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"DE GUSTIBUS ERRARI (POT)EST": UTILITY MISPREDICTION, PREFERENCES FOR WELL-BEING AND LIFE SATISFACTION

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"De gustibus errari (pot)est": utility misprediction, preferences for well-being and life satisfaction[§]

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Abstract

The life satisfaction literature generally focuses on how life events affect subjective well-being. Through a contingent valuation survey we test whether well-being preferences have significant impact on life satisfaction. A sample of respondents is asked to simulate a policymaker decision consisting in allocating scarce financial resources among 11 well-being domains. Consistently with the utility misprediction hypothesis, we find that the willingness to invest more in the economic well-being domain is negatively correlated with life satisfaction. Our findings are shown to be robust when we account for unobservables related to economic fragility and non-random sample selection. Reverse causality and omitted variable bias are controlled for with instrumental variables and a sensitivity analysis on departures from exogeneity assumptions. Subsample estimates document that the less educated are more affected by the problem.

Keywords: life satisfaction, well-being preferences, utility misprediction, subjective well-being.

JEL numbers: A13, D64, H50, I31

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γνῶθι σεαυτόν (know thyself)
Socrate

1. Introduction

Several authors have provided rationales explaining why individuals may mispredict utility (see, among others, Lebergott 1993, Lane 1991, Frank 1999 and Frey et al. 2004). Among the most relevant of them we find underestimation of asymmetric adaptation to the effects of extrinsic/intrinsic aspects to subjective well-being,[1] distorted past memories due to peak-end rules[2] and effects of marketing policies advertising comfort goods more than stimulus goods.[3] The same line of thought argues that utility misprediction may explain the often observed positive (negative) correlation between life satisfaction and intrinsic (extrinsic) life goals (e.g. Kasser and Ryan 1996; Sirgy 1997; Frey and Stutzer, 2004). This is because the above-mentioned rationales lead individuals to overestimate the impact on life satisfaction of extrinsic and material goods. Advocates of the utility misprediction hypothesis must however overcome the error correction argument (why people do not correct their misprediction) and, from an empirical point of view, empirical findings in support of this hypothesis must be proven to be robust to reverse causality and endogeneity.

[1] The life satisfaction literature documents on this point that individuals adapt quickly to positive changes in income (van Praag 1993, Easterlin 2001, Stutzer 2004, Di Tella et al. 2010) while much less so to negative non pecuniary events such as illnesses, shocks to relational goods and job losses (e.g. Easterlin 2005, Oswald and Powdthavee 2008, Luhmann et al. 2012).

[2] Frey and Stutzer (2005) argue that extrinsic attributes are more related to peak emotions which are demonstrated to distort retrospective assessments of feelings in psychological experiments (Kahneman, 1999). Due to such peak emotions materialistic events are remembered with more satisfaction.

[3] The concepts of stimulus and comfort goods were first introduced by Scitovsky (1992). Stimulus goods are goods whose consumption is not possible without previous investment in activities or skills which make such consumption possible. The concept may be applied for instance to cultural, language or sport abilities. The main example provided by Scitovsky is the enjoyment of culture and arts and study and investment in humanistic culture accumulates the crucial "capital" which allows to enjoy this kind of stimulus good. In alternative, comfort goods are goods which provide immediate satisfaction but may create in the long run dependence and may weaken investment in the acquisition of the skills necessary to consume stimulus goods, thereby contributing to create a happiness paradox (Pugno, 2013). Since comfort goods may produce dependence, and consequently a much more stable flow of profits, they are by far more advertised than stimulus goods. Frey and Stutzer (2013) argue that advertising emphasizes extrinsic more than intrinsic aspects of goods. Our point is that advertising pushes toward comfort goods which in turn require more economic wellbeing to be consumed but negatively affect life satisfaction. Addiction to comfort goods and insufficient investment in skills required to consume stimulus goods may contribute to explain why the negative effects of utility misprediction may not be easily corrected in a dynamic perspective.

We aim to contribute to this literature by documenting from an original source of empirical evidence a strong and statistically significant negative correlation between life satisfaction and materialistic preferences proxied for by expenditure preferences for economic well-being. We show that our evidence is robust to non random sample selection, endogeneity and reverse causality. The starting point of our investigation is the process of construction of equitable and sustainable well-being indicators (*Benessere Equo e Sostenibile*) enacted by the Italian Statistical Institute in 2011 following the guidelines of the Sen/Stiglitz commission (see section 2 for details). The result of such process is the identification of 11 well-being domains which were regarded as fundamental by representatives of different groups of the Italian population. Our research builds on such classification by asking individuals to simulate the hypothetical policymaker decision to allocate a given sum among the 11 domains. Our work is novel from this point of view since, to our knowledge and with the exception of Becchetti et al. (2013), papers investigating the determinants of political preferences have so far concentrated their effort on single factors affecting support for a specific well-being domain (i.e. environmental sustainability, redistribution), while never looking at how weights across different domains are distributed.

Empirical findings related to our question on well-being preference weights document that individuals who would invest more in economic well-being are significantly less satisfied with their life. The maintained assumption behind our reasoning is that willingness to invest more in economic wellbeing in the simulated policymaker action should mirror excess time dedicated to its pursuit in private life thereby producing negative consequences on life satisfaction. Under this assumption, our results are consistent with the utility misprediction hypothesis since individuals who overestimate utility from material well-being (and underestimate utility from other non-material domains, like e.g. socializing) should declare higher willingness to invest in economic well-being (rather than, e.g., in social relationships) and, at the same time – due to a systematic estimation error in their utility estimation – lower life satisfaction than individuals who declare lower willingness to invest in the same domain while attaching higher value to other non-material domains.

Most of the empirical work in the paper aims to disentangle the above discussed utility misprediction interpretation of the observed nexus from the alternative interpretations of omitted variable bias, endogeneity and reverse causality.

A first alternative rationale may in fact be that available explanatory variables do not adequately capture all economic well-being dimensions. According to this interpretation, individuals would invest more in economic well-being while being relatively less satisfied with life because they are relatively worse off in terms of unobservable economic well-being components (i.e., they may be relatively more indebted or suffer from other forms of financial fragility not captured by information available to the researcher). In order to control for this problem we introduce income satisfaction among regressors in our benchmark specification. Such variable not only captures the impact of all unobservables related to economic well-being but also accounts for a potential gap between expectations and realisations in terms of material satisfaction which may produce a negative impact on life satisfaction even when income and other unobservable economic components are at levels which may be objectively considered as adequate.

A second rationale for our findings, alternative to utility misprediction, is reverse causality: reduced life satisfaction may push individuals to search compensation for their unhappiness in material goods. According to this view, whatever the causes of unhappiness (idiosyncratic time invariant psychological traits or life events) their effects on life satisfaction may produce a reverse causality nexus from the latter to materialistic preferences due to such compensatory reaction.

We control for these alternative interpretations with instrumental variable regressions and a sensitivity analysis à la Imbens (2003) which allows us to evaluate the robustness of our results to the introduction of a simulated confounder when relaxing the standard conditional independence assumption. Note as well that the sensitivity analysis also provides a sound alternative to the introduction of income satisfaction among regressors when controlling for unobservables related to financial fragility.

Being robust to alternative interpretations tested with these econometric tools, our results therefore provide confirmation that utility misprediction is an explanation of our main result. These results have relevant implications for economic theory since they suggest the need of broadening our theoretical horizons from a standard framework for economic modeling in which preferences are generally regarded as exogenous and time invariant (*de gustibus non est disputandum*) to a framework in which individuals progressively discover their preferences in a noisy environment in which psychological or sociological distortions may make this work not simple (*de gustibus errari potest*).

The paper is divided into six sections (including introduction and conclusions). In the second section we describe the institutional process of construction of the equitable and sustainable well-being indicators which are at the root of our empirical work. In the third section we illustrate the design of our empirical investigation. In the fourth section we provide and comment descriptive findings and hypothesis testing. In the fifth section we illustrate and discuss our econometric results and robustness checks controlling for omitted variable bias, non-representativeness of our sample, endogeneity and reverse causality; we further provide subsample estimates in order to check how (below/above median) education and income affect misprediction. The final section concludes.

The rest of the paper is available in its published form on Social Indicators Research (title: Preferences for well-being and life satisfaction)