.48
Income: Quintile 2	6.77	6.82	6.77	6.98
Income: Quintile 3	7.25	7.25	7.21	7.44
Income: Quintile 4	7.78	7.80	7.78	7.83
Income: Quintile 5	8.02	8.00	8.04	8.05
Overall mean	7.19	7.21	7.17	7.33

 Table 2: Mean life satisfaction

Note: Raw data are from the World Values Survey.