

Urban-rural differences in subjective well-being: Turkey

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Abstract: *Urban-rural differences in subjective well-being: Turkey.* The study explores whether urban and rural disparities in terms of material and non-material conditions are reflected in the happiness of rural and urban residents in the case of Turkey. The study aims at contributing to the empirical literature on the geographic dimension of happiness by examining differences in rural and urban determinants in the case of a developing country, since developing countries have been rarely examined despite their rapid urbanization and their efforts to improve rural development. We analyze the data from a nationally representative survey collected by TURKSTAT through a series of linear and ordered logit regressions. The findings of the study indicate that the mean happiness of urban areas is higher than that of rural areas over time, apart from 2011, while there is a convergence between rural and urban happiness on average. In estimated regressions, we could not find statistically significant coefficients on a rural dummy. In separate estimations for both sub-samples, we found that differences in rural and urban happiness occur especially in economic estimators. Employment status, social security coverage and income level are not statistically significant estimators of the rural sample, contrary to the urban sample and the sample as a whole. Also, the perceived social pressure and positive expectations for the country's future are not statistically significant for the rural sample, while they are significant for the urban sample. Finally, urban happiness is positively correlated

with both satisfaction with central public services and local public services, while rural happiness has a statistically significant association only with those of central government services.

Key words: subjective well-being, happiness, rural welfare, urban welfare, rural-urban differences, spatial differences

INTRODUCTION

The idea that per capita national income is not a sufficient measurement for indicating the welfare level of a country and its citizens has been criticized. Individual welfare depends on social and psychological properties, and factors related to resource-use beyond material welfare. In this respect, subjective well-being (SWB) and happiness, as a commonly accepted indicator of SWB, have drawn much attention, especially in economics and psychology. Various dimensions of the determinants of happiness, such as material welfare, psychological factors, and social interaction have been widely examined in the enormous body of literature on happiness.

However, literature on the geographical dimensions of SWB is relatively limited and mostly looks at developed countries. It can be accepted that rural and urban life produce different social systems which affect residents' welfare

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levels directly. The SWB of individuals and of members of a community could be shaped by time and place [Nordbakke and Schwanen, 2013] and thus, the geographical context and the spatial differences are important to explain the SWB [Wang and Wang, 2016]. Rural and urban contexts can affect the happiness of residents due to various reasons, such as labor market opportunities, access to public services, education opportunities, social solidarity/support and environmental features. An interesting discussion has been held on which lifestyle is better for individual welfare. While the rapid growth of large cities has led to rising wealth and economic growth, it raises concerns which are related to increased human interaction, such as anomie, alienation and social disorganization, as pointed out by Louis Wirth [Wirth, 1938]. It is clear that rural areas suffer some material disadvantages such as lower income, fewer occupational opportunities, and limited access to education, health and transport services, while they enjoy the pastoral style of life, supportive communities and social environment, positive environmental externalities (green spaces, absence of pollution and environmental hazards) and perceived security in terms of protection from economic deprivation, unemployment and safety from crime [Schucksmith et al., 2009, Gilbert et al., 2016] that could affect the perceptions of SWB.

We explore whether urban and rural disparities in terms of material and non-material conditions are reflected in the happiness of rural and urban residents in the case of Turkey. Thus, the study aims at contributing empirical literature on the geographic dimension of happiness

by examining the differences in rural and urban determinants in the case of a developing country. This issue is especially important for most of the developing countries because of their rapid urbanization and their efforts to improve rural development, despite being rarely examined in the empirical literature. Moreover, Schucksmith et al. [2009] showed that urban-rural differences are minimal in richer countries, while these are greater in poorer countries. In order to study rural-urban differences in happiness, we use the data collected by the Life Satisfaction Survey (LSS) by TURKSTAT. The data concerned has been collected since 2003 and includes variables which allow considering various demographic, social, economic and psychological determinants of happiness.

In the study, we first evaluate the literature on spatial differences in happiness and examine the changes in the rural and urban happiness of Turkey since 2003. Then, we investigate rural and urban differences of happiness with a dummy variable and two sub-populations through the OLS and ordered logistic regressions after controlling standard determinants of happiness that are suggested by related literature. The final section concludes.

LITERATURE ON SPATIAL DIFFERENCES IN SUBJECTIVE WELL-BEING AND RURAL-URBAN HAPPINESS IN TURKEY

Even though studies on spatial variations on SWB are limited, an increasing number of studies have begun to realize the importance of the impact of the geographical dimension on happiness.

Recently the spatial differences in SWB and happiness have been studied at the international, national, interurban and neighborhood scale. However, the empirical evidence on the impact of geographic locations on SWB is mixed and inconclusive due to both theoretical difficulties in modelling and conceptualizing the relationship of geographical context to happiness, and of differences in research methods and data [Dolan et al., 2008; Gilbert et al., 2016]. On the other hand, the studies of SWB at local levels are relatively limited due to data issues, and existing studies on differences in SWB deal with the issue at international and regional levels [Ballas and Dorling, 2013; Wang and Wang, 2016]. Thus, the literature on the geographies of well-being needs to be extended by examining spatial variations and patterns [Schwanen and Wang 2014] such as between and within states, provinces, urban-rural continuum, cities, and intercity.

In terms of international comparative studies, Easterline et al. [2011] found from the data of the Gallup World Poll that economic development level is a matter for happiness with respect to urban-rural geography. In developing countries, the SWB tends to be higher for urban residents, while the disparity tends to disappear or even reverse at advanced levels of development, due to convergence in urban-rural socio-economic systems in terms of income levels, employment, education etc.

Schucksmith et al. [2009] found in EU countries, from the data of European Quality of Life Survey, that urban-rural disparity in quality of life is minimal in

richer countries and greater in poorer countries at the expense of rural areas. However, they also found that the SWB (life satisfaction and happiness) was not significantly different between rural and urban areas, and did not compensate for material disadvantages.

Some studies consider the issue with indicators such as population density, degree of urbanization, city size and accessibility to transport and other services. Some of these [Brereton et al., 2008; Berry and Okulicz-Kozaryn, 2011; Morrison, 2011] found more urbanized and denser locations to have lower happiness. On the rural-urban continuum, several studies [Cummings et al., 2003; Schucksmith et al., 2009; Davern and Chen, 2010; Knight and Gunatilaka, 2010] presented results that rural areas have higher levels of SWB or happiness, while others [Murray et al., 2004; Millward and Spinney, 2013] provide evidence in favor of urban places. Berry and Okulicz-Kozaryn [2011] provide evidence that rural areas or small towns are happier than large cities, from the US General Social Survey, and they comment that their finding confirms Wirthian theory on the urban-rural happiness gradient. A recent study on Scotland by Gilbert et al. [2016] presents evidence on higher life satisfaction in remote rural areas and no change in mental wellbeing across rural--urban space in Scotland.

Some studies estimated separate models for each sub-sample of the population, as we did in this study. Millward and Spinney [2013] found that the satisfaction with life varies significantly by urban-rural zones, being highest in inner

cities and lowest in the outer commuter belts in Canada. Han [2015] found that income, structural attributions of inequality and attitudes toward governance were significant in both urban and rural samples, while some other sets of variables which reflect the economic, social, and cultural discrepancies between urban and rural, such as materialistic pursuit or social trust, have different effects between rural and urban samples in the case of China.

Geographical differences in happiness in Turkey are mostly examined through a dummy variable to control regression estimations. Atay [2012] and Selim [2012], who use data from the World Value Survey and European Value Survey, found people living in urban areas to be happier than those living in rural areas. A similar result was provided by Bozkuş et al. [2006] from the data of TURKSTAT LSS. However, Kahyaoglu [2008], Şimşir [2013], Caner [2015, 2016] found that people who live in ur-

ban areas are less happy compared to those who live in urban areas.

Dumludağ et al. [2016] make separate estimations in part for rural and urban sub-samples, and present evidence the residents of rural areas are happier than those living in urban areas for all income levels. However, they could not find significant differences in the welfare comparison between rural-urban sub-samples.

Another recent study by Çevik [2016] examines the distribution of happiness across the provinces of Turkey, and found the population and railway access index to have a negative association with the provinces' average happiness, and per capita income, socio-economics development index and the number of actively insured people to have a positive association with the provinces' average happiness.

Figure 1 examines changes in the averages of rural-urban happiness and in some macroeconomics indicators from 2003 to 2012. As can be seen in Panel A,

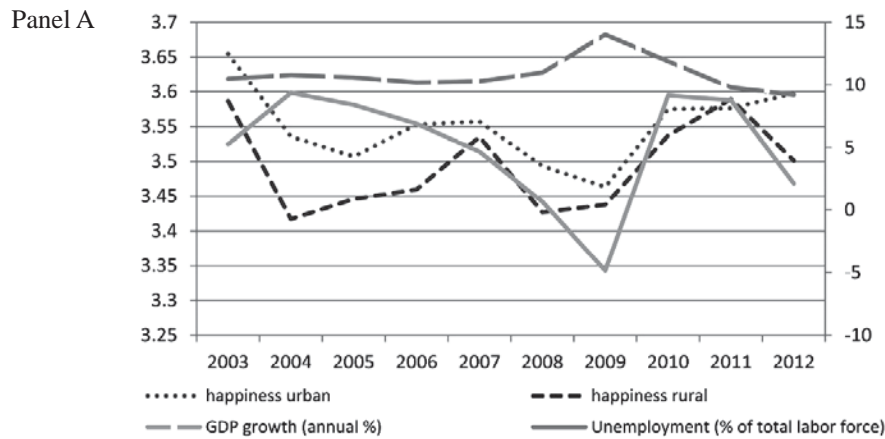


FIGURE 1A. Urban and rural happiness and change in GDP and unemployment rate
Source: Authors' calculations from the data by TURKSTAT.

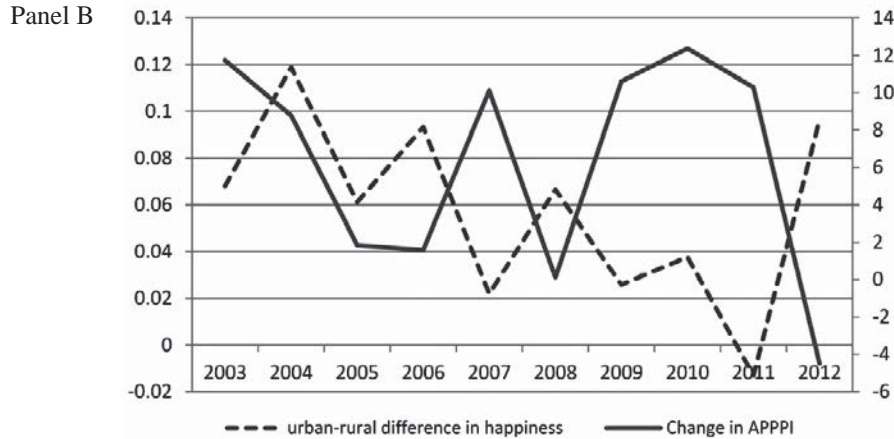


FIGURE 1B. Urban and rural happiness and change in APPPI
Source: Authors' calculations from the data by TURKSTAT.

on average, urban happiness is higher than rural happiness until 2011, which is the only year, where rural happiness is higher than urban happiness. Visually, rural and urban happiness is positively correlated with GDP growth. However, urban happiness has a bigger correlation coefficient (0.44) than this of rural happiness (0.30) over time. Unemployment is negatively correlated with urban happiness (r 0.60) and rural happiness (0.35). Thus, it can be said that unemployment is more important for urban happiness in the macroeconomic setting. Panel B presents the difference in rural and urban happiness, and changes in the producer price index of agricultural products (APPPI) over time. The urban-rural difference in happiness increases and decreases year by year. Most importantly, APPPI is highly and negatively correlated with rural-urban differences in happiness (r 0.53). When APPPI increases, the average rural happiness also

increases, and the difference between rural and urban happiness decreases. In general, economic growth and unemployment are more associated with urban happiness and the price of agricultural products is more associated with rural happiness in Turkey.

DATA, VARIABLES AND EMPIRICAL STRATEGY

In order to investigate rural and urban differences in subjective welfare, we studied the survey data from the TURKSTAT (Turkish Statistical Institute) Life Satisfaction Survey (LSS), which has been collected annually since 2003. The dataset includes a variety of variables on dimensions and determinants of life satisfaction, besides direct measurement of happiness and life satisfaction. In the empirical section of this study, we employed the data from 2012. The data employed in the econometric estimations contains 7,880 observations.

As a dependent variable, we use the happiness question, “Considering your life as a whole, how happy are you?” with alternative responses on a Likert scale of five categories, namely, very unhappy (1), unhappy (2), neither happy nor unhappy (3), happy (4) and very happy (5), after we reversed the coding of the responses.

One of the disadvantages of the dataset is that it does not provide detailed information on the place of residence of the respondents apart from rural-urban information. Since the LSS enables us to obtain information on location as only urban and rural, we cannot analyze the impact of the size of locality on happiness. In some specifications, we employed a dummy of rural which scores 1 if the respondent’s location is rural, 0 for urban (26.3% of the population sample is rural and the remainder is urban). Figure 2 shows responses to the happiness question by rural and urban residents. As can be seen, more than half of respondents express themselves as happy and

very happy. Close to 10% of the sample are unhappy or very unhappy. Rural residences tend to being unhappy a little bit more (approximately 1% more) than urban residences.

Literature on happiness research from both psychology and economics suggests numerous variables to estimate the determinants of happiness and/or life satisfaction, including demographic factors such as age, gender, marital status, education; socio-psychological factors such as victimization, social pressure, trust, relationships with others in society; and economic factors such as income level, comparative income according to reference group’s income, employment status, employment conditions etc. In order to control the personal and economic determinants of subjective welfare, we selected the following variables, taking into account the related literature. Table 1 presents the variables employed in the estimations, brief definitions of them and some summary statistics.

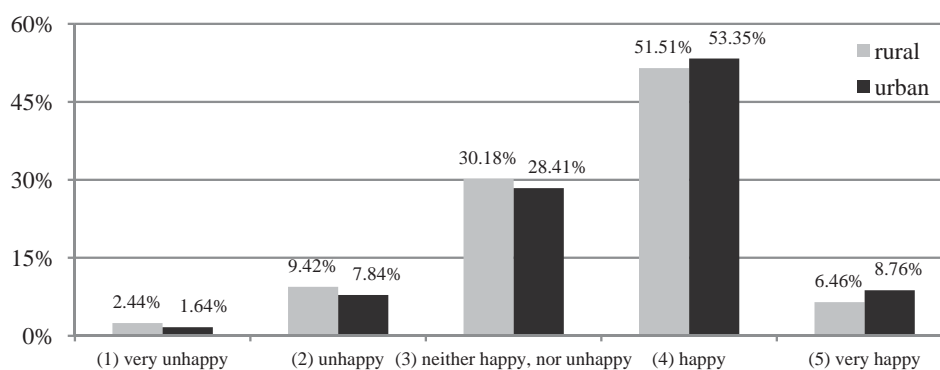


FIGURE 2. The percentage distribution of responses to happiness question in rural and urban sample of LSS

Source: Authors’ calculation from the LSS.

TABLE 1. Variables and summary statistics

Variable	Description
Variables which control personal characteristics	
Gender	1 male; 2 female
Age	Age of respondent (mean 44.46; SD 16.30; min 18; max 93); the square of age to account for non-linearity
Marital status	Categories: married, divorced, widowed and unknown
Education	Education level of respondent at eight levels (mean 2.837; SD 1.561)
Victimization	Respondents are asked if they have been exposed to particular crimes in eight categories (pickpocketing, extortion, assault, domestic violence, blackmailing, sexual offences, fraud, and other offences/crimes). We assign 1 for “yes” answers and calculate a score of victimization by summing respondents’ “yes” answers if a respondent was exposed to crimes more than one (mean 0.087; SD 0.366)
Perceived social pressure	Respondents are asked if they perceive social pressure with regard to their gender, marital status, age, tradition, religious practices, political views, homeland, job, appearance, being unemployed and income levels, on an itemized Likert scale (1 – never, 4, always). We calculate average score depending on the respondent’s answer to all items (mean 1.067; sd 0.182; min 1; max 3.9)
Feeling secure (at home)	Feeling secure at home on a Likert scale (1 – very unsafe, 5 – very safe) (mean 3.903; SD 0.789)
Hope for personal future	on a Likert scale (1 – very hopeless, 4 – very hopeful) (mean 2.784; SD 0.620)
Prospects for country’s future	Average rating of a respondent on a Likert scale (1 – in a bad way, 4 – in a good way) on how the country will change in the next 5 years on particular issues as economic, rights-liberties, providing public services, transparency of the government and the country’s prestige around the world
Materialism (the source of happiness)	Respondents are asked what thing makes them happiest in their lives. Options are achievement, work, health, affection, money and other. We use the option money as a base category to control the materialistic tendency of respondents
Economic factors	
Employment status	Categories: unemployed, employed, seasonal worker, student, homemaker, retired, unable to work (due to being disabled or a patient), older (but not retired) and other. Unemployed is used as a base category
Social security coverage	Categories: unregistered, public employees, private sector employees, self-employed
Income	Six levels of household income level (1 – the lowest, 6 – the highest) (mean 3.069; SD 1.604)
Welfare comparison	Respondents are asked where they see themselves if they imagine that people living in Turkey are standing on a ten step well-being ladder (0 – the lowest level, 10, the highest level) (mean 5.315; SD 1.871).
Satisfaction with central government services	Average score of respondent’s satisfaction with six central government services (health, public security, justice, education, social security and transportation) on a Likert scale (1 – never satisfied, 5 – very satisfied) (mean: 3.868; SD 0.595)
Satisfaction with local government services	Average score of respondent’s satisfaction with 18 local government services (waste collection, sewer, mains water, public transportation, municipal police, road/pavement construction, green space, combating air pollution, recreation services, registration transactions, arrangements for disabled, supports for sick and poor people, exhibitions/festivals/fairs etc., courses for vocational training/handcrafting, lighting/cleaning, fire/funeral services, street signs/enumeration, and food controls) on a Likert scale (1 – never satisfied, 5 – satisfied) (mean 4.244; SD 0.556)

We ran a series of regressions to examine the impact of these estimators on happiness. First, we estimated OLS regressions. In the context of OLS estimations, we first estimated a general model for the whole sample, including rural and urban populations, to test if the rural dummy is significant and to see the significance of other estimators. Then, we reran OLS regressions with rural and urban subsamples separately, to see if there is a difference in the significance and magnitude of variables in the rural and urban contexts. The same strategy was followed by ordered logistic regressions (OLR), since the dependent variable takes ordered values from 5 to 1, by estimating coefficients and odd ratios which indicate the probabilities of being at a higher level of happiness.

RESULTS

As can be seen in Table 2, which presents the results of the OLS regressions, we could not find a significant coefficient for the rural dummy in Column 1, or in Column 2 which employed robust standard errors. The significance of coefficients on other variables was generally as expected from the literature which employed the same dataset. Column 3 and Column 4 of Table 2 presents the results of OLS estimations on the rural and urban sub-samples respectively. In these estimations, we used robust standard errors against possible heteroscedasticity.

Results indicate that among personal traits gender, marital status, education, perceived social pressure and prospects for the country's future; and employment status, social security coverage, income level and satisfaction with local

government services produced different outcomes between the rural and urban samples with respect to the significance of coefficients on variables.

Table 3 presents the results of the ordered logit regressions by considering the dependent variables as ordered categories (from very happy – 5 to very unhappy – 1) to consider the probabilities of being at a higher level of happiness. One important concern in this analysis is whether the parallel regression (or the proportional odds) assumption (the probability curves are parallel) across response categories is violated. For testing this assumption, we employed the Brant test and compared the ordered logit models and the generalized logistic models through likelihood-ratio (LR) tests. Although the Brant test showed that the assumption has been violated in some specifications, the Bayesian Information Criterion (BIC) obtained from LR tests indicated that the ordered logit models were more preferable. Thus, we continued with the ordered logit models. In Table 3, we present the odd ratios for convenience in interpretation as well as the coefficients for the whole sample in Column (3), rural sub-sample in Column (2) and urban sub-sample in Column (1).

As can be seen in Table 3, mostly in line with the results from the OLS models, we found differences in sign and magnitude in such variables as marital status, education, prospects for country's future, employment status, social security coverage, and income level. We will examine variables which have been found to have a different impact on urban and rural sub-samples with respect to their statistical significance.

TABLE 2. Estimations for determinants of happiness of OLS

Variable		Whole Sample (Standard OLS)	Whole Sample (Robust S.E.)	Rural (Robust S.E.)	Urban (Robust S.E.)
		1	2	3	4
Demographic and personal characteristics					
Gender	female	0.044** (0.022)	0.044** (0.022)	0.034 (0.043)	0.046* (0.027)
Age	age (year)	-0.028*** (0.003)	-0.028*** (0.003)	-0.019*** (0.007)	-0.032*** (0.004)
	age-squared	0.000*** (0.000)	0.000*** (0.000)	0.000** (0.000)	0.000*** (0.000)
Marital status (base: never married)					
	married	0.222*** (0.031)	0.222*** (0.031)	0.292*** (0.068)	0.204*** (0.035)
	divorced	-0.163*** (0.055)	-0.163*** (0.060)	0.135 (0.141)	-0.231*** (0.066)
	widowed	-0.042 (0.049)	-0.042 (0.052)	0.149 (0.101)	-0.128** (0.062)
	unknown	0.109 (0.415)	0.109 (0.221)	-0.071 (0.137)	0.195 (0.322)
Education		0.023*** (0.008)	0.023*** (0.007)	0.014 (0.020)	0.026*** (0.008)
Victimization		-0.096*** (0.023)	-0.096*** (0.027)	-0.106* (0.061)	-0.092*** (0.031)
Perceived social pressure		-0.118** (0.048)	-0.118** (0.058)	-0.145 (0.144)	-0.107* (0.064)
Feeling secure (at home)		0.069*** (0.011)	0.069*** (0.013)	0.109*** (0.026)	0.053*** (0.015)
Personal hope		0.348*** (0.014)	0.348*** (0.018)	0.402*** (0.035)	0.328*** (0.020)
Prospects for country's future		0.023** (0.011)	0.023** (0.012)	0.008 (0.023)	0.031** (0.014)
Materialism (The source of happiness) (base: money)	achievement	0.107** (0.051)	0.107* (0.057)	0.185 (0.128)	0.088 (0.064)
	work	0.015 (0.063)	0.015 (0.072)	0.024 (0.141)	0.023 (0.083)
	health	0.140*** (0.040)	0.140*** (0.046)	0.187** (0.095)	0.125** (0.053)
	affection	0.154*** (0.044)	0.154*** (0.052)	0.178* (0.105)	0.149** (0.059)
	other	0.097 (0.110)	0.097 (0.109)	0.004 (0.220)	0.117 (0.124)

Table 2, cont.

Variable		Whole Sample (Standard OLS)	Whole Sample (Robust S.E.)	Rural (Robust S.E.)	Urban (Robust S.E.)
		1	2	3	4
Economic factors					
Employment Status (base: unemployed)	seasonal worker	0.338*** (0.114)	0.338*** (0.104)	0.242 (0.166)	0.374*** (0.140)
	student	0.222*** (0.068)	0.222*** (0.073)	0.249 (0.191)	0.212*** (0.081)
	homemaker	0.257*** (0.050)	0.257*** (0.058)	0.203* (0.117)	0.272*** (0.067)
	retired	0.290*** (0.055)	0.290*** (0.061)	0.256** (0.129)	0.296*** (0.070)
	unable to work (disabled, patient)	0.116* (0.069)	0.116 (0.080)	-0.021 (0.138)	0.193* (0.107)
	older (not retired)	0.198*** (0.069)	0.198*** (0.076)	0.085 (0.137)	0.265*** (0.098)
	other	0.251** (0.105)	0.251** (0.127)	0.178 (0.298)	0.263* (0.140)
	employed	0.210*** (0.047)	0.210*** (0.054)	0.120 (0.111)	0.227*** (0.062)
Social Security Coverage (base: unregistered)	public employees	0.055 (0.036)	0.055 (0.037)	0.021 (0.076)	0.100** (0.046)
	employees	0.115*** (0.026)	0.115*** (0.029)	0.030 (0.049)	0.169*** (0.037)
	self-employed	0.127*** (0.031)	0.127*** (0.033)	0.065 (0.050)	0.182*** (0.045)
	bank workers	0.065 (0.134)	0.065 (0.111)	0.449*** (0.092)	0.085 (0.118)
Income		0.036*** (0.007)	0.036*** (0.007)	0.021 (0.014)	0.040*** (0.007)
Welfare comparison		0.060*** (0.005)	0.060*** (0.005)	0.064*** (0.010)	0.058*** (0.006)
Satisfaction with central government services		0.155*** (0.016)	0.155*** (0.018)	0.134*** (0.039)	0.162*** (0.020)
Satisfaction with local government services		0.062*** (0.017)	0.062*** (0.017)	0.043 (0.027)	0.079*** (0.022)
Rural dummy (base: urban)		0.021 (0.022)	0.021 (0.023)	-	-
Constant		1.090*** (0.149)	1.090*** (0.163)	0.914*** (0.343)	1.101*** (0.189)
Number of observations		7,880	7,880	2,056	5,824
R ²		0.252	0.252	0.262	0.252

Standard errors in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.

TABLE 3. Ordered logit estimations for determinants of happiness: coefficients and odd ratios.

Variable		Whole Sample		Rural		Urban	
		1		2		3	
		coef.	odd ratios	coef.	odd ratios	coef.	odd ratios
Demographic and personal characteristics							
Gender	female	0.114* (0.060)	1.121* (0.068)	0.112 (0.115)	1.118 (0.128)	0.119 (0.074)	1.127 (0.083)
Age	age (year)	-0.079*** (0.009)	0.924*** (0.009)	-0.047*** (0.017)	0.954*** (0.017)	-0.094*** (0.011)	0.911*** (0.010)
	age-squared	0.001*** (0.000)	1.001*** (0.000)	0.000** (0.000)	1.000** (0.000)	0.001*** (0.000)	1.001*** (0.000)
Marital status (base: never married)	married	0.619*** (0.086)	1.857*** (0.159)	0.779*** (0.180)	2.178*** (0.393)	0.584*** (0.098)	1.792*** (0.176)
	divorced	-0.369** (0.147)	0.692** (0.102)	0.416 (0.342)	1.516 (0.518)	-0.536*** (0.165)	0.585*** (0.096)
	widowed	-0.042 (0.133)	0.959 (0.128)	0.475* (0.251)	1.608* (0.404)	-0.277* (0.159)	0.758* (0.121)
Education		0.068*** (0.021)	1.070*** (0.023)	0.061 (0.054)	1.063 (0.058)	0.073*** (0.023)	1.076*** (0.025)
Victimization		-0.244*** (0.064)	0.784*** (0.050)	-0.302** (0.149)	0.740** (0.110)	-0.229*** (0.071)	0.796*** (0.056)
Perceived social pressure		-0.234* (0.133)	0.791* (0.106)	-0.299 (0.310)	0.742 (0.230)	-0.212 (0.149)	0.809 (0.120)
Feeling secure (at home)		0.208*** (0.031)	1.232*** (0.038)	0.320*** (0.060)	1.377*** (0.083)	0.164*** (0.036)	1.179*** (0.042)
Personal hope		0.922*** (0.042)	2.514*** (0.104)	1.025*** (0.082)	2.786*** (0.228)	0.886*** (0.048)	2.425*** (0.117)
Prospects for country's future		0.065** (0.031)	1.067** (0.033)	0.019 (0.059)	1.020 (0.061)	0.084** (0.037)	1.088** (0.040)
Materialism (the source of happiness) (base: money)	achievement	0.190 (0.142)	1.210 (0.171)	0.302 (0.306)	1.353 (0.413)	0.162 (0.162)	1.176 (0.191)
	work	-0.015 (0.173)	0.985 (0.171)	-0.009 (0.327)	0.991 (0.324)	0.004 (0.205)	1.004 (0.206)
	health	0.288*** (0.109)	1.334*** (0.145)	0.411** (0.207)	1.508** (0.313)	0.252* (0.129)	1.287* (0.166)
	affection	0.342*** (0.123)	1.408*** (0.173)	0.429* (0.236)	1.536* (0.363)	0.330** (0.145)	1.390** (0.202)
	other	0.189 (0.303)	1.208 (0.366)	-0.132 (0.561)	0.877 (0.492)	0.260 (0.359)	1.297 (0.466)
Economic factors							
Employment status (base: unemployed)	seasonal worker	0.751** (0.303)	2.120** (0.642)	0.583 (0.482)	1.792 (0.865)	0.782* (0.407)	2.186* (0.890)
	student	0.522*** (0.188)	1.685*** (0.317)	0.650 (0.468)	1.916 (0.896)	0.464** (0.208)	1.590** (0.331)
	homemaker	0.645*** (0.136)	1.906*** (0.259)	0.650 (0.468)	1.777** (0.513)	0.661*** (0.156)	1.937*** (0.302)
	retired	0.704*** (0.148)	2.023*** (0.300)	0.704** (0.325)	2.022** (0.658)	0.690*** (0.169)	1.994*** (0.336)

Table 3, cont.

Variable		Whole Sample		Rural		Urban	
		1		2		3	
		coef.	odd ratios	coef.	odd ratios	coef.	odd ratios
Employment status (base: unemployed)	unable to work (disabled, patient)	0.304 (0.187)	1.355 (0.253)	0.002 (0.330)	1.002 (0.331)	0.483* (0.249)	1.620* (0.404)
	older (not retired)	0.468** (0.186)	1.597** (0.298)	0.247 (0.338)	1.280 (0.433)	0.618*** (0.239)	1.856*** (0.444)
	other	0.417 (0.274)	1.518 (0.416)	-0.127 (0.650)	0.881 (0.573)	0.506* (0.305)	1.658* (0.505)
	employed	0.489*** (0.126)	1.630*** (0.205)	0.304 (0.269)	1.355 (0.364)	0.516*** (0.144)	1.676*** (0.242)
Social security coverage (base: unregistered)	public employees	0.145 (0.099)	1.156 (0.114)	0.052 (0.212)	1.053 (0.223)	0.260** (0.119)	1.297** (0.154)
	employees	0.283*** (0.072)	1.327*** (0.096)	0.067 (0.124)	1.069 (0.133)	0.419*** (0.093)	1.520*** (0.141)
	self-employed	0.328*** (0.085)	1.388*** (0.117)	0.194 (0.129)	1.214 (0.157)	0.458*** (0.115)	1.581*** (0.181)
	bank workers	0.169 (0.362)	1.184 (0.428)	1.255 (1.417)	3.508 (4.972)	0.213 (0.378)	1.237 (0.467)
Income		0.095*** (0.018)	1.100*** (0.020)	0.053 (0.040)	1.054 (0.042)	0.108*** (0.021)	1.114*** (0.023)
Welfare comparison		0.166*** (0.014)	1.180*** (0.017)	0.174*** (0.026)	1.190*** (0.032)	0.163*** (0.017)	1.177*** (0.020)
Satisfaction with central government services		0.429*** (0.045)	1.536*** (0.069)	0.326*** (0.098)	1.385*** (0.136)	0.458*** (0.051)	1.580*** (0.080)
Satisfaction with local government services		0.195*** (0.047)	1.216*** (0.057)	0.137* (0.072)	1.146* (0.083)	0.254*** (0.063)	1.289*** (0.081)
Rural (base: urban)		0.085 (0.062)	1.088 (0.068)	-	-	-	-
Number of observations		7,877		2,055		5,822	
Pseudo R ²		0.115		0.119		0.116	

Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Demographic and personal factors

For whole sample, we found a positive coefficient on being female in both OLS and OLR estimations in line with Bozkuş et al. [2006] and Kangal [2013], who employed TURKSTAT LSS data. However, the OLS estimations showed that gender is statistically insignificant for the rural sample, while it is signifi-

cant for the urban sample. The OLR estimations produced an insignificant coefficient and odd ratios for both samples.

Marital status is statistically significant and has positive coefficients for the categories “married” and “divorced” compared to the base category “never married” for the whole sample. Bozkuş et al. [2006], Babadağ et al. [2009], Bül-

bül and Giray [2011] and Kangal [2013] also find a positive coefficient for being married. In separate rural and urban samples, we found a slightly significant coefficient for being married in both rural and urban samples from both the OLS and OLR, while other categories of marital status are also significant for the urban samples.

Education has been found to have a positive effect on happiness by Bülbül and Giray [2011], Kangal [2013], while Bozkuş et al. [2006] found a negative coefficient on education. For the whole sample, we found a positive effect of education by both estimation types. However, both estimations produced an insignificant coefficient in the rural sample and a significant and positive coefficient in the urban sample.

We found that perceived social pressure has a negative impact on happiness in the whole sample, while it is only statistically significant in the urban sample in the OLS estimations. OLR estimations produced an insignificant coefficient in both sub-samples. On the other hand, the positive prospects for the country's future has a positive impact on happiness only for the whole sample and urban sub-sample. This finding may be considered together with CEC'S [2003] finding that rural residents are less optimistic about the future, and Ray and Ward [2006] present the observation that rurality tends to be related with past ways of life and values, instead of the future.

Economic Factors

One important discussion in the related literature is whether monetary benefits have any impact on happiness. For this

aim, we employed a series of economic indicators such as employment status, social security coverage, income level, welfare comparison and satisfaction with government services.

Employment status has a positive effect on almost all categories compared to the reference category unemployed in both estimation techniques. Considering urban and rural sub-samples, employment status generally is only significant for the urban sample. In both estimations, the categories "retired" and "homemaker" are those which have significant and positive coefficients.

Similarly, social security coverage is also positive, and significant coefficients for employees and self-employed people compared to the reference category of unregistered. However, we could not find significant coefficients on social security coverage categories for the rural sub-samples, while almost all categories were significant for the urban sub-sample in both OLS and OLR.

Income level, which was found to have contrasting results, has a positive and significant impact on happiness for whole sample. However, income level was not a significant estimator of happiness for the rural sample.

Finally, we found a contrasting finding for satisfaction with governmental services, while social expenditure especially is considered as very important for social life and economic welfare [Erdogdu 2010, Erdogdu 2013]. Satisfaction with both central and local public services was found to have significant and positive impact on happiness for the whole sample in both OLS and OLR.

Satisfaction with local public services was not significant for the rural sample in OLS estimations, while it had a statistically significant positive coefficient in OLR estimations. For both sub-samples, it can be said that satisfaction with central government services is a more important estimator of happiness than satisfaction with local public services. At the same time, the urban sample has a higher coefficient of satisfaction with central government services compared to the rural sample.

CONCLUSION

The study makes an exploration on how a rural and urban context is different by standard determinants of happiness in Turkey. The subject has been scarcely investigated in prior research, especially for developing countries. Examining changes over the years shows that economic growth and unemployment are more associated with urban happiness, and the price of agricultural products is more associated with rural happiness in Turkey over time. On the time line, the mean happiness in urban areas is higher than that for rural happiness.

To understand relatively the significance and magnitude of the estimators, we conducted linear and ordered logit regressions on separate samples of urban and rural populations using data from the Turkish nationally representative sample Life Satisfaction Survey (LSS). Results of OLS and OLR are mostly compatible with each other in significance of estimators.

In some specifications, we employed a rural dummy, but we could not find

a statistically significant coefficient of the variable. For gender, we found contrasting results. The OLS showed that being female is significant only for the urban sample, while OLR produced an insignificant coefficient for both samples. Marital status was found to be significant for the category “married” compared to “never married” in both samples, while other categories of marital status are also significant for the urban sample. We found education level is significant and positively associated with happiness in the whole sample, while it is insignificant in both sub-samples. Perceived social pressure and positive expectations for the country’s future are not statistically significant for the rural sample, while they are significant estimators for the urban sample.

Considering economic variables, employment status, social security coverage and income level are not significant estimators for the rural sample, contrary to the urban sample. Finally, we examined satisfaction with public services, for local government services and central government services. Happiness in urban areas is positively correlated with both of types of services, while rural happiness only has a statistically significant correlation to central government public services, not local public services.

Of course, the results should be considered with caution, taking into account the limitations of the study. First of all, we used cross-sectional data which do not reveal the causal direction. Also, this study depends on just one year of data. Future studies employing longitudinal data and different scales of locality, such

as inner-city, a detailed measurement of the urban-rural continuum will reveal more specific outcomes to help understand the impact of geographical setting on happiness and SWB.

With respect to policy making, explaining rural and urban differences in SWB will help to differentiate public policies according to local needs.

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Streszczenie: *Różnice między miastem a wsią w subiektywnym postrzeganiu dobrostanu.* Celem pracy jest zbadanie, czy różnice między miastem a wsią w odniesieniu do uwarunkowań materialnych i niematerialnych są odzwierciedlone w zadowoleniu mieszkańców miast i wsi na przykładzie Turcji. Badania miały również na celu wniesienie wkładu do empirycznej literatury dotyczącej geograficznego wymiaru zadowolenia poprzez zbadanie różnic między wiejskimi i miejskimi wyznacznikami w kraju rozwijającym się, co rzadko jest przedmiotem badań pomimo ich szybkiej urbanizacji oraz wysiłków, aby wspomóc rozwój rolniczy. Analizowano dane z krajowych badań zebranych przez TURKSTAT za pomocą regresji liniowej i logistycznej. Wyniki badań wskazują, że przeciętne zadowolenie mieszkańców terenów miejskich jest większe niż mieszkańców terenów wiejskich, oprócz roku 2011, choć przeważnie istnieje konwergencja między zadowoleniem na obszarach wiejskich i miejskich. W oszacowanych regresjach nie znaleziono statystycznie istotnych współczynników dla ślepej obserwacji w obszarach wiejskich. W osobnych ocenach dla obu prób różnice w zadowoleniu na obszarach wiejskich i miejskich

wystąpiły jedynie w kategoriach ekonomicznych. Status zatrudnienia, dostępność opieki społecznej oraz poziom zarobków nie są statystycznie istotnymi estymatorami w próbie pośród mieszkańców wsi, inaczej niż dla próby mieszkańców miasta oraz dla całej przebadanej próby. Postrzeganie presji społecznej i pozytywne oczekiwania

co do przyszłości kraju także istotne statystycznie w próbie mieszkańców wsi, w przeciwieństwie do próby mieszkańców miasta. Zadowolenie mieszkańców miast jest pozytywnie skorelowane z satysfakcją z centralnych i lokalnych usług publicznych, zadowolenie mieszkańców wsi ma zaś statystycznie istotny związek tylko z centralnymi usługami administracyjnymi.