DO ASPIRATIONS DAMPEN SUBJECTIVE WELL-BEING? EVIDENCE FROM SLOVAKIA

Boris Marton

Abstract

Generally, people have expectations or aspirations for the future. With improved internet access and social media access, many individuals tend to compare themselves to their role models via social networks. However, they may not realise that photos, videos or statements on these platforms might not be true in real life. This article complements the existing literature on subjective well-being (SWB) by investigating the relationship between an individual's level of SWB and their aspirations. The theory predicts that aspirations, mainly income related, may cause frustration if one's aspirational goals are set too high. These are called unrealistic aspirations and these can lower the well-being of individuals. I will examine this hypothesis in the Slovak context using individual data from the 2018 European Union Statistical Survey on Income and Living Conditions (EU-SILC) microdata. Furthermore, the results suggest that unrealistic aspirations do indeed dampen individual well-being. The results are robust and control multiple variables such as health, employment, education, age, income, etc, which suggests a significant negative relationship between SWB and aspirations.

Key words: Subjective well-being, aspirations, EU-SILC, Slovakia.

JEL Code: I31, I39.

Introduction

In this paper, I aim to examine the relationship between SWB and income aspirations. The leading work in this area of research is a research study by Easterlin (1974), in which rising consumption norms or income aspirations have been considered as a possible reason for rising income' failure to improve the well-being of individuals. This phenomenon is called the Easterlin paradox. Though the phenomenon is well studied in literature and numerous studies confirms this hypothesis (see, e.g., Easterlin, 2015), a stream of literature also provides opposing evidence.

Only a handful of studies examining the relationship between income aspirations and SWB have been published over the past few years. I believe that the rarity of aspirations data

has hindered researchers from studying these questions. In this present study, I utilise 2018 EU-SILC microdata, which includes information on SWB, income and income aspirations, to study how income aspirations affect SWB in a Slovakian setting, while controlling a range of various variables commonly used in SWB research. Before I proceed to the results, let's conduct a brief literature review.

1 Theoretical background

In this article, I investigate the relationship between SWB, income and income aspirations, so in this section I will summarise the current research in academic literature in each of the mentioned topics. I will start with SWB, then move to income and its impact on individual SWB, and finally I finish by linking SWB and aspirations.

1.1 Subjective well-being

One of the best-known authors in the field of SWB research, Ed Diener, defines subjective wellbeing as: "People's evaluations of their lives—the degree to which their thoughtful appraisals and affective reactions indicate that their lives are desirable and proceeding well." (Diener, et. Al., 2017, p. 237). Previously, Diener adopted a different definition of SWB, considering it "a broad category of phenomena that include people's emotional responses, domain satisfactions and global judgments of life satisfaction." (Diener, et al., 1999, p. 277).

There is plethora of other similar definitions of SWB proposed by various authors, so when speaking of SWB, I mean a multidimensional construct that encompasses both peoples' subjective evaluation of their own life, as well as their feelings and emotions (whether negative or positive). Since I am using individual survey data in which individuals were asked to rate their satisfaction with life as a whole, with the scale ranging from 0 to 10 I will use terms well-being and SWB interchangeably.

I define SWB as a multidimensional construct, so let's examine which aspects of life may influence this. Below, I present five of the most commonly linked variables: unemployment, health, age, freedom and gender. I have not included income as this relationship is investigated in the later section of this paper. Unemployment, lack of freedom and bad health will always affect SWB in a negative way, while the relationship between SWB and age is a bit more complex. Early in life, during childhood, individuals tend to be very happy but later during adolescence and early adulthood, their SWB will usually decrease. Finally, as individuals grow older, their SWB starts to rise, so there is an inverted U-shape pattern in the relationship between age and SWB. The final variable is gender. Different studies show different results, since there are also other factors such as gender discrimination, gender equality, etc. that play a significant role in this relationship.

I am not arguing that those are the only five variables that have a pronounced impact on the SWB of individuals as there are certainly other variables that are linked to SWB. These include corruption, inflation, consumption, etc. Moreover, there are not only different variables linked to SWB, but one could also investigate these variables from either a macroeconomic or a microeconomic perspective. For example, unemployment could be seen as a result of the labour market imbalance from a microeconomic perspective, while usually unemployment is taken as macroeconomic variable for those without a job. Describing every single variable linked to SWB from multiple perspectives would be a whole other study, so let's focus on one of the most famous relationships in this area which is SWB and income.

Authors and year	Title of the article	Journal	Key variable
Glatz, C., & Eder, A.	Patterns of Trust and Subjective Well-Being	Social Indicators	Unemployment
(2020)	Across Europe: New Insights from Repeated	Research.	
	Cross-Sectional Analyses Based on the		
	European Social Survey 2002–2016.		
Ngamaba, K. H.	Determinants of subjective well-being in	The European	Health
(2016)	representative samples of nations.	Journal of Public	
		Health.	
López Ulloa, B.F.,	How Does Subjective Well-Being Evolve with	Population	Age
Møller, V. & Sousa-	Age? A Literature Review.	Ageing	
Poza, A. (2013)			
Spruk, R., &	Institutional Origins of Subjective Well-Being:	Journal of	Freedom
Kešeljević, A.	Estimating the Effects of Economic Freedom on	Happiness	
(2016).	National Happiness.	Studies.	
Meisenberg, G.,	Gender Differences in Subjective Well-Being	Journal of	Gender
Woodley, M.A.	and Their Relationships with Gender Equality.	Happiness	
		Studies	

Tab. 1: Literature review on different aspects of life related to the SWB.

Source: Authors' research.

1.2 Subjective well-being and income

The relationship between SWB and income has been studied for decades in various branches of social sciences, including psychology, sociology, economics, etc. Numerous researchers found a significant relationship between income and SWB, see e.g. (Veenhoven, et. Al., 2006),

while others did not find this relationship to be significant, see e.g. (Lim, et al., 2020). Mentioned studies vary in many aspects such as: datasets, periods, countries, different definitions of SWB or a different measurement of income. According to a study by Jebb et al. (2018) analysing the impact of income on SWB by using 1.7 million individuals worldwide, there is a point after which income no longer plays a significant role in SWB. Jebb refers to this point as "income satiation". When the satiation point is reached (this differs across countries), income plays only a minor role in SWB, while in some cases going above and beyond the point of income satiation will negatively affect SWB. However, I have to clarify that the mentioned studies rely mostly on absolute income.

Also, it is necessary to distinguish between absolute and relative income when examining the effects of income on SWB. People in general do not evaluate the adequacy of their income very well. For example, a study by Grable et al. (2013) reports only a modest positive association between objective, and perceived income adequacy. In the Knight and Gunatilaka (2010) study, they used multiple regression models fitted to the Chinese national household survey data, and proved the importance of relative income and relative income comparisons. They found that with the rising share of the population with internet access, more individuals wanted to compare themselves to others more often. This brings us to the area of expectations and aspirations.

1.3 Subjective well-being and income

As mentioned in the previous paragraph, internet access plays a significant role in income aspirations. Lohmanns' (2015) research suggests that income aspirations are positively related to computer access, mainly in areas with advanced internet infrastructure. However, aspirations differ based on many individual characteristics such as age, gender, the achieved level of education etc. Generally speaking, men tend to have higher income aspirations in their earlier life oppose to women, who aspire more towards a happy marriage and having a healthy and functioning family. Women with strong income aspirations tend to marry for money (or at least money-making potential) regardless of their work status, while men with strong income aspirations do not. Later in life, men become more satisfied than women with their material and marital situation (Nickerson et al. 2007).

Clark et al (2015) focussed their study on education. Their research provides an explanation as to why higher education does not provide an adequate rise in SWB. The explanation for this is people's aspirations. Higher education raises aspirations but in some cases to the extent of unrealistic aspirations, which can decrease perceived happiness and cancel

about fifty percent of the positive effect of education on SWB. His study is based on social comparison theory, proposed by Leon Festinger in 1950s. Social comparison theory states that people do not only focus on their absolute income or wealth, but rather they compare themselves to others.

Ray (2016) revised and further developed the social comparison theory to a theory of socially determined aspirations, according to which, interaction of socially determined aspirations with economic growth and inequalities is bidirectional. In other words, economywide outcomes determine aspirations, which in turn determine social outcomes and economic activities. Ray also mentioned the term "aspiration gap", which he defines as: "the difference between socially generated aspirations and the current socio-economic level that the individual occupies." (Ray 2016, p. 314) In this context, it is worth mentioning a study by Dalton et. al (2016), in which the term "aspiration failure" is characterised as a failure to aspire to one's full potential. Hence, unlike Ray, Dalton links aspirations failure to the behavioural poverty trap – a state in which an individual with low income gives up aspiring to his/her full potential, which in turn prevents them from rising his/her income and escaping the poverty trap. At first glance, the mentioned theories may seem very different one from other but in fact, all of them are heading towards similar conclusions - ideal aspirations are those which are realistically high and reachable, but not too close to the current situation.

In previous paragraphs, I discussed SWB, income and other variables related to the SWB as well as aspirations, aspirational biases, the aspirational gap and aspirations failure. In the following section of this article I will present our research methodology, data and the methods used to examine the relationship between mentioned variables.

2 Methods and methodology

I examine the relationship between SWB, income and aspirations in the Slovakian context, using data from the 2018 European Union Statistical Survey on Income and Living Conditions (EU-SILC) microdata. I use responses to question PW10T – "Overall, how satisfied are you with your life these days?" – measured on the scale ranging from 0 to 10, as a proxy for SWB and responses to question HS130 – "In your opinion, what is the very lowest net monthly income that your household would have to have in order to make ends meet, that is to pay its usual necessary expenses?" - as a proxy for income aspirations. I employ numerous control variables: individual income, age, self-assessed health status, household size, highest achieved education level, sex, degree of urbanization of individual' current location, employment and

managerial position. All control variables are taken from EU-SILC microdata and the estimations are performed in R Studio version 2022.07.1+554¹.

For my research framework, I followed a study by Hovi (2021), where in a case of positive impact of income on SWB, the model is consistent with the key assumptions about utility functions made by recent theoretical papers on income or wealth and aspirations (Dalton et al., 2016; Ray, 2016). "First, the marginal utility of aspirations is negative. Second, at a given income level, utility is higher the higher above the income level is as compared to the aspiration level. The model also implies a correspondent disappointment effect when aspirations are not met." (Hovi, 2021, p. 290) Based on theory, I consider OLS regression model, where logarithmically transformed individual income is the dependent variable, while the rest of the afore mentioned control variables are independent.

This model is used for predicting individual income potential based on the mentioned variables. I use a 90 percent confidence interval for interval predictions, which are compared with individuals' income aspirations. I categorise individuals to three different groups based on the predictions:

- a) Below potential, aspirations < potential income.
- b) At potential, aspiration = potential income.
- c) Above potential, aspirations > potential income.

Next, I use OLS regression models to evaluate the relationship between SWB and aspirations for the mentioned groups. I will provide results for the model and its alternative specification in the following section.

3 Results

Below, I report descriptive statistics for the whole dataset. Mean and median values for SWB are both close to seven, so I can conclude that Slovaks are mostly satisfied with their life. As shown, mean and percentiles values are close between income and aspirations variables, but there is a huge difference between minimum values. This tells us that Slovaks have realistic aspirations on average, except financially deprived individuals that aspire towards a normal life, which could be seen as an unrealistic aspiration in their conditions.

After examining the dataset, I used the OLS regression models, shown in Tab. 3 to examine the relationship between SWB, aspirations and income. At first, I regressed aspirations

¹ RStudio Team (2022). RStudio: Integrated Development Environment for R.

RStudio, PBC, Boston, MA URL http://www.rstudio.com.

and aspirations squared on the SWB variable, while in the second alternative specification I also added income. In both models, quadratic specification fitted the data better. Coefficient related to the quadratic factor is negative in both models, so I expected an inverted U-shaped relationship between aspirations and SWB. To further examine the expected relationship, I have provided Fig. 1 below. This plot confirms the expected inverted U-shaped relationship between SWB and aspirations. The results go in line with (Dalton, 2016; Hovi, 2021; Ray, 2016) and many other studies in the field of income aspirations research, so I can conclude that aspirations that are too high do in fact dampen life satisfaction.

After confirming the inverted U-shaped pattern between aspirations and SWB, I used the OLS regression model mentioned in a previous section of the article to predict potential individual income, and then I categorised individuals into groups as described in section two of the article. I used logarithmic transformation for the income variable, as is common in related academic literature. The model is statistically significant, and it explains that over 66 percent of variation is in the dependent variable. I tested the model for standard assumptions such as heteroscedasticity or autocorrelation. The model is also significant and qualitatively the same when employing different specifications.² Tab. 5 below shows the numbers of individuals in

1.1 Subjective well-being

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² I run two different alternative specifications of the model, first one between Log(income) and variables mentioned in the In this article, I investigate the relationship between SWB, income and income aspirations, so in this section I will summarise the current research in academic literature in each of the mentioned topics. I will start with SWB, then move to income and its impact on individual SWB, and finally I finish by linking SWB and aspirations.

each category. Most of our respondents (51 percent) ended up in the category with aspirations below their full potential, while only 7 percent of respondents aspire towards their full potential, according to my model. This means that the rest of the individuals (39 percent) have unrealistically high aspirations, which may cause frustration if their aspirations are not met (Ray, 2016), but also that more than half of surveyed individuals could have higher aspirations, which may result in greater satisfaction and a better financial situation in the future (Dalton, 2016).

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I define SWB as a multidimensional construct, so let's examine which aspects of life may influence this. Below, I present five of the most commonly linked variables: unemployment, health, age, freedom and gender. I have not included income as this relationship is investigated in the later section of this paper. Unemployment, lack of freedom and bad health will always affect SWB in a negative way, while the relationship between SWB and age is a bit more complex. Early in life, during childhood, individuals tend to be very happy but later during adolescence and early adulthood, their SWB will usually decrease. Finally, as individuals grow older, their SWB starts to rise, so there is an inverted U-shape pattern in the relationship between age and SWB. The final variable is gender. Different studies show different results, since there are also other factors such as gender discrimination, gender equality, etc. that play a significant role in this relationship.

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Tab. *1*, while I added household size and highest achieved education level in the second alternative specification.

Finally, I get to the model examining the effects of aspirational biases³⁴ on SWB. Results from the OLS regression models are reported in Tab. 4 below. The first model examines the relationship between aspirational biases and SWB, while in the second alternative specification I also included logarithmically transformed income, as is common practice in the field of SWB research. In presence of a strong predictor such as income in this case, coefficients related to the aspirational biases became insignificant, so I can conclude that income is a stronger predictor of SWB than aspirational biases. The results from OLS 3 model suggest that there is a significant negative relationship between unrealistically high aspirations and SWB, but I was unable to prove that aspirations below someone's full potential may also decrease SWB. To further examine this, I used the Wald Test to check whether I can drop aspirations below someone's potential from the model, but the p-value was lower than the significance level, so I cannot reject the null hypothesis and drop out aspiration below potential. My results go in line with Ray's (2016) study, while they partially differ from (Dalton, 2016; Hovi, 2021) studies.

	count	mean	std	min	25%	50%	75%	max
Income	5500	1174.45	646.71	19	691	1057	1537	5138
Aspiration	5500	1091.33	621.38	150	700	1000	1400	7800
Household size	5500	8.08	2.67	5	6	7	10	13
SWB	5325	6.78	2.25	0	5	7	8	10
Education	5499	330.17	93.54	0	300	300	354	500
Age	5500	56.63	14.46	17	45	58	67	81
Employment	5500	2.10	1.08	1	1	2	3	4
Managerial position	4902	1.86	0.35	1	2	2	2	2
Urbanization	5500	2.11	0.79	1	1	2	3	3
Sex	5500	1.61	0.49	1	1	2	2	2
Health status	5491	2.61	0.98	1	2	2	3	5

Tab. 2: Descriptive Statistics of dataset

Source: Author' research.

³ Aspiration failure - failure to aspire to one's full potential (Dalton, 2016).

⁴ Aspirational gap - the difference between socially generated aspirations and the current socio-economic level that the individual occupies (Ray, 2016).

Fig. 1: Relationship between SWB and aspirations



Source: Authors' research.

	OLS 1	OLS 2
(Intercept)	5.903 ***	5.726 ***
	(0.092)	(0.092)
Aspirations	1.08.10-3 ***	4.15.10-4 **
	(<0.001)	(<0.001)
Aspiration ²	-1.94·10 ⁻⁷ ***	-1.08.10-7 ***
	(<0.001)	(<0.001)
Income		6.57.10-4 ***
		(<0.001)
Num. Obs.	5325	5325
R2	0.021	0.044
R2 Adj.	0.020	0.044
AIC	23622.4	23494.9
BIC	23648.7	23527.8
Log. Lik.	-11807.209	-11742.426
F	55.915	81.872
RMSE	2.22	2.20

Tab. 3: OLS regression results

Source: Authors' research.

	OLS 3	OLS 4
(Intercept)	6.886 ***	0.636 .
	(0.113)	(0.367)
Below potential	0.005	-0.037
	(0.121)	(0.117)
Above potential	-0.262 *	-0.167
	(0.123)	(0.119)
Log(income)		0.902 ***
		(0.051)
Num. Obs.	5317	5317
R2	0.003	0.060
R2 Adj.	0.003	0.059
AIC	23674.9	23367.6
BIC	23701.2	23400.5
Log. Lik.	-11833.452	-11678.791
F	9.042	112.473
RMSE	2.24	2.18

Tab. 4: OLS regression results for aspirational biases

Source: Authors' research.

Tab. 5: Number of individuals in aspiration categories

Groups	Num. Obs.	% Of total
Below potential	2861	51%
At potential	409	7%
Above potential	2220	39%
NA	165	3%
Total	5655	100%

Source: Authors' research.

Conclusion

In this article, I examined the relationship between income aspirations, income and SWB. The results suggest that unrealistically high aspirations dampen the satisfaction from life, SWB and shows that income is positively associated with SWB. However, I was unable to confirm that aspirations below one's full potential may also decrease SWB in long run. This may have been caused by focusing only on a single country and period in my research. In my future research, I will include all countries in the EU-SILC dataset, and examine them separately and in a pooled model to provide more robust results.

However, as suggested by the theory, findings reported in this study suggest that aspirations that are set too high cause frustration which consequently lowers SWB of individuals (Dalton, 2016; Hovi, 2021; Ray, 2016).

Unfortunately, I was not able to address the question: Why aspirations dampen SWB? This is due to character of the data. Such explanation based on empirical research is missing in current literature and it would be a great idea to design such research in the near future, since science is not only about finding the relationships and facts, but also about providing an explanation for them.

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Contact

Boris Marton Technical university in Kosice Faculty of Economics, Department of Regional Sciences and Management Nemcovej 32, 040 01 Kosice, Slovakia e-mail: <u>boris.marton@tuke.sk</u>