THE REGIONAL HETEROGENEITY OF WELLBEING "EXPENDITURE" PREFERENCES: EVIDENCE FROM A SIMULATED ALLOCATION CHOICE ON THE BES INDICATORS

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Motivation

- **BES domains**. With an online survey on major Italian newspapers we ask respondents to simulate the typical policymaker decision, that is, the dilemma of allocating scarce financial resources among alternative competing goals using the domains of the newly defined Italian **BES** (**sustainable and equitable wellbeing**) indicators

- We also consider a **set of objective BES indicators** at the regional level for each specific BES domain to reflect the relative scarcity/abundance of wellbeing on that given domain induced by local level policy.

- Beyond **regional** factors we find that two major individual characteristics explaining the heterogeneity in expenditure preferences over the BES domains are left/right wing political orientation and low/high education.

- Overall, our findings document that left wing respondents would spend relatively more on environment, research and innovation, culture and education and relatively less on safety and measures directly aimed at improving economic wellbeing.

BES: the Domains

1. Health
2. Education and training
3. Work and life balance
4. Economic well-being
5. Social relationship
6. Politics and Institutions
7. Safety
8. Subjective well-being
9. Natural and cultural heritage
10. Environment
11. Research and innovation
12. Quality of services

BES Domains	Regional Indicators
Health	Life expectancy at birth Healthy life expectancy at birth Physical Component Summary (PCS) Mental Component Summary (MCS) Infant mortality rate Traffic accidents (15-34 years old) Age-standardised cancer mortality rate (19-64 years old) Age-standardised mortality rate for dementia and related illnesses (people aged 65 and over) Life expectancy without activity limitations at 65 years of age Overweight or obesity - Standardized percentage of people aged 18 years and over who are Smoking - Standardized percentage of people aged 14 years and over declaring to smoke Alcohol consumption - Standardized percentage of people aged 14 years and over with at least one risk behaviour in alcohol consumption Sedentariness - Standardized percentage of people aged 14 years and over who do not practice any Nutrition - Standardized percentage of people aged 3 years and over who consume at least 4 portions of fruit and vegetables a day
BES Domains	**Regional Indicators**
Economic well-being	Per capita adjusted disposable income Disposable income inequality People at risk of relative poverty Per capita net wealth People living in absolute poverty Severely materially deprived people People suffering poor housing conditions Index of subjective evaluation of economic distress People living in jobless households
BES Domains	**Regional Indicators**
Education and Training	Participation in early childhood education Percentage of people aged 25-64 having completed at least upper secondary education Percentage of people aged 30-34 having completed tertiary education (ISCED 5 o 6) Percentage of early leavers (aged 18-24) from education and training Percentage of people aged 15-29 not in education, employment, or training (NEET) Percentage of people aged 25-64 participating in formal or non-formal education Level of literacy: Scores obtained in the tests of functional literacy skills of students in the II classes of Level of numeracy Percentage of people aged 16 and over with high level of ICT competencies Synthetic indicator of the level of cultural participation

BES

Equitable and Sustainable Wellbeing

Not just GDP but the stock of economic, environmental, cultural, relational goods which a given community may enjoy

Individual and Regional Dimensions

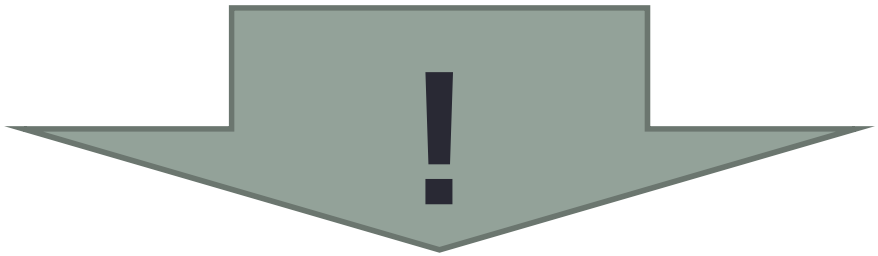
GDP useful to fight unemployment and government debt but broader concepts of wellbeing should be pursued

The Research: Pros

- Italy is the first country to adopt such a process hence, results on preference weights on the Italian indicators may provide relevant insights even for countries which do not adopt them at the moment.
- OCSE is building European regional level BLI indicators. Our data have information on the same domains at the regional plus individual level (plus set of subdomains)
- Direct link to a list of wellbeing indicators which has not been created ad hoc by the researcher, but represents the result of a long participated process stemming from the recommendation of the Sen-Stiglitz-Fitoussi-Giovannini commission.

BES: Final Outcome

Definition of a list of equally weighted indicators which are assumed to represent wellbeing for all individuals in the country (same as for the Better Life Index, OCSE).



This is a parsimonious but unrealistic approximation of the reality where any individual has actually her/his own list with her/his own weights.

The Research: Main Aims

Evaluate whether and in which direction the various BES domains are affected by socio-demographic factors such as political orientation, age, gender, income, education and (characteristics of) the place of residence such as the same values of BES indicators for a given geographical area

BES: the Bottom-up Participative Process

Three steps:

1. Consultation with a council of representative members of the different interest groups (CNEL) who were asked to identify the most important wellbeing domains;
2. Ad hoc commissions of experts started working in each domain in order to identify proper indicators;
3. The indicators were in turn evaluated and validated again by CNEL members in a second consultation process which led to the definition of the final composite BES indicator

Originality in the Literature

- Previous studies focus on drivers of preferences in specific domains and do not consider allocation of scarse resources among all domains jointly
- Oswald and Powdthavee (2010) find that children gender significantly affects political preferences.
- Kuhn (2011) finds that East Germans are more oriented toward state redistribution and progressive taxation vis-à-vis West Germans.
- Differences in redistribution preferences may depend on the perception of vertical mobility and/or the belief that luck, birth, connections and/or corruption determine wealth (Alesina and Angeletos, 2005).
- Alesina and Glaeser (2004) document that such difference is wide between Americans and Europeans, with the latter declaring in a much higher proportion that the poor have to be blamed.
- De Silva and Pownall (2012) find that educated females are more likely to have green preferences.

The Research: the Benchmark Model

We assume the existence of the following utility function

$$U_i = \left(W_{i1}(M_{i1}), W_{i2}(M_{i2}), \cdots, W_{iJ}(M_{iJ})\right)$$
$$M_{i1} + M_{i2} + \cdots + M_{iJ} = M$$

where W_{ij} is the *j*-th wellbeing domain for the individual *i* and M_{ij} is the amount of the total sum (*M* euros) invested in the specific domain (where the same total amount, *M*, is virtually allocated to each respondent)

The Research: the Benchmark Model

- Allocation decision represents in itself a good indication on how voters would like politicians to allocate resources among the different domains;
- And gives the possibility to evaluate how different socio-demographic factors at the regional level affect such preferences;
- This is why we consider more correct to define what we measure *wellbeing expenditure preferences* and not just *wellbeing preferences*

The Research Design

- The empirical analysis is based on data collected with an online survey where respondents are asked to allocate the hypothetical sum of 100 million euros to promote wellbeing improvement in one or more of the 11 considered BES domains;
- The sub-questions which follow ask respondents to identify, within each domain, the first five priorities (ranked in ascending order) among the indicators included in that domain

The Research Design

- The questionnaire also collects data on standard socio-demographic variables and the database is enriched with data on characteristics of the province/region in which the respondent lives *including values of BES indicators* at the regional level
- Since subjective domains are too general and make unclear what it means investing economic resources to improve them we exclude them from our empirical analysis (ie. the 8th domain of subjective wellbeing is excluded).

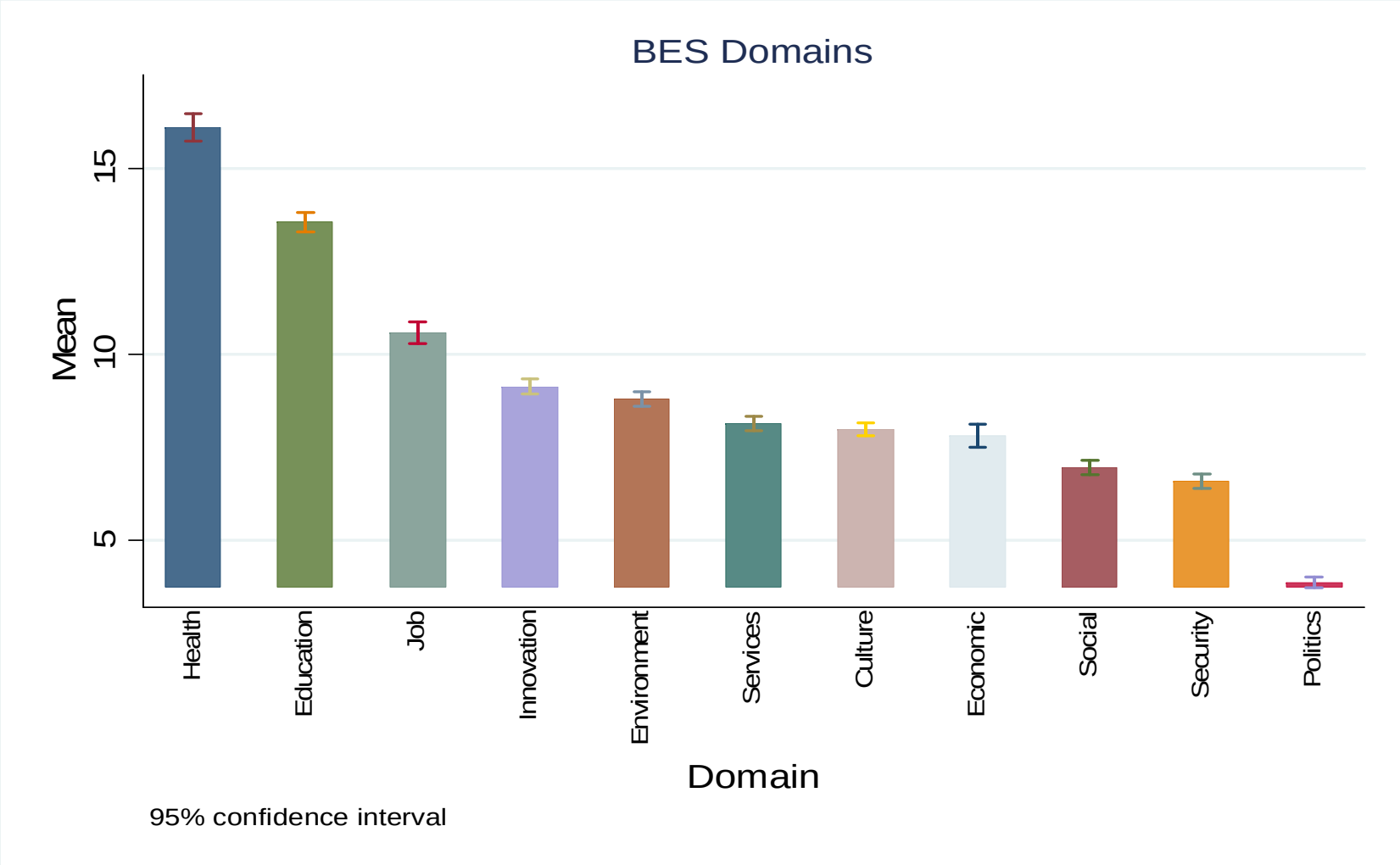
The Research Design

- The survey has been launched on the websites of three main Italian newspapers on March 2013:
  - *Il Messaggero:* the fifth most read Italian newspaper (excluding sport newspapers) with a reputation of being at the center-right of political orientation;
  - *L'avvenire:* the main Italian catholic newspaper. Its readers reflect the ideological divide of Italian believers since they are balanced between right and left wing orientation
  - *L'Unità:* more left wing oriented being the official newspaper of the Democrat Party
- Beyond these three major newspapers which accepted to participate to our research, the online survey appeared as well on several minor newspapers and websites

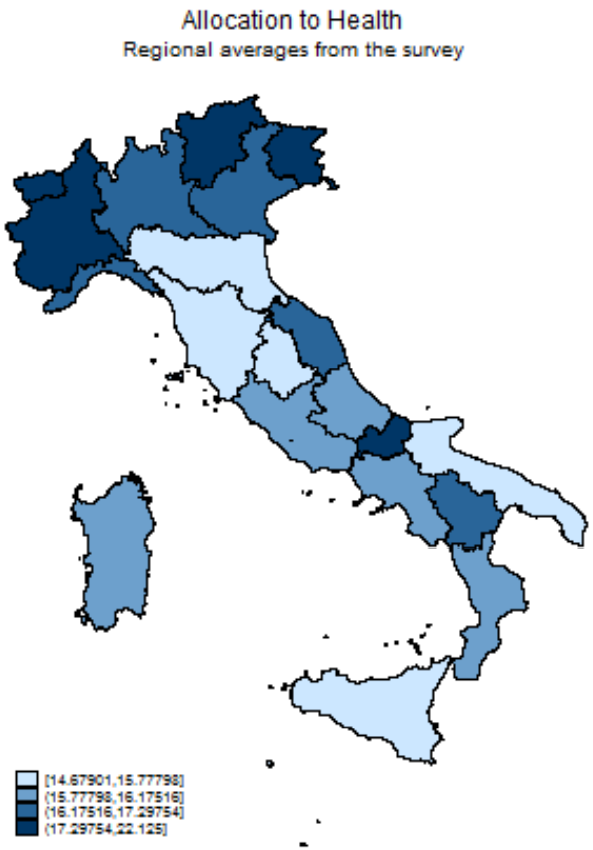
The Research Database

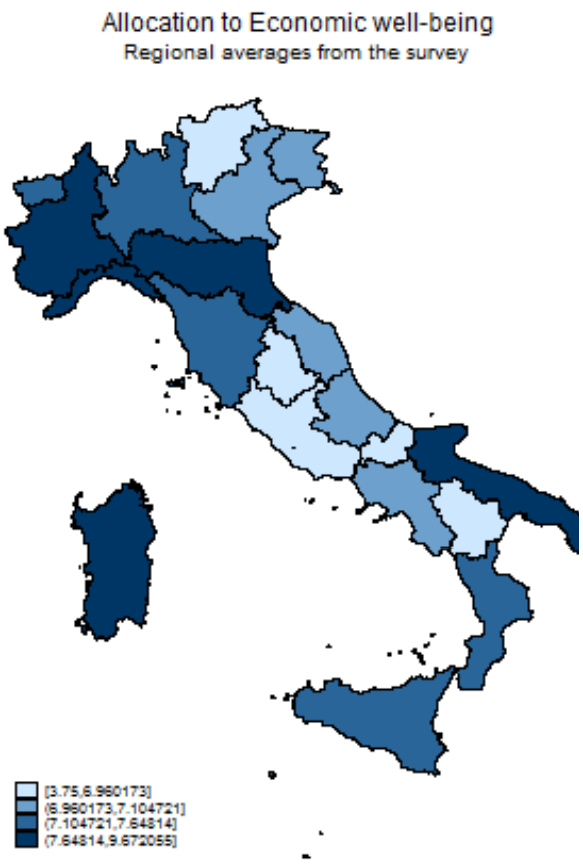
- At end July, after five months from the start of the online survey we collected 2,605 complete questionnaires;
- a control check which prevents respondents from filling the form more than once from the same web address;
- Ranking order of BES domains is randomized to control for rank order bias

BES Domains


BES Domains
Mean
5
10
15
Health
Education
Job
Innovation
Environment
Services
Culture
Economic
Social
Security
Politics
Domain
95% confidence interval

The Regional Dimension of BES Domains





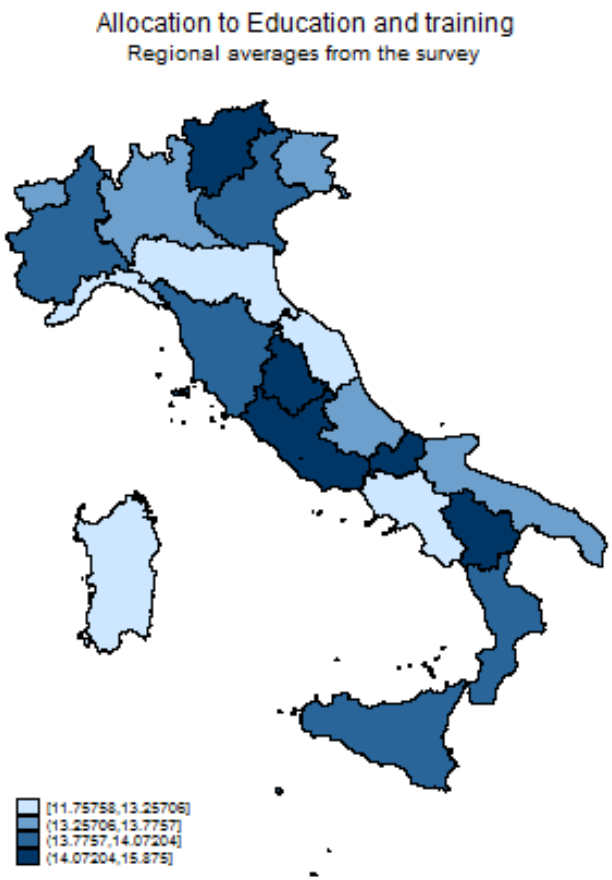


Table 2 Variance Decomposition Analysis BES Domains (ANOVA)

	Between Regions	Within Region
Education and training	0.14	0.17
Work and life balance	0.30	0.26
Economic wellbeing	0.60	0.37
Social relations	0.32	0.30
Politics and institutions	0.34	0.46
Environment	0.19	0.20
Health	0.20	0.22
Security	0.52	0.30
Quality of service	0.50	0.23
Landscape and cultural heritage	0.27	0.21
Research and innovation	0.31	0.20

The Regional Dimension of BES Domains

- Unobserved variation **within regions** accounts for a larger proportion of the overall variation in subjective BES domains for **politics** and **health**

- Unobserved variation **between regions** accounts for a larger proportion of the overall variation in subjective BES domains for **economic well-being** and **quality of services**

The Regional Dimension of BES Domains

- The BES expenditure preferences vary greatly between and within regions because of the characteristics of the regions and localities where respondents live, study and work.

- Are regional differences in respondents' preferences on a given BES domain affected by the relative scarcity/abundance of wellbeing on that given domain at the regional level?

- Unobservable effect that reflects the attractiveness of the place where each respondent lives.

The Regional Dimension of BES Domains

$$BES_{ij,pr} = X_{i,pr}\beta_j + \varepsilon_{ij,pr} + \eta_{j,pr}$$

$$\eta_{j,pr} = Z_p\beta_{jp} + Z_r\beta_{jr} + BESIndicator_{jr}\alpha_{jr} + u_{j,pr}$$

$$i = 1,2,\ldots,N, \quad j = 1,2,\ldots,J \quad r = 1,2,\ldots,R \quad p = 1,2,\ldots,P$$

$$E(u_{j,pr}) = 0 \; Var(u_{j,pr}) = \sigma_u^2$$

The Regional Dimension of BES Domains

- We assume that individual preferences on the BES domains, $BES_{jr,pr}$, depend on the characteristics of the region ($r = 1,\ldots,R$) and the locality ($p = 1,\ldots,P$) where each individual lives (Durlauf and Ioannides, 2010).

- $BESDOM_{jr}$ is the set of (objective) BES indicators at the regional level for each specific BES domain to reflect the relative scarcity/abundance of wellbeing on that given domain induced by regional level policy

- Z_r and Z_p denote the set of contextual effects at the regional and local level such as regional per capita GDP, the share of provincial population with no more than middle school degree and the percent of senate voters at regional level. They are common to all domains.

Empirical Findings: OLS specification

$$BES_{ij,pr} = \alpha_{0j} + \alpha_{1j}\, RightWing_i + \alpha_{2j} Bachelor_i + \alpha_{3j} Low/MiddleEdu_i + \alpha_{4j} Female_i$$
$$+ \sum_{g=1}^{G} \kappa_{gj}\, Macroregion_{i,g} + \sum_{k=1}^{K} \gamma_{kj}\, DAgeClass_{i,k} + \sum_{l=1}^{L} \delta_{lj}\, DIncomeClass_{i,l}$$
$$+ \sum_{m=1}^{M} \zeta_{mj}\, DMaritalStatus_{i,m} + \sum_{s=1}^{S} \theta_{sj}\, DFamilyStatus_{i,s}$$
$$+ \sum_{q=1}^{Q} \lambda_{qj}\, DJobStatus_{i,q} + \sum_{z=1}^{Z} \xi_{zj}\, DIndustry_{i,z} + \sum_{v=1}^{V} \chi_{vj}\, DSource_{i,v} + \alpha_{5j} GDP_r$$
$$+ \alpha_{6j} MiddleSchool_p + \alpha_{7j} SenateVoters_r + \sum_{b=1}^{B} \varphi_{bj}\, BESIndicator_{r,b} + e_{ij,pr}$$

$$i = 1,2,\dots,N, \quad j = 1,2,\dots,J \quad r = 1,2,\dots,R \quad p = 1,2,\dots,P \qquad (2)$$

Tobit System Robustness

- Our dependent variables are left and right censored given the 0 and 100 limit values they can achieve.
- Individuals may have liked to go **beyond the limits** imposed by our questions (the 0-100 percent choice range) by actually "going short" and disinvesting resources from a domain in which they may believe that the government is overinvesting.
- As well, they may have decided to use some of the disinvested resources to increase above 100 percent investment in domains which they regard as essential.
- Second, choices on the different domains are **correlated** with each other since the decision to allocate one euro more in one of them implies that one euro has to be "disinvested" from the others.

Tobit System Robustness

$$BES_{ij,pr} = X_{i,pr}\beta_j + Z_p\beta_{jp} + Z_r\beta_{jr} + BESIndicator_{jr}\alpha_{jr} + e_{ij,pr}$$

$$BES_{ij,pr} = BES^*_{ij,pr} \qquad if \;\; BES^*_{ij,pr} > 0$$

$$BES_{ij,pr} = 0 \qquad if \;\; BES^*_{ij,pr} \leq 0$$

$$i = 1,2,\ldots,N, \quad j = 1,2,\ldots,J \quad r = 1,2,\ldots,R \quad p = 1,2,\ldots,P$$

Tobit System Robustness

where $e_{ij,pr}$ are multivariate normally and independently distributed error terms with zero mean, variance σ^2, correlation ρ, and covariance matrix

$$\Sigma_{e_j} = \begin{pmatrix} \sigma^2_{e_1} & \cdots & \rho_{e_J e_1}\sigma^2_{e_J}\sigma^2_{e_1} \\ \vdots & \ddots & \vdots \\ \rho_{e_1 e_J}\sigma^2_{e_1}\sigma^2_{e_J} & \cdots & \sigma^2_{e} \end{pmatrix} \tag{3}$$

Given these error terms the density function of $BES_{ij,pr}$ is

$$f_j\left(BES_{ij,pr} \mid X_{i,pr}\beta_j + Z_p\beta_{jp} + Z_r\beta_{jr} + BESIndicator_{jr}\alpha_{jr} \right) =$$

$$\prod_{BES_{ij,pr}=0}\left[1 - \Phi\left(\frac{X_{i,pr}\beta_j + Z_p\beta_{jp} + Z_r\beta_{jr} + BESIndicator_{jr}\alpha_{jr}}{\sigma_{e_j}}\right)\right] \prod_{BES_{ij,pr}>0}\frac{1}{\sigma_{e_j}}\left[\phi\left(\frac{BES_{ij,pr} - X_{i,pr}\beta_j + Z_p\beta_{jp} + Z_r\beta_{jr} + BESIndicator_{jr}\alpha_{jr}}{\sigma_{e_j}}\right)\right]$$

Empirical findings: tobit system (1)

	Education and training	Work and life balance	Economic wellbeing	Social relations	Politics and institutions	Environment
Individual Controls	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**
			CONTROLS			
Common controls						
Per capita GDP	-0.039	-0.321	-0.456	-0.463*	0.038	Omitted
	(0.328)	(0.549)	(0.324)	(0.193)	(0.070)	
People with up to the middle school degree	0.027	0.054	-0.001	-0.043	-0.050*	-0.024
	(0.034)	(0.047)	(0.045)	(0.027)	(0.023)	(0.041)
Voters for Senate election	-0.046	0.096	0.097	0.052	-0.014	-0.086
	(0.058)	(0.072)	(0.084)	(0.061)	(0.042)	(0.073)
Significant Regional BES indicators						
Employed persons with temporary jobs		0.427*				
		(0.180)				
Share of population who has given unpaid aid				0.237**		
				(0.083)		
Number of social co-operatives per 10,000 inhabitants				-2.028*		
				(0.875)		
Trust in justice					1.062***	
					(0.065)	
Trust in institutions other than local					3.313**	
					(1.126)	
_cons	YES	YES	YES	YES	YES	YES
_sigma	6.708***	8.162***	8.918***	5.558***	4.941***	5.136***
	(0.208)	(0.146)	(1.332)	(0.189)	(0.025)	(0.370)

Empirical findings: tobit system (2)

	Health	Security	Quality of service	Landscape and cultural heritage	Research and innovation
Individual Controls	**YES**	**YES**	**YES**	**YES**	**YES**
	CONTROLS				
Per capita GDP	Omitted	-0.041	Omitted	Omitted	0.024
		(0.200)			(0.262)
People with up to the middle school degree	-0.008	0.035	-0.012	-0.022	0.046
	(0.056)	(0.025)	(0.025)	(0.032)	(0.033)
Voters for Senate election	0.186	0.031	0.092	-0.180*	-0.095
	(0.116)	(0.038)	(0.060)	(0.071)	(0.073)
Significant Regional BES indicators					
Life expectancy at birth_males	-9.250*				
	(3.658)				
Life expectancy at birth_females	11.490*				
	(5.164)				
People overweight	-1.297*				
	(0.635)				
Burglary rate		0.180*			
		(0.080)			
Sexual violence rate		-1.764*			
		(0.841)			
Conservation of historic urban fabric				0.176**	
				(0.061)	
_cons	YES	YES	YES	YES	YES
_sigma	9.704***	5.386***	5.657***	4.947***	5.653***
	(0.412)	(0.071)	(0.072)	(0.160)	(0.198)

Impact of Regional BES Indicators

- No effect for any of the domain specific BES indicators in the *training and education*, *environment, health, quality of services, research and innovation.*
- The share of temporary jobs is significant on the propensity of respondents to invest in *work and life balance,*
- the amount of voluntary aid affects positively the propensity to invest in *social relationships*.
- regional trust in justice has a strong and significant effect on the propensity to invest in *politics and institutions.*
- the relative abundance of historical buildings has a positive effect on the respondents' propensity to invest in the *natural and cultural heritage* domain.

Impact of Individual Controls

- According to our findings right wing respondents desire to invest relatively more in economic wellbeing and safety, while left wing respondents in the environment, the preservation of natural and cultural heritage, in research and innovation and education
- Overall, our findings seem to suggest that sustainable wellbeing goals may more easily achieved with left wing oriented citizens who, in a hypothetic dilemma between economic growth and environmental sustainability, are relatively more inclined toward the latter
- The impact of education is also relevant and is mainly represented by the difference made by a university degree

Results

- one integer shift toward right from average political orientation (-2.78 in our sample) leads to
- -102,000 euros investment in the *education and training*
- +207,000 euros in the *economic wellbeing* domain (weakly significant),
- -192,000 euros in the *environment* domain,
- +263,000 euros in the *safety* domain,
- - 126,000 euros in the *natural and cultural heritage*
- - 72,000 euros in the *research and innovation* domain.

Subdomain Analysis

- Since any respondent may indicate for each domain the five most relevant items in order of importance we estimate the impact of socio-demographics on such priorities with an ordered logit estimate in which the most important item in a given domain takes value 5, the second value 4, the third value 3, the fourth value 2 and the fifth value 1.

- The set of selected regressors is the same as in (1).

Subdomain Findings

- Left wing oriented respondents are concerned for job stability, gender equality and gender participation in politics and have more propensity to fight crime against women even though the indicator is in the “right wing” *safety* domain.
- Right wing oriented respondents prioritize relatively more fight against dependencies (alcohol, smoke, obesity), family satisfaction and support to families living economic difficulties, investment in defense and institutions and access to services.
- Unskilled give reasonably relatively more priority to flexsecurity, the problem of irregular workers, economic dignity, fighting against degradation of urban areas, contaminated sites and emissions, reducing queues in health services and improving quality of urban transport (Table 5).
- Overall, our findings are consistent with the fact that unskilled workers suffer more (have less resources to defend themselves) from exposure to unskilled and irregular workers, degradation of the urban environment and the inefficiency of public services (health, urban transportation).
- Full evidence of ordered logit estimates according to gender and skilled/unskilled is collected in an Appendix available upon request.

Conclusions

- The original contribution of our paper to the wellbeing literature hinges upon the analysis of the heterogeneity of individual wellbeing expenditure preferences and on the expenditure trade-offs among different wellbeing domains:

- We demonstrate that the null of equal expenditure preference weights on different welfare domains among survey respondents is rejected by our empirical analysis

- We document that two main drivers of BES preference heterogeneity are (left/right wing) political orientation and education as well as the relative scarcity/abundance of wellbeing on that given domain induced by **regional** and **local** level policy.

Empirical findings: OLS estimates (1)

	Education and train.	Work and life bal.	Economic wellb.	Social rel.	Pol. and institutions	Environment
Gender	-0.475	-0.498	0.975	0.3	-0.013	0.186
	(-0.39)	(-0.29)	(-0.52)	(-0.21)	(-0.17)	(-0.35)
Education_middle	-0.935	-0.256	1.977	0.435	-0.047	-1.148*
	(-0.75)	(-0.95)	(-1.74)	(-0.51)	(-0.31)	(-0.57)
Education_bachelor	0.486	-0.192	-0.619	0.336	0.11	0.059
	(-0.26)	(-0.33)	(-0.37)	(-0.22)	(-0.17)	(-0.34)
Politics and institution	-0.102**	-0.06	0.207**	-0.036	-0.039	-0.192***
	(-0.04)	(-0.04)	(-0.07)	(-0.02)	(-0.02)	(-0.04)
NorthEast	0.012	-0.574	2.14	-1.016	-1.142*	-
	(-3.54)	(-1.27)	(-1.91)	(-1.16)	(-0.5)	
NorthWest	1.035	-1.455	0.048	0.011	-0.816*	-
	(-1.75)	(-1.59)	(-0.8)	(-0.96)	(-0.37)	
SouthIsles	-1.563	-1.158	5.015*	0.948	1.802**	-
	(-3.18)	(-3.93)	(-2.19)	(-0.89)	(-0.67)	
Source - Avvenire	1.565***	0.684	-1.792*	-0.332	-0.345*	0.192
	(-0.31)	(-0.45)	(-0.7)	(-0.25)	(-0.17)	(-0.38)
Source - Messaggero	-0.767	0.965	0.173	-1.488*	-0.714	0.09
	(-0.55)	(-0.85)	(-1.45)	(-0.61)	(-0.39)	(-1.53)
Source - Unità	1.096	2.329	-1.192	-0.725	0.011	1.501
	(-0.9)	(-1.51)	(-0.83)	(-0.74)	(-0.47)	(-1.25)
Manufacturing	-0.253	1.167	0.42	0.636*	-0.13	-0.291
	(-0.46	(-0.61)	(-0.74)	(-0.31)	(-0.19)	(-0.53)
Agriculture	-1.332	-1.248	2.43	2.623**	-0.256	0.016
	(-1.31)	(-1.06)	(-2.25)	(-0.92)	(-0.69)	(-1.59)
Personal services	0.22	0.122	-0.134	1.043***	0.097	-0.850*
	(-0.28)	(-0.34)	(-0.28)	(-0.26)	(-0.17)	(-0.37)
Other sectors	1.484**	-1.402**	-0.944	-0.022	-0.758*	-0.833
	(-0.55)	(-0.47)	(-0.81)	(-0.41)	(-0.32)	(-0.59)
Age - under 25	-0.647	-1.089	4.248	0.874	-0.613	-1.274*
	(-0.84)	(-0.94)	(-2.72)	(-0.61)	(-0.64)	(-0.48)
Age 25-30	-0.594	0.171	1.329	0.425	-0.512	0.082
	(-0.46)	(-0.55)	(-1.04)	(-0.43)	(-0.55)	(-0.42)

Empirical findings: OLS estimates (1)

	Education and train.	Work and life bal.	Economic wellb.	Social rel.	Pol. and institutions	Environment
Age 35-40	0.136	-0.365	-0.119	0.373	-0.351	0.862
	(-0.58)	(-0.45)	(-0.76)	(-0.35)	(-0.43)	(-0.52)
Age 40-45	-0.517	-0.354	-0.68	0.194	-0.192	1.245*
	(-0.54)	(-0.51)	(-0.71)	(-0.41)	(-0.42)	(-0.6)
Age 45-50	0.209	0.525	-1.001	-0.348	-0.422	1.310*
	(-0.58)	(-0.54)	(-0.62)	(-0.38)	(-0.39)	(-0.57)
Age 50-55	0.265	0.149	-1.109	-0.532	-0.552	0.885*
	(-0.76)	(-0.63)	(-0.77)	(-0.43)	(-0.43)	(-0.44)
Age 55-60	-0.488	0.633	-0.617	-1.048**	-0.595	0.378
	(-0.66)	(-0.92)	(-0.66)	(-0.39)	(-0.43)	(-0.51)
Age 60-65	-0.408	0.201	-1.085	-1.151	-0.062	0.04
	(-0.69)	(-1.14)	(-0.78)	(-0.64)	(-0.55)	(-0.67)
Age 65-70	0.312	0.797	-1.04	-1.691**	0.379	0.643
	(-0.9)	(-1.12)	(-0.8)	(-0.57)	(-0.67)	(-0.8)
Age 70-75	-0.441	1.984	-2.454*	-0.43	0.376	-0.109
	(-1.12)	(-1.46)	(-1.15)	(-0.86)	(-0.7)	(-1.01)
Age 75-80	4.117	2.005	-1.796	-0.955	-0.084	0.359
	(-2.87)	(-2.43)	(-1.8)	(-0.96)	(-2.17)	(-1.22)
Age - over 80	-1.319	4.210*	0.043	-0.055	-0.255	1.142
	(-1.03)	(-1.9)	(-0.86)	(-0.94)	(-0.57)	(-0.94)
Single	-1.172	0.92	0.964	-0.44	0.249	0.623
	(-0.63)	(-0.97)	(-0.91)	(-0.39)	(-0.32)	(-0.78)
Separated	-0.918	1.135	1.715	1.086)	-0.582	-0.747
	(-0.95)	(-1.34)	(-1.06)	(-0.55)	(-0.57)	(-0.76)
Divorced	-0.77	2.917	0.24	-1.591**	-0.566	-0.666
	(-0.93)	(-1.62)	(-0.98)	(-0.56)	(-0.52)	(-0.94)
Widower	-1.86	2.911	2.032	1.079	0.011	-0.297
	(-1.7)	(-2.06)	(-1.65)	(-1.15)	(-0.72)	(-1.12)
Fixed term contract	-0.432	0.052	1.759	0.291	0.167	-0.041
	(-0.51)	(-0.51)	(-1.01)	(-0.4)	(-0.26)	(-0.44)
Seasonal contract	-0.085	0.651	6.766*	0.279	-0.697	0.332
	(-2.56)	(-1.46)	(-3.23)	(-0.76)	(-0.51)	(-1.24)

Empirical findings: OLS estimates (1)

	Education and training	Work and life balance	Economic wellbeing	Social relations	Politics and institutions	Environment
Independent contractor/freelancer	-0.708	0.199	-0.064	0.285	0.481	0.591
	(-0.38)	(-0.47)	(-0.37)	(-0.38)	(-0.25)	(-0.41)
Not working/unemployed/looking for a job	-1.182*	0.314	1.815	-0.321	0.013	0.495
	(-0.52)	(-0.94)	(-1.22)	(-0.29)	(-0.31)	(-0.53)
Redundancy fund benefits	-1.976	-0.116	5.394	0.426	1.71	-2.309
	(-1.72)	(-1.85)	(-3.8)	(-1.22)	(-0.89)	(-1.3)
Redundancy worker	-2.133	2.409	-0.08	-1.578	-1.327*	-1.37
	(-2.29)	(-4.74)	(-2.43)	(-0.88)	(-0.54)	(-1.56)
Housewife	-0.964	-1.315	-0.855	-0.319	0.217	-0.143
	(-1.04)	(-0.86)	(-0.93)	(-0.81)	(-0.54)	(-1.83)
Student	-0.753	-0.204	-1.69	-0.12	0.374	2.277**
	(-1.02)	(-1.19)	(-1.97)	(-0.67)	(-0.54)	(-0.74)
Retired	-1.363*	-0.425	0.967	0.173	0.466	0.981
	(-0.59)	(-1.12)	(-0.8)	(-0.48)	(-0.34)	(-0.86)
Living alone	0.86	-1.129	-1.840*	0.433	-0.059	-0.745
	(-0.68)	(-1.02)	(-0.81)	(-0.46)	(-0.41)	(-0.7)
Living with my original family	1.242	-0.719	-2.124*	0.407	0.511	-0.877
	(-0.76)	(-1.02)	(-0.94)	(-0.48)	(-0.53)	(-0.86)
Living with my partner without children	-0.513	-1.137*	-0.326	0.17	-0.106	-0.209
	(-0.31)	(-0.48)	(-0.44)	(-0.27)	(-0.22)	(-0.42)
I am the only parent of child/children	0.674	-1.937	1.091	-0.206	0.174	-0.426
	(-0.91)	(-1.23)	(-1.32)	(-0.64)	(-0.58)	(-0.68)
Income less than € 15.000 per year	-0.478	0.262	1.166	0.207	0.354	-0.557
	(-0.33)	(-0.42)	(-0.64)	(-0.34)	(-0.29)	(-0.4)
Income between € 30.000 and € 50.000 per year	-0.041	0.096	-0.66	-0.116	0.036	-0.227
	(-0.4)	(-0.34)	(-0.52)	(-0.28)	(-0.17)	(-0.34)
Income between € 50.000 and € 100.000 per year	0.116	0.396	0.066	-0.299	0.285	-0.646
	(-0.5)	(-0.77)	(-0.42)	(-0.43)	(-0.28)	(-0.57)
Income higher than € 100.000 per year	-0.175	0.3	-0.168	-0.604	-0.195	-0.82
	(-1.28)	(-1.47)	(-0.77)	(-0.86)	(-0.58)	(-0.68)
Don't want to declare my income class	-0.67	1.291	-0.648	-0.348	0.3	-0.439
	(-0.64)	(-0.86)	(-1.18)	(-0.44)	(-0.27)	(-0.46)

Empirical findings: OLS estimates (1)

	Education and training	Work and life balance	Economic wellbeing	Social relations	Politics and institutions	Environment
			CONTROLS			
Common controls						
Per capita GDP	-0.0033	-0.1865	-0.3318	-0.3925*	0.0351	Omitted
	(0.320)	(0.4962)	(0.2792)	(0.1719)	(0.0494)	Omitted
People with up to the middle school degree	0.027	0.055	-0.006	-0.04	-0.040*	-0.031
	(-0.03)	(-0.04)	(-0.04)	(-0.02)	(-0.02)	(-0.04)
Voters for Senate election	-0.042	0.089	0.079	0.049	-0.011	-0.103
	(-0.06)	(-0.1)	(-0.08)	(-0.05)	(-0.03)	(-0.07)
Significant BES indicators						
Employed persons with temporary jobs	-	0.363*	-	-	-	-
		(-0.17)				
Share of population who has given unpaid aid	-	-	-	0.212**	-	-
				(-0.07)		
Social cooperatives per 10,000 inhabitants	-	-	-	-1.681*	-	-
				(-0.76)		
Trust in justice	-	-	-	-	0.641***	-
					(-0.04)	
Trust in institutions other than local	-	-	-	-	2.271**	-
					(-0.84)	
Cons	33.909	-38.368	5.548	0.254	-15.683	15.590*
	(-89.03)	(-35.75)	(-6.9)	(-8.14)	(-9.13)	(-7.76)

Empirical findings: OLS estimates (2)

	Health	Security	Quality of service	Landscape and cultural heritage	Research and innovation
Gender	-0.59	-0.042	-0.281	0.338	0.159
	(-0.38)	(-0.21)	(-0.24)	(-0.2)	(-0.27)
Education_middle	2.558	-0.911	-0.714	-0.537	-1.123*
	(-1.34)	(-0.49)	(-0.51)	(-0.5)	(-0.54)
Education_bachelor	-0.990*	-0.605*	0.432	0.539*	0.414
	(-0.42)	(-0.23)	(-0.26)	(-0.24)	(-0.23)
Politics and institution	0.088	0.263***	-0.008	-0.126***	-0.072*
	(-0.05)	(-0.03)	(-0.03)	(-0.03)	(-0.03)
NorthEast	6.04	-1.977		1.897	-0.736
	(-6.05)	(-1.33)		(-1.46)	(-1)
NorthWeast	4.309	-0.844		2.104	-0.414
	(-4.82)	(-0.73)		(-1.11)	(-0.64)
SouthIslands	6.092	1.149		0.127	-0.036
	(-7.33)	(-0.73)		(-1.22)	(-0.91)
Source - Avvenire	-0.282	0.015	0.18	0.570*	0.289
	(-0.58)	(-0.24)	(-0.35)	(-0.28)	(-0.27)
Source - Messaggero	0.611	0.748	-0.21	0.795*	-0.245
	(-1.46)	(-0.38)	(-0.43)	(-0.34)	(-0.41)
Source - Unità	-1.645	-0.868	-2.328**	0.529	2.073*
	(-1.19)	(-0.59)	(-0.75)	(-0.7)	(-0.82)
Manufacturing	-0.845	-0.053	0.105	-0.413	-0.025
	(-0.66)	(-0.26)	(-0.3)	(-0.31)	(-0.4)
Agriculture	-0.406	-0.223	0.063	-0.231	-2.047*
	(-1.57)	(-0.84)	(-1.15)	(-0.88)	(-0.96)
Personal services	-0.362	0.102	0.524	-0.484*	-0.526
	(-0.42)	(-0.21)	(-0.29)	(-0.23)	(-0.27)
Other sectors	1.339	0.941	-0.181	-0.132	0.23
	(-0.94)	(-0.75)	(-0.38)	(-0.46)	(-0.58)
Age - under 25	0.326	-0.012	-1.166	-0.12	-0.595
	(-1.25)	(-0.44)	(-0.63)	(-0.61)	(-0.55)
Age 25-30	-0.336	-0.537	-0.052	0.106	-0.088
	(-0.79)	(-0.42)	(-0.44)	(-0.41)	(-0.37)

Empirical findings: OLS estimates (2)

	Health	Security	Quality of service	Landscape and cultural heritage	Research and innovation
Age 35-40	-0.445	-0.531	-0.418	0.708	0.035
	(-0.94)	(-0.36)	(-0.38)	(-0.45)	(-0.38)
Age 40-45	0.754	-0.686	0.285	1.368***	-0.656
	(-0.72)	(-0.38)	(-0.48)	(-0.4)	(-0.45)
Age 45-50	-0.371	-0.405	-0.342	1.007*	0.246
	(-0.81)	(-0.44)	(-0.49)	(-0.43)	(-0.42)
Age 50-55	0.237	-0.842	0.263	1.323**	0.081
	(-1.01)	(-0.5)	(-0.46)	(-0.44)	(-0.38)
Age 55-60	1.212	-0.795	0.6	1.011	-0.606
	(-1.14)	(-0.54)	(-0.68)	(-0.6)	(-0.52)
Age 60-65	-0.057	-0.348	1.464	0.79	-0.016
	(-1.16)	(-0.58)	(-0.81)	(-0.53)	(-0.78)
Age 65-70	-1.168	-0.38	0.866	0.851	-0.228
	(-1.51)	(-0.57)	(-1.11)	(-0.6)	(-0.77)
Age 70-75	-2.222	0.027	1.24	1.09	0.62
	(-1.78)	(-0.67)	(-0.83)	(-0.82)	(-0.95)
Age 75-80	-2.868	0.149	-1.607	0.527	1.025
	(-3.01)	(-2.17)	(-2.04)	(-2.2)	(-1.75)
Age - over 80	-0.115	-0.5	-0.473	-1.007*	-0.904
	(-1.24)	(-0.57)	(-0.85)	(-0.5)	(-0.86)
Single	-0.054	-0.21	0.191	-0.248	-0.096
	(-1.17)	(-0.43)	(-0.53)	(-0.45)	(-0.5)
Separate	1.059	-1.055*	-0.319	-0.07	-0.412
	(-1.8)	(-0.52)	(-0.78)	(-0.96)	(-1)
Divorced	4.006	-1.077*	-1.35	-0.351	-0.464
	(-2.67)	(-0.51)	(-1.33)	(-0.8)	(-0.8)
Widower	3.503	-2.038*	-1.536	-0.552	-1.643
	(-2.73)	(-0.97)	(-1.08)	(-0.87)	(-0.95)
Fixed term contract	-0.644	-0.438	-0.119	-0.105	-0.301
	(-0.67)	(-0.34)	(-0.3)	(-0.26)	(-0.38)
Seasonal contract	-3.487*	-1.423	-0.31	0.561	-1.688*
	(-1.64)	(-1.13)	(-0.85)	(-1)	(-0.8)

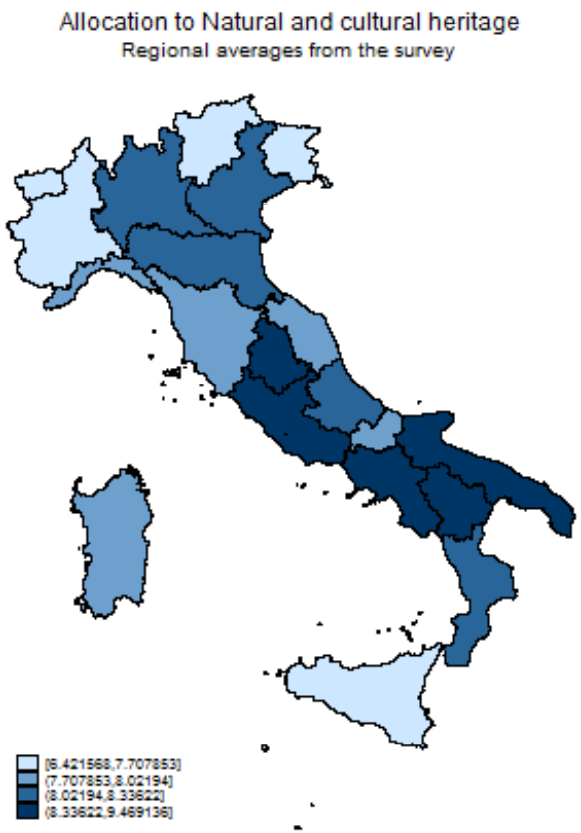
Empirical findings: OLS estimates (2)

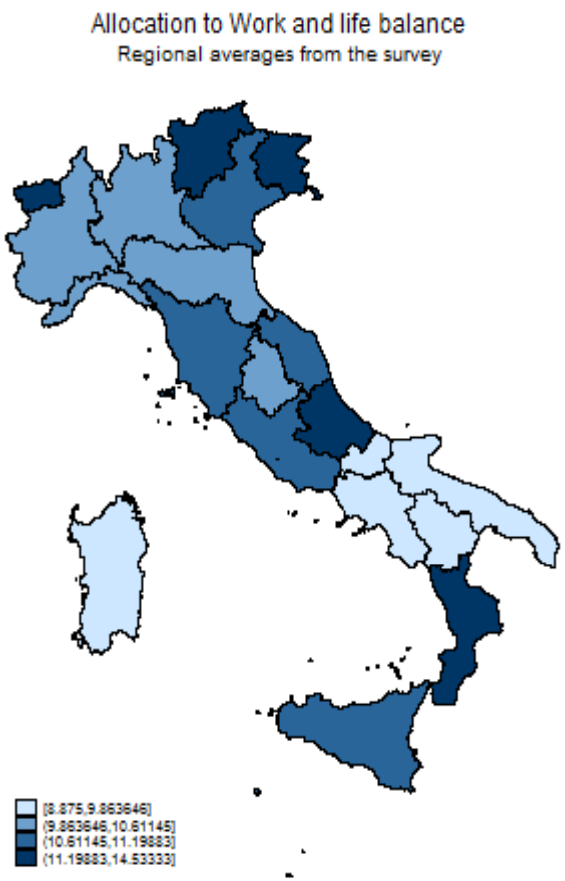
	Health	Security	Quality of service	Landscape and cultural heritage	Research and innovation
Independent contractor/freelancer	-0.582	-0.287	-0.267	0.231	0.105
	(-0.46)	(-0.27)	(-0.34)	(-0.32)	(-0.27)
Not working/unemployed/looking for a job	-0.519	-0.575	0.249	0.244	-0.143
	(-0.73)	(-0.39)	(-0.43)	(-0.55)	(-0.35)
Redundancy fund benefits	-2.675*	-0.673	-0.387	0.861	-2.173*
	(-1.18)	(-1.02)	(-0.56)	(-1.46)	(-1.02)
Redundancy worker	-1.358	-0.882	-0.83	0.27	1.565
	(-2.37)	(-0.74)	(-1)	(-1.28)	(-1.76)
Housewife	-3.532**	3.776	0.426	0.671	1.448
	(-1.33)	(-2.47)	(-0.75)	(-0.87)	(-0.91)
Student	-0.379	-0.452	1.52	0.507	0.362
	(-1.19)	(-0.51)	(-0.8)	(-0.56)	(-0.56)
Retired	0.65	0.204	-1.32	0.188	0.1
	(-1.16)	(-0.54)	(-0.79)	(-0.48)	(-0.59)
Living alone	-0.402	0.413	0.455	0.992*	0.278
	(-1.16)	(-0.45)	(-0.53)	(-0.49)	(-0.55)
Living with my original family	-1.257	0.547	-0.649	0.95	0.424
	(-0.96)	(-0.44)	(-0.48)	(-0.53)	(-0.61)
Living with my partner without children	0.124	0.256	0.582	0.857*	0.035
	(-0.52)	(-0.33)	(-0.46)	(-0.39)	(-0.27)
I am the only parent of child/children	-2.799	1.098*	1.609*	0.52	-0.443
	(-1.97)	(-0.55)	(-0.64)	(-0.89)	(-0.65)
Income less than € 15.000 per year	-0.556	-0.491	-0.16	0.212	-0.224
	(-0.52)	(-0.26)	(-0.31)	(-0.33)	(-0.31)
Income between € 30.000 and € 50.000 per year	-0.358	-0.216	-0.211	0.752*	0.256
	(-0.54)	(-0.31)	(-0.34)	(-0.33)	(-0.33)
Income between € 50.000 and € 100.000 per year	1.28	-0.54	-0.622	-0.075	-0.569
	(-0.77)	(-0.45)	(-0.4)	(-0.29)	(-0.4)
Income higher than € 100.000 per year	2.184	0.142	0.394	-0.078	-0.331
	(-2.11)	(-1.01)	(-1.04)	(-0.55)	(-0.95)
Don't want to declare my income class	-0.584	0.553	0.077	0.031	0.022
	(-0.91)	(-0.35)	(-0.7)	(-0.41)	(-0.48)

Empirical findings: OLS estimates (2)

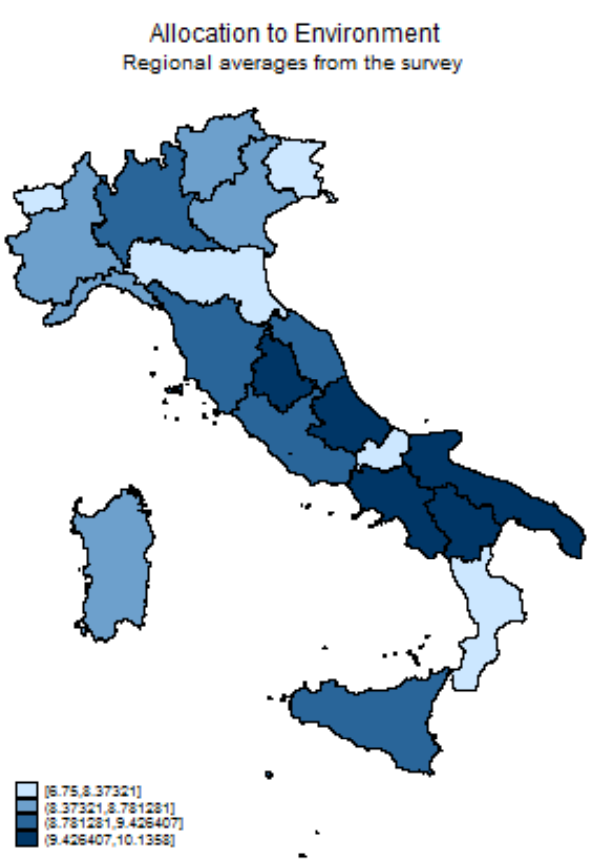
	Health	Security	Quality of service	Lands. and cult. Her.	Research and inn.
			CONTROLS		
Common controls					
Per capita GDP	-0.3966	0.0136	-0.0917	Omitted	-0.0263
	(0.7340)	(0.1713)	(0.1581)	Omitted	(0.2279)
People with up to the middle school degree	-0.001	0.034	-0.015	-0.028	0.039
	(-0.06)	(-0.02)	(-0.02)	(-0.03)	(-0.03)
Voters for Senate election	0.178	0.028	0.092	-0.164**	-0.076
	(-0.12)	(-0.03)	(-0.05)	(-0.06)	(-0.06)
Significant BES indicators					
Lifetime duration for women	8.800*	-	-	-	-
	(-4.01)				
Burglary rate	-	0.154*	-	-	-
		(-0.07)			
Sexual violence rate	-	-1.520*	-	-	-
		(-0.75)			
Conservation of historic urban fabric	-		-	0.154**	-
				(-0.05)	
Cons	-625.164	-8.476	3.412	19.133**	4.271
	(-383.28)	(-14.05)	-7.09)	(-6.41)	(-6.01)

The Regional Dimension of BES Domains

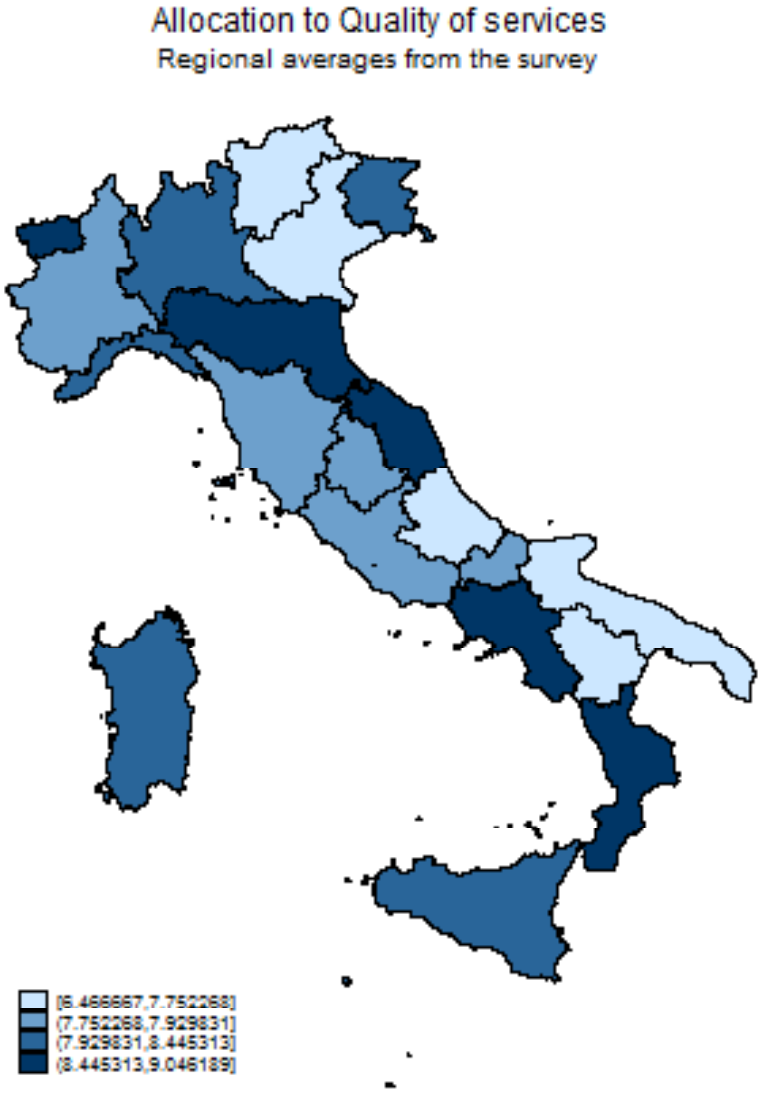


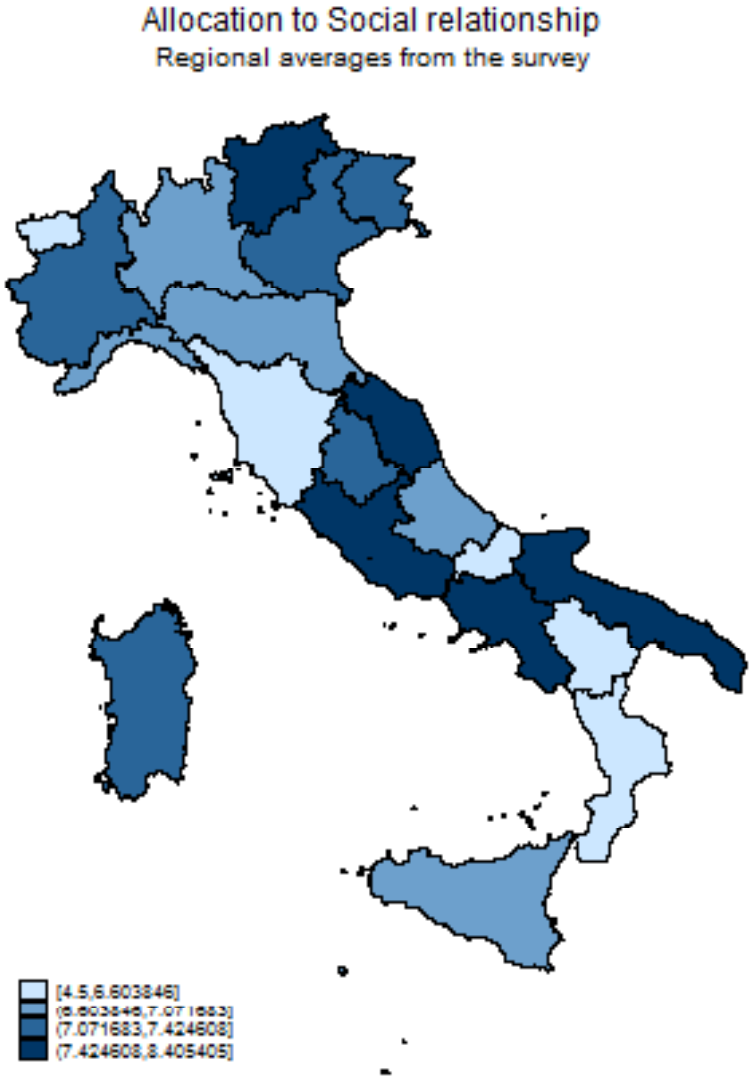


The Regional Dimension of BES Domains



The Regional Dimension of BES Domains





BES Domains	Regional Indicators
Work and life balance	Employment rate of people 20-64 years old
	Transition rate (12 months time-distance) from non-standard to standard employment
	Share of employed persons with temporary jobs for at least 5 years
	Share of employees with below 2/3 of median hourly earning
	Share of over-qualified employed persons
	Incidence rate of fatal occupational injuries or injuries leading to permanent disability
	Share of employed persons not in regular occupation
	Ratio of employment rate for women 25-49 years with children under compulsory school age to the
	Share of household work time carried out by women in a couple on the total of the household work
	Share of population aged 15-64 years that work over 60 hours per week (including paid work and
	Share of employees covered by collective bargaining at company or district level
	Share of employees that work in companies where there is trade union
	Share of employed persons who feel their work unsecure
	Share of employed persons who feel satisfied with their work
BES Domains	**Regional Indicators**
Social relationships	Synthetic indicator of social participation
	Generalized trust
	Non-profit organizations per 10,000 inhabitants
	Social co-operatives per 10,000 inhabitants
	Volunteer work
	Provided aids
	Association funding
	Satisfaction with family relationship
	Satisfaction with friendship relationship
	Percentage of people of 14 years and over which have relatives, friends or neighbours on which they can count
	Percentage of children aged 3 to 10 years who play with their parents: Based on the aggregation of the following indicators

BES Domains	Regional Indicators
Politics and Institutions	Voter turnout
	Civic and political participation
	Trust in the parliament
	Trust in judicial system
	Trust in political parties
	Trust in local institutions
	Trust in other institutions
	Women and political representation in Parliament
	Women and political representation at regional level
	Women in decision-making bodies
	Women in the boards of companies listed in stock exchange
	Median age of members of Parliament
	Length of civil proceedings of ordinary cognisance of first and second degree
BES Domains	**Regional Indicators**
Security	Homicide rate
	Burglary rate
	Pick-pocketing rate
	Robbery rate
	Physical violence rate
	Sexual violence rate
	Fear of crime rate
	Worries of sexual crime rate
	Concrete fear rate
	Social decay (or incivilities) rate
	Intimate partnership violence rate
BES Domains	**Regional Indicators**
Landscape and cultural heritage	Endowment of cultural heritage items
	Current expenditure of Municipalities for the management of cultural heritage (museums, libraries
	Illegal building rate
	Urbanisation rate of areas subject to building restrictions by virtue of the Italian laws on landscape
	Erosion of farmland from urban sprawl
	Erosion of farmland from abandonment
	Presence of historic rural landscapes
	Quality assessment of Regional programmes for rural development (PSRs), with regard to the
	Presence of Historic Parks/Gardens and other Urban Parks recognised of significant public interest
	Conservation of historic urban fabric
	People that are not satisfied with the quality of landscape of the place where they live
	Concern about landscape deterioration

BES Domains	Regional Indicators
Environment	Drinkable water
	Quality of marine coastal waters
	Quality of urban air
	Urban parks and gardens
	Areas with hydrogeological risks
	Contaminated sites
	Terrestrial parks
	Marine protected areas
	Areas of special naturalistic interest
	Concern for biodiversity loss
	Material flowsion
	Energy from renewable sources
	Emissions of CO2 and other greenhouse gasses
BES Domains	**Regional Indicators**
Research and Innovation	Research intensity
	Patent propensity
	Percentage of knowledge workers on total employment
	Innovation rate of the national productive system
	Percentage of product innovators
	Productive specialization in high-tech and knowledge intensive sectors
	Internet use
BES Domains	**Regional Indicators**
Quality of Services	Index of accessibility to hospitals with emergency room
	Beds in residential health care facilities
	Waiting lists
	Percentage of population served by natural gas
	Separate collection of municipal waste
	Composite index of service accessibility
	Density of urban public transport networks
	Index of accessibility to transport networks
	Citizens who benefit from infancy services
	Elders who benefit from home assistance
	Prison density per 100 places
	Irregularity in water supply
	Landfill of waste
	Irregularity in electric power distribution
	Time devoted to mobility

Empirical findings: tobit system (1)

	Education and training	Work and life balance	Economic wellbeing	Social relations	Politics and institutions	Environment
Gender	-0.521	-0.576*	1.127	0.345	-0.016	0.188
	(0.394)	(0.285)	(0.584)	(0.228)	(0.217)	(0.371)
Education_middle	-1.161	-0.484	1.874	0.359	-0.227	-1.322*
	(0.826)	(0.885)	(1.811)	(0.574)	(0.452)	(0.650)
Education_bachelor	0.532	-0.146	-0.674	0.437	0.178	0.096
	(0.274)	(0.370)	(0.432)	(0.257)	(0.220)	(0.371)
Politics and institution	-0.110**	-0.067	0.252**	-0.034	-0.058*	-0.203***
	(0.039)	(0.040)	(0.086)	(0.026)	(0.024)	(0.041)
NorthEast	0.126	-0.909	2.502	-1.233	-1.691**	1.082
	(3.645)	(1.447)	(2.066)	(1.284)	(0.598)	(1.302)
NorthWeast	1.083	-1.602	0.256	0.149	-1.277**	0.584
	(1.791)	(1.768)	(0.875)	(1.040)	(0.416)	(1.799)
SouthIslands	-1.891	-0.934	5.337*	0.870	2.615*	-1.369
	(3.190)	(4.316)	(2.343)	(1.080)	(1.109)	(1.398)
Source - Avvenire	1.673***	0.794	-2.210**	-0.365	-0.500	0.358
	(0.317)	(0.504)	(0.838)	(0.297)	(0.262)	(0.369)
Source - Messaggero	-0.648	1.363	0.119	-1.622*	-0.780	0.180
	(0.606)	(0.866)	(1.566)	(0.715)	(0.519)	(1.492)
Source - Unità	1.164	2.517	-2.133	-0.945	-0.253	1.395
	(0.920)	(1.556)	(1.236)	(0.864)	(0.689)	(1.319)
Manufacturing	-0.305	1.177*	0.396	0.643	-0.319	-0.400
	(0.481)	(0.566)	(0.814)	(0.352)	(0.281)	(0.559)
Agriculture	-1.636	-1.659	2.428	2.694**	-0.652	-0.198
	(1.432)	(1.161)	(2.304)	(1.015)	(1.005)	(1.793)
Personal services	0.255	0.190	-0.070	1.188***	0.200	-0.884*
	(0.278)	(0.361)	(0.322)	(0.284)	(0.212)	(0.398)
Other sectors	1.532**	-1.493*	-1.379	-0.082	-1.024*	-0.833
	(0.576)	(0.599)	(0.978)	(0.487)	(0.416)	(0.651)

Empirical findings: tobit system (1)

	Education and training	Work and life balance	Economic wellbeing	Social relations	Politics and institutions	Environment
Age - under 25	-0.759	-1.284	4.743	0.981	-0.673	-1.295*
	(0.936)	(1.058)	(2.788)	(0.623)	(0.783)	(0.536)
Age 25-30	-0.632	0.180	1.587	0.431	-0.578	0.074
	(0.498)	(0.590)	(1.075)	(0.465)	(0.447)	(0.413)
Age 35-40	0.152	-0.563	-0.285	0.397	-0.323	0.864
	(0.596)	(0.502)	(0.855)	(0.388)	(0.347)	(0.524)
Age 40-45	-0.513	-0.476	-0.730	0.210	-0.080	1.359*
	(0.550)	(0.507)	(0.791)	(0.453)	(0.382)	(0.612)
Age 45-50	0.217	0.479	-1.363	-0.416	-0.376	1.381*
	(0.586)	(0.494)	(0.712)	(0.410)	(0.438)	(0.575)
Age 50-55	0.253	0.117	-1.345	-0.647	-0.815	0.849
	(0.776)	(0.648)	(0.923)	(0.480)	(0.457)	(0.475)
Age 55-60	-0.513	0.634	-0.956	-1.302**	-0.892	0.290
	(0.666)	(0.675)	(0.804)	(0.455)	(0.535)	(0.557)
Age 60-65	-0.400	0.020	-1.658	-1.558*	-0.131	-0.057
	(0.705)	(1.174)	(1.039)	(0.725)	(0.701)	(0.757)
Age 65-70	0.337	0.697	-1.616	-2.058**	0.442	0.532
	(0.936)	(1.181)	(1.017)	(0.667)	(0.786)	(0.860)
Age 70-75	-0.359	2.183	-3.061*	-0.606	0.440	-0.343
	(1.165)	(1.498)	(1.493)	(0.974)	(0.957)	(1.090)
Age 75-80	4.302	2.245	-2.407	-1.339	-0.941	0.216
	(2.881)	(2.490)	(2.199)	(1.204)	(2.915)	(1.253)
Age - over 80	-1.565	4.076***	-0.366	-0.381	-0.509	1.066
	(1.095)	(1.116)	(1.049)	(1.062)	(0.695)	(1.017)
Single	-1.248	1.064	1.232	-0.477	0.303	0.611
	(0.667)	(1.043)	(0.990)	(0.438)	(0.424)	(0.818)
Separate	-1.103	0.920	1.761	1.196	-0.866	-0.853
	(1.033)	(1.411)	(1.123)	(0.626)	(0.822)	(0.811)
Divorced	-0.972	2.597	-0.350	-2.003**	-0.996	-0.697
	(0.992)	(1.758)	(1.323)	(0.719)	(0.762)	(1.040)
Widower	-2.108	2.982	2.561	1.069	0.179	-0.164
	(1.786)	(2.087)	(1.863)	(1.300)	(1.004)	(1.278)
Fixed term contract	-0.501	0.051	2.098	0.335	0.272	-0.137
	(0.544)	(0.426)	(1.127)	(0.427)	(0.351)	(0.465)

Empirical findings: tobit system (1)

	Education and training	Work and life balance	Economic wellbeing	Social relations	Politics and institutions	Environment
Seasonal contract	-0.336	0.372	7.051*	0.347	-1.119	0.123
	(2.725)	(1.576)	(3.215)	(0.800)	(0.937)	(1.470)
Independent contractor/freelancer	-0.702	0.308	0.150	0.364	0.689**	0.578
	(0.388)	(0.500)	(0.458)	(0.441)	(0.234)	(0.423)
Not working/unemployed/looking for a job	-1.254*	0.307	2.176	-0.313	0.034	0.535
	(0.554)	(0.651)	(1.341)	(0.328)	(0.373)	(0.579)
Redundancy fund benefits	-2.114	-0.052	6.373	0.623	2.493*	-2.429
	(1.899)	(2.079)	(3.883)	(1.429)	(1.153)	(1.501)
Redundancy worker	-2.504	2.186	-0.285	-1.854	-2.160*	-1.949
	(2.526)	(1.719)	(2.900)	(1.204)	(1.009)	(1.902)
Housewife	-1.012	-1.608	-0.711	-0.202	0.327	-0.287
	(1.088)	(1.006)	(1.383)	(0.983)	(0.784)	(2.030)
Student	-0.707	0.012	-1.409	0.073	0.802	2.361**
	(1.105)	(1.174)	(2.000)	(0.726)	(0.697)	(0.786)
Retired	-1.364*	-0.268	1.790	0.422	0.670	1.155
	(0.626)	(1.093)	(0.951)	(0.558)	(0.500)	(0.911)
Living alone	0.979	-1.200	-2.237*	0.371	-0.120	-0.780
	(0.732)	(1.092)	(0.893)	(0.543)	(0.545)	(0.727)
Living with my original family	1.385	-0.812	-2.509*	0.434	0.540	-0.845
	(0.807)	(1.050)	(1.047)	(0.554)	(0.608)	(0.910)
Living with my partner without children	-0.559	-1.292*	-0.210	0.200	-0.143	-0.171
	(0.315)	(0.521)	(0.533)	(0.319)	(0.267)	(0.438)
I am the only parent of child/children	0.822	-1.767	1.598	-0.006	0.272	-0.299
	(0.949)	(1.266)	(1.492)	(0.776)	(0.830)	(0.754)
Income less than € 15.000 per year	-0.562	0.131	1.170	0.233	0.406	-0.583
	(0.343)	(0.455)	(0.672)	(0.372)	(0.355)	(0.435)
Income between € 30.000 and € 50.000 per year	-0.055	0.152	-0.754	-0.096	0.075	-0.246
	(0.407)	(0.376)	(0.621)	(0.319)	(0.251)	(0.362)
Income between € 50.000 and € 100.000 per year	0.065	0.519	0.150	-0.268	0.516	-0.662
	(0.520)	(0.801)	(0.523)	(0.511)	(0.383)	(0.574)
Income higher than € 100.000 per year	-0.185	0.503	-0.661	-0.750	-0.269	-0.659
	(1.302)	(1.476)	(1.138)	(1.040)	(0.875)	(0.693)
Don't want to declaire my income class	-0.693	1.324*	-0.733	-0.422	0.393	-0.395
	(0.677)	(0.674)	(1.296)	(0.497)	(0.337)	(0.492)

Empirical findings: tobit system (2)

	Health	Security	Quality of service	Landscape and cultural heritage	Research and innovation
Gender	-0.647	-0.054	-0.291	0.374	0.142
	(0.390)	(0.250)	(0.310)	(0.219)	(0.302)
Education_middle	2.448	-1.169*	-1.047	-0.789	-1.472*
	(1.355)	(0.514)	(0.629)	(0.584)	(0.654)
Education_bachelor	-0.991*	-0.626**	0.478	0.619*	0.479
	(0.432)	(0.228)	(0.258)	(0.260)	(0.253)
Politics and institution	0.083	0.300***	-0.007	-0.136***	-0.085*
	(0.053)	(0.032)	(0.027)	(0.028)	(0.034)
NorthEast	4.437	-2.115	-2.531	1.886	-0.982
	(3.352)	(1.605)	(2.726)	(1.634)	(1.166)
NorthWeast	2.916	-1.025	-2.025	2.256	-0.475
	(2.109)	(0.866)	(2.907)	(1.264)	(0.710)
SouthIslands	11.948	1.033	1.786	0.295	-0.385
	(7.228)	(0.803)	(2.164)	(1.305)	(0.997)
Source - Avvenire	-0.220	0.065	0.161	0.677*	0.369
	(0.586)	(0.293)	(0.377)	(0.315)	(0.313)
Source - Messaggero	0.782	0.887*	-0.015	0.907*	-0.100
	(1.593)	(0.434)	(0.458)	(0.355)	(0.463)
Source - Unità	-1.802	-1.553	-2.872**	0.496	2.142*
	(1.266)	(0.829)	(0.948)	(0.770)	(0.861)
Manufacturing	-0.884	-0.144	0.088	-0.478	-0.054
	(0.684)	(0.306)	(0.331)	(0.346)	(0.432)
Agriculture	-0.686	-0.485	-0.106	-0.317	-2.682*
	(1.625)	(1.010)	(1.251)	(1.031)	(1.279)
Personal services	-0.360	0.130	0.579	-0.497*	-0.560
	(0.426)	(0.237)	(0.355)	(0.252)	(0.294)
Other sectors	1.414	1.068*	-0.161	-0.124	0.244
	(0.937)	(0.451)	(0.460)	(0.506)	(0.649)

Empirical findings: tobit system (2)

	Health	Security	Quality of service	Landscape and cultural heritage	Research and innovation
Age - under 25	0.248	-0.016	-1.327	-0.187	-0.723
	(1.371)	(0.489)	(0.778)	(0.706)	(0.636)
Age 25-30	-0.350	-0.608	-0.024	0.112	-0.114
	(0.832)	(0.479)	(0.474)	(0.465)	(0.398)
Age 35-40	-0.355	-0.643	-0.453	0.765	0.025
	(0.974)	(0.407)	(0.414)	(0.482)	(0.418)
Age 40-45	0.878	-0.747	0.338	1.554***	-0.648
	(0.758)	(0.421)	(0.524)	(0.430)	(0.521)
Age 45-50	-0.390	-0.487	-0.367	1.066*	0.265
	(0.846)	(0.482)	(0.569)	(0.486)	(0.444)
Age 50-55	0.291	-1.033	0.267	1.409**	0.065
	(1.039)	(0.590)	(0.508)	(0.480)	(0.424)
Age 55-60	1.229	-1.054	0.655	0.992	-0.698
	(1.186)	(0.652)	(0.584)	(0.644)	(0.576)
Age 60-65	-0.003	-0.638	1.605	0.811	-0.087
	(1.174)	(0.689)	(0.841)	(0.587)	(0.846)
Age 65-70	-1.182	-0.557	0.763	0.914	-0.224
	(1.554)	(0.712)	(1.188)	(0.656)	(0.861)
Age 70-75	-2.114	-0.081	1.484	1.183	0.697
	(1.781)	(0.849)	(0.894)	(0.889)	(1.073)
Age 75-80	-2.840	-0.226	-2.066	0.315	1.136
	(3.014)	(2.672)	(2.647)	(2.531)	(1.877)
Age - over 80	-0.133	-0.728	-0.852	-1.240*	-1.169
	(1.270)	(0.710)	(1.018)	(0.626)	(0.958)
Single	0.167	-0.181	0.271	-0.189	-0.193
	(1.199)	(0.522)	(0.604)	(0.497)	(0.568)
Separate	1.074	-1.382*	-0.539	-0.206	-0.636
	(1.766)	(0.647)	(0.927)	(1.111)	(1.222)
Divorced	4.117	-1.383*	-1.737	-0.442	-0.766
	(2.693)	(0.632)	(1.683)	(0.876)	(0.890)
Widower	3.704	-2.263	-1.811	-0.623	-1.881
	(2.735)	(1.169)	(1.304)	(1.012)	(1.113)
Fixed term contract	-0.716	-0.503	-0.056	-0.137	-0.385
	(0.704)	(0.415)	(0.334)	(0.294)	(0.444)
Seasonal contract	-4.006*	-1.977	-0.528	0.491	-2.164*
	(1.857)	(1.412)	(1.038)	(1.153)	(1.013)

Empirical findings: tobit system (2)

	Health	Security	Quality of service	Landscape and cultural heritage	Research and innovation
Independent contractor/freelancer	-0.532	-0.256	-0.236	0.222	0.173
	(0.464)	(0.307)	(0.352)	(0.347)	(0.285)
Not working/unemployed/looking for a job	-0.505	-0.557	0.354	0.277	-0.109
	(0.755)	(0.473)	(0.448)	(0.610)	(0.395)
Redundancy fund benefits	-2.511*	-0.669	-0.371	0.949	-2.471
	(1.147)	(1.318)	(0.686)	(1.694)	(1.329)
Redundancy worker	-1.584	-1.121	-0.953	0.245	1.613
	(2.594)	(1.066)	(1.019)	(1.456)	(1.913)
Housewife	-3.714**	4.017***	0.541	0.757	1.563
	(1.374)	(0.891)	(0.735)	(0.956)	(0.956)
Student	-0.159	-0.328	1.871*	0.652	0.513
	(1.251)	(0.573)	(0.789)	(0.619)	(0.625)
Retired	0.756	0.470	-1.242	0.249	0.151
	(1.163)	(0.720)	(0.804)	(0.542)	(0.680)
Living alone	-0.556	0.386	0.377	1.006	0.399
	(1.181)	(0.557)	(0.601)	(0.531)	(0.647)
Living with my original family	-1.520	0.548	-0.768	0.974	0.583
	(0.992)	(0.525)	(0.553)	(0.578)	(0.695)
Living with my partner without children	0.103	0.330	0.617	0.920*	0.053
	(0.522)	(0.371)	(0.344)	(0.422)	(0.296)
I am the only parent of child/children	-2.950	1.453*	1.905*	0.655	-0.342
	(2.048)	(0.667)	(0.781)	(1.019)	(0.692)
Income less than € 15.000 per year	-0.647	-0.608	-0.226	0.183	-0.321
	(0.528)	(0.321)	(0.330)	(0.358)	(0.342)
Income between € 30.000 and € 50.000 per year	-0.386	-0.237	-0.238	0.805*	0.269
	(0.552)	(0.285)	(0.389)	(0.363)	(0.368)
Income between € 50.000 and € 100.000 per year	1.303	-0.601	-0.714	-0.119	-0.654
	(0.768)	(0.538)	(0.483)	(0.321)	(0.453)
Income higher than € 100.000 per year	2.367	0.263	0.394	-0.001	-0.412
	(2.120)	(1.256)	(1.087)	(0.598)	(1.023)
Don't want to declaire my income class	-0.586	0.601	0.054	0.083	0.087
	(0.953)	(0.387)	(0.482)	(0.442)	(0.528)

The Research: Limits

- Country specific results
  - But it can be interpreted as a benchmark for other countries
- Biased results
  - Web users tend to be relatively younger and more educated. However given the trend toward higher education and web use, it may anticipate future preference trends in contemporary societies
- Virtual payoffs
  - But the risk of “strategic answering” is much smaller since the respondent has to decide about a virtual government (and not her own) outlay