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SUBJECTIVE VS OBJECTIVE WELL-BEING: BRIDGING THE GAP

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Outline

- Aims and contributions of the paper
- Related literature
- Data and methods: happiness and well-being
- Results and robustness checks
- Concluding remarks

Aims

- to analyze how happiness levels of Italian households are related to the individual characteristics, in a panel setting
- to assess whether the regional well-being conditions might affect people's perceptions of happiness
 - by considering a composite multidimensional well-being index
 - by considering four SHIW waves (2004, 2006, 2008 and 2010)
- to assess the causal relationship between subjective well-being and a number of quality of life dimensions

Contributions

The relationship between happiness and income has been deeply explored, whereas the link between subjective (SWB) and objective well-being (OWB) is still a black-box.

Few studies have tried to unpack this complex and undefined relationship (Osvald and Wu 2010, Stevenson and Wolfers 2008)

Our paper aims to estimate the effect of a **composite multidimensional regional well-being indicator (OWB measure) and a number of quality of life dimensions (QoL) on self-reported happiness perceptions (SWB measure) for Italian regions**

Differing from existing studies analyzing the determinants of happiness for Italy (Scoppa and Ponzio, 2008; Ferrante, 2009; Carrieri, 2011; Righi, 2014) our analysis is carried out at the regional level and longer than one year span of time

The contribution of this paper is, therefore, both empirical and methodological

Background and related literature

Much of the debate on happiness (subjective well-being) has centered on the role of income or individual characteristics (Blanchflower and Oswald, 2011; Easterlin 1974) even if some recent papers consider the role of macroeconomic and institutional factors (Frey and Stutzer 2000; Rodriguez-Pose and Maslauskaite 2011; Stevenson and Wolfers 2008)

Few papers analyze the relationship between Subjective and Objective Well-Being mainly on the theoretical ground (Cummins 2000; Binder 2014; Blanchflower and Oswald 2005)

A lively recent literature highlights the multidimensional nature of objective well-being (Stiglitz et al. 2009; Fleubeary 2009; OECD 2014; Bleys 2012; Costanza et al. 2009)

Data and Methods

Main steps of the analysis:

- 1) assessment of the impact of individual characteristics on happiness perception over a panel sub-sample of three SHIW waves
- 2) definition of a composite multidimensional Regional Well-Being Index (RWBI-Ferrara and Nisticò 2015)
- 3) Aggregation of happiness individual responses at regional level by means of an ordered probit regression with regional fixed effects
- 4) Assessment of the impact of Objective Well-Being conditions (OWB) and QoL indicators on regional happiness

Data and Methods (OWB)

As a measure of Objective Well-Being we adopt the multidimensional regional well-being indicator (RWBI), proposed by Ferrara and Nisticò (2015).

The composite indicator is calculated starting from 57 original variables extracted by the BES database, grouped in ten well-being domains:

culture and free time; education; employment; environment; essential public services; health; material living conditions; personal security; research and innovation; and the strength of social relations.

A two step procedure is adopted:

a composite index for each well-being domain is first computed by means of PCA

then the composite indexes are used for the second step of the PCA in order to obtain a well-being indicator for the Italian NUTS 2 regions.

In order to compare RWBI index in different years we apply the min-max normalization; the indicator ranges in the (0,1) interval.

Data and Methods (SWB)

As a **proxy** of Subjective Well-Being (SWB) we use the variable “*happy*”, a **self-reported** happiness measure extracted from the SHIW dataset.

The variable happy refers to the answer - asked only to the heads of households - to the question:

“**Considering every aspect of your life,
how happy do you feel?**”

and ranges from 1 (extremely unhappy) to 10 (extremely happy).

The basic statistical unit is the household.

Frequencies of *happy* in the panel sub-sample

HAPPY	Freq.	Percent	Cum.
1	11	1.42	1.42
2	6	0.77	2.19
3	10	1.29	3.47
4	18	2.32	5.79
5	51	6.56	12.36
6	121	15.57	27.93
7	176	22.65	50.58
8	235	30.24	80.82
9	83	10.68	91.51
10	66	8.49	100.00
Total	777	100.00	

Data and Methods

(SWB and Individual Characteristics)

Following the leading literature in the strand of research on SWB (Clark and Oswald, 1994; Ferrer-i-Carbonell and Frijters, 2004; Gerdtham and Johannesson, 2001; Rodriguez-Pose and Maslauskaitė, 2012 among others), we aim to assess the effect of some individual characteristics on happiness. In this case, the happiness regression model is:

$$happy_{i,t} = \alpha + \delta_i X_{i,t} + \varepsilon_{i,t}$$

where $X_{i,t}$ is a vector of individual and contextual characteristics (e.g.: age, gender, family size, marital status, health status, job position, education, regional dummies and municipality demographical size).

The impact of individual and contextual characteristics on individual happiness is assessed applying a longitudinal ordered logistic regression

XTOLOGIT	(1)	(2)	(3)	(4)			(5)			
	happy	happy	happy	Happy			happy			
31_40y	2.147*** -0.488	2.792*** -0.475	2.774*** -0.476	2.947*** -0.507	areaCentre	-0.302 -0.26	31_40y	2.709*** -0.551	areaCentre	-0.279 -0.262
51_65y	1.145*** -0.213	2.106*** -0.302	2.154*** -0.314	2.264*** -0.4	areaSouth	-0.728** -0.368	51_65y	1.994*** -0.463	areaSouth	-0.752** -0.376
41_50y	2.042*** -0.235	2.712*** -0.288	2.714*** -0.286	2.883*** -0.392	inhab20000	0.532 -0.459	41_50y	2.651*** -0.437	inhab20000	0.69 -0.463
over65y	0.940*** -0.225	2.320*** -0.346	2.560*** -0.392	2.662*** -0.456	inhab 20000_40000	0.654 -0.492	over65y	2.357*** -0.541	inhab 20000_40000	0.857* -0.505
female	-0.890*** -0.283	-0.2 -0.289	-0.176 -0.287	-0.181 -0.291	inhab 40000_500000	0.526 -0.45	female	-0.136 -0.316	inhab 40000_500000	0.663 -0.453
ncomp		-0.299** -0.128	-0.286** -0.128	-0.262** -0.126	Insured	0.136 -0.21	ncomp	-0.260* -0.132	Insured	0.0718 -0.219
married		0.930* -0.48	0.965** -0.478	0.959** -0.478			married	1.072** -0.508	worker	-0.12 -0.483
separated		-0.899 -0.634	-0.904 -0.637	-0.826 -0.607			separated	-0.739 -0.622	employee	0.548 -0.522
widowed		-0.845 -0.557	-0.775 -0.547	-0.74 -0.549			widowed	-0.692 -0.555	manager	0.866 -0.603
heverygood		2.005*** -0.346	1.945*** -0.346	1.853*** -0.353			heverygood	1.862*** -0.357	entrepreneur	0.174 -0.687
hegood		1.421*** -0.264	1.364*** -0.264	1.342*** -0.263			hegood	1.346*** -0.265	other self- employed	-0.183 -0.617
compulsory_ed			0.457	0.414			compulsory_ ed	0.434	retired	0.255
degree			-0.325 0.0404 -0.556	-0.33 0.215 -0.57			degree	-0.328 0.0866 -0.582		-0.515
Post degree			1.477*** -0.374	1.596*** -0.393			Post degree	1.839*** -0.694		
Observations	777	777	777	777				777		
Number of nquest	259	259	259	259				259		

Data and Methods (SWB, OWB and QoL dimensions)

The focus of the paper is to investigate the causal relationship between a multidimensional objective well-being indicator and the regional average of subjective well-being.

- First, we apply to the individual happiness responses of the SHIW data-set an ordered probit regression with regional fixed effects in order to switch from individual to regional values (previously used by Stevenson and Wolfers (2008))

- Then, our happiness regression equation has the form: $happy_{i,t} = \alpha + \beta RWBI_{i,t} + \varepsilon_{i,t}$ where i are the Italian regions, t is the year, RWBI is the value of the composite indicator of well-being computed for the region i in year t .

The model is estimated by means of a panel regression with regional fixed effects.

- Finally, we regress regional happiness values on each of the synthetic intermediate indices of objective well-being calculated for each of the ten well-being domains and for each Italian region:

$happy_{i,t} = \alpha + \gamma Z_{i,t} + \varepsilon_{i,t}$ where Z is the value of QoL intermediate indicators.

Concluding remarks

The analysis of happiness determinants is not an easy task. A multidimensional approach is needed to highlight its multifaceted features:

- OWB and SWB are not two independent spheres
- Happiness perception is positively affected by better (objective) well-being conditions, different from production levels (GDP)
- QoL dimensions have a significant impact on happiness perceptions

THANK YOU FOR YOUR ATTENTION!

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