

Research on New Urbanization and Residents' Happiness in the Context of Common Wealth

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Abstract: This paper uses the China City Statistical Yearbook and the CLDS database to explore the mechanisms by which urban population size, population density, and land area affect residents' happiness. The findings reveal that the happiness of male residents is higher than that of female residents in China due to differences in personality and the pressure of the employment situation; the happiness of urban residents is higher than that of rural residents due to income change expectations and differences in living standards; and the happiness of residents in the eastern region is higher than that in the central and western regions, mainly due to the expansion of urban scale brought about by population agglomeration, which helps to the construction of urbanization and the level of urban economy. In addition, the size of the urban population is conducive to the development of new urbanization, and the increase in urban population density has a more significant effect than expanding the land area. In conclusion, the country should pay attention to urbanization construction and development quality. At the same time, it needs to overcome the unbalanced urban-rural relationship and inadequate regional development brought about by urban development.

1. Introduction

In the Resolution on the Development of Agricultural Production Cooperatives in 1953, the term "common prosperity" was first introduced in its entirety, which has been hotly debated by scholars from all walks of life, and there are two keywords in "common prosperity". One is prosperity, and the other is sharing. This means that achieving common prosperity is the organic unity of development and sharing, achieving sharing in development and promoting development in sharing [1]. "The 14th Five-Year Plan" period proposes that achieving common prosperity for all people is a long-term task, and in this context, as China has gradually advanced from building a moderately prosperous society to a socialist modern state, we must focus on the construction of a new type of urbanization and the country's economic development, while placing the people's common prosperity in a more important position, and step towards this goal on the ground[2]. At present, the biggest problems in the context of shared prosperity are the unbalanced urban-rural relationship, the inadequate development of the countryside, unbalanced regional development, and the large gap between urban and rural income distribution. Therefore, accelerating urbanization and achieving integrated urban-rural development are the keys to solving people's livelihood problems and enhancing their sense of well-being.

In recent years, China's urbanization process has been accelerating, and towns and cities are essential to support the country's economic operating system. An important manifestation of urbanization is the transfer of large numbers of people from rural areas to cities, which has effectively improved the efficiency of resource use and labor productivity, thus forming a close link between urbanization and economic development. The urbanization rate of China's resident population has increased from 17.9% in 1978 to 64.72% by the end of 2021, an increase of 46 percentage points in just over 40 years, which shows how fast it is developing. The "Easterling" paradox, which we will explore, has been a significant problem. The report of the Nineteenth

National Congress of the Communist Party of China emphasized: “We should continue to meet the people’s growing needs for a better life, continuously promote social fairness and justice, and make the people’s sense of gain, happiness and security, more fulfilling, more secure and more sustainable.” It is evident that the Party and the State have also gradually begun to pay attention to how to enhance national happiness, and the people’s needs and aspirations for a better life have significantly increased. This paper attempts to discuss the characteristics of the subjective well-being of different groups of people in China. Subjective well-being reflects residents’ evaluation of their economic situation. This evaluation is a better side reflection of the development of social and economic levels.

In summary, this paper matches the data from the China Labor-force Dynamics Survey (CLDS) with the data from the China Urban Statistical Yearbook. Through descriptive analysis and the development of an empirical model, we will investigate the factors influencing urbanization on residents’ happiness in the context of the common prosperity and further measure the direction and magnitude of the influence of each factor on the happiness of the sample population by gender, household registration and region.

2. Literature Review

Urbanization is the process of population agglomeration in cities, and the agglomeration effect can significantly promote the progress of urban productivity, as well as raise the income level of residents, thus improving their sense of well-being. An increase in the level of urbanization can promote the growth of urban consumption rates, but too rapid an urbanization rate can act as a hindrance. Secondly, the output elasticity of the urban agglomeration effect in China is about 0.26, for every 1% increase in population in a city, the per capita output will increase by 0.26%[3.4] argues that promoting shared prosperity requires increasing the size of the middle-income group and pushing more low-income people to move into the middle-income bracket. At the same time, we should consider how to develop products and expand employment according to the actual situation of each place. Moreover, we should improve our understanding of the laws of natural economic, social and demographic changes to adjust the spatial layout of production, optimize the allocation of resources and achieve full employment on a larger spatial and temporal scale. Nowadays, promoting a new type of urbanization and improving the quality of urbanization development is of great significance for shared prosperity. A new type of urbanization is a critical path to achieving shared prosperity. believes that China’s urbanization development has taken on an aggressiveness trend during the “10th Five-Year Plan” period, and the process of urbanization must be coordinated with economic growth and industrialization. At the same time, in such a large-scale urbanization development we should pay more attention to quality rather than speed, and look out the urbanization of people and put people first[5]. In order to improve the problem of “stagnant happiness”, the government proposed in 2004 the goal of building a harmonious socialist society with more attention to humanistic concerns, emphasizing the quality and efficiency of economic growth and increasing the importance of improving people’s livelihoods and enhancing their sense of well-being[6].

What kind of relationship exists between shared prosperity, urbanization and happiness of residents? In collecting literature, I found that the relevant research literature deals with the relationship between the three, and even if it does, it is only briefly touched upon. Most of it is related to shared prosperity or new urbanization. There is now literature that provides some space and writing ideas for writing this paper, and this paper plans to research and expands on this issue accordingly[7].

3. Empirical Model Analysis

According to the above theoretical hypothesis, the factors affecting residents’ subjective well-being can be divided into two categories: the former includes individual characteristics such as gender, age, income level, education level and health, while the latter includes social factors such as

household registration system, employment status, region of residence and house prices. We set up an econometric model to examine the impact of common prosperity and urbanization on residents' happiness. Considering that there may be differences in subjective happiness by gender, household registration and region, a controlled regression will be conducted on sub-samples in the empirical study to examine the mechanism of each difference in the impact of urbanization on their own happiness in the context of the commonwealth, and the underlying model is set as follows:

$$Happiness - c_i = \alpha + \beta_1 City - s_i + \beta_2 Economy - c_i + \gamma Individual - c_i + \mu_i$$

“Happiness-c” is a measure of the well-being of the nation’s individual residents. “City-s” is a measure of the size and characteristics of a city. In this paper, we split the city size into 2 variables: “Population” was analyzed in combination with “Density” and “Area”. “Economy-c” is an economic indicator of the degree of shared prosperity. “Individual-c” is a measure of individual heterogeneity variable, because the explanatory variable “Happiness” was scored on a scale of integers between 1 and 5. The larger the value, the higher the happiness of the residents; i.e., the variables take on a discrete ordinal relationship, so the empirical model will be estimated using the ranked choice model. The specific empirical model is as follows[8].

$$\begin{aligned} Happiness - c_i &= \alpha + \beta_1 \ln Population_i + \beta_2 \ln Income_i + \beta_3 Eduyear_i + \beta_4 Friend_i + \beta_5 Health_i \\ &+ \beta_6 Urban_i + \beta_7 Gender_i + \beta_8 Age_i + \beta_9 Age_i^2 + \mu_i \end{aligned}$$

$$\begin{aligned} Happiness - c_i &= \alpha + \beta_1 \ln Density_i + \beta_2 \ln Area_i + \beta_3 \ln Income_i + \beta_4 Eduyear_i + \beta_5 Friend_i \\ &+ \beta_6 Health_i + \beta_7 Urban_i + \beta_8 Gender_i + \beta_9 Age_i + \beta_{10} Age_i^2 + \mu_i \end{aligned}$$

The explanatory variable in this paper is happiness. The core explanatory variables are total urban population; population density; land area; and total income. In addition, the control variables include “Eduyear” representing the number of years of actual education; “Friend” representing the number of close local friends; “Health” representing one’s own health; “Gender” representing gender; “Age” representing age; “Age²” representing age squared; α and β is the variable coefficient, μ is a random perturbation term. Given the non-linear trend in the impact of the economic indicator of shared prosperity and the level of urbanization on the well-being of the population, it is necessary to include the squared terms of city size and economic level to test for potential inflection points. The four variables are: “Population²” “Density²” “Area²” “Income²”. The rest of the control variables are consistent with the indicators chosen for the model above. At the same time, by taking the core explanatory variables into logarithmic form to calculate the elasticity of demand, the empirical model is obtained as follows:

$$\begin{aligned} Happiness - c_i &= \alpha + \beta_1 \ln Population_i + \beta_2 \ln Population_i^2 + \beta_3 \ln Income_i + \beta_4 \ln Income_i^2 \\ &+ \beta_5 Eduyear_i + \beta_6 Friend_i + \beta_7 Health_i + \beta_8 Urban_i + \beta_9 Gender_i + \beta_{10} Age_i \\ &+ \beta_{11} Age_i^2 + \mu_i \end{aligned}$$

$$\begin{aligned} Happiness - c_i &= \alpha + \beta_1 \ln Density_i + \beta_2 \ln Density_i^2 + \beta_3 \ln Area_i + \beta_4 \ln Area_i^2 + \beta_5 \ln Income_i \\ &+ \beta_6 \ln Income_i^2 + \beta_7 Eduyear_i + \beta_8 Friend_i + \beta_9 Health_i + \beta_{10} Urban_i \\ &+ \beta_{11} Gender_i + \beta_{12} Age_i + \beta_{13} Age_i^2 + \mu_i \end{aligned}$$

4. Data Sources and Sample Description

4.1 Data Sources

This paper examines the impact of the common wealth and the level of urbanization on

well-being with regression analyses by gender, household registration, and central-eastern and western regions. The variables used to reflect individual heterogeneity variables and city characteristics variables have micro-individual data from the China Labor-force Dynamics Survey and city characteristics data from the 2016 data in the China City Statistical Yearbook. The CLDS database provides the city's code where the resident is located. For further regression analysis, we match the micro-individual data with the city data according to the city code[9].

As this study involved the essential characteristics, education, and health of the individuals in the sample, we also needed to remove extreme outliers in the main variables and some samples where variables were missing. The final empirical model obtained 144 valid samples at the city level and 18,170 at the individual level[10].

4.2 Description of the Sample At the City Level

The description of the variables at the city level is detailed in Table 1. A scatter plot of the linear quadratic fit between city size and residents' well-being in 2016 is shown in Figure 1.

Table 1 Descriptive Statistics For City-Level Variables

Variables	Variable interpretation	Obs	Mean	Std. Dev.	Min	Max
Population	1,000,000 people	144	5.372	3.697	0.970	33.820
Density	1000 people/km2	144	0.504	0.347	0.031	2.280
Area	1000km2	144	14.900	11.959	1.456	82.402
Gdpper	rmb10,000/year	144	5.621	3.282	1.189	16.741
Wagemean	rmb10,000/year	144	6.052	1.308	4.102	12.275

Figure 1 shows that there is a clear correlation between the level of urbanization and the happiness of residents, which is reflected in the fact that the total urban population is positively correlated with the happiness of residents, and population density is positively correlated with the happiness of residents. In contrast, land area is negatively correlated with the happiness of residents. The correlation coefficients between city size and residents' happiness are land area coefficient $< 0 <$ total population coefficient $<$ population density coefficient. When the total population of the city is divided into population density and land area, the happiness of residents tends to increase as population density increases, while land area is negatively related. This can be interpreted to mean that humans mostly live in groups, and cities with higher population density can increase the happiness of residents through the agglomeration effect. When the land area gradually increases, the happiness of residents will increase. When the land area reaches a specific size, the continuous expansion of land area will make the population density decrease, which in turn will offset the demographic dividend brought by urbanization development leading to a decrease in the happiness of residents. This explains the fact that when the population of a city is constant, the land area and population density constantly change inversely. Hence, population density has a positive effect on urbanization development, and this explains the fact that population density continuously varies inversely with population density when the population of a city is essentially constant.

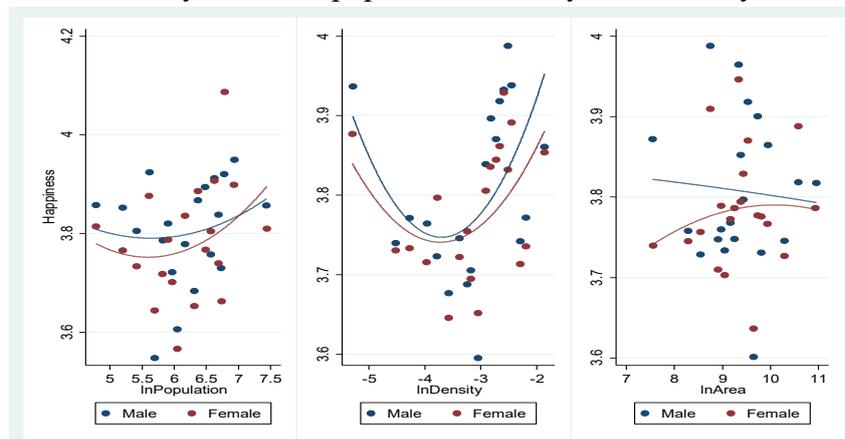


Fig.1 Level of Urbanization and Well-Being of Residents

Note: All data in the graph except for the happiness index are logarithmic values

Based on a quadratic linear fit scatterplot, it can be concluded that the total urban population and population density are in a positive U-shape with residents' happiness, while land area is in an inverted U-shape with residents' happiness, and women's happiness is mostly lower than that of men. The sample distribution is mainly concentrated in medium-sized cities, indicating that residents live in medium-sized cities with a more extensive and denser population. The average resident's happiness in the graph is around 3.8, indicating that respondents' happiness is generally higher. However, women's happiness is slightly lower than men's, probably because most married women need to worry more about their families and face higher employment pressure in society. As population density increases, residents' happiness increases, suggesting that the expansion of the city's size due to population clustering helps to increase employment rates and that both high- and low-skilled workers are able to access more employment opportunities, thus effectively increasing residents' happiness.

4.3 Description of the Sample At the Individual Level

The description of the variables at the individual level of the sample is detailed in Table 2. A scatter plot of the linear quadratic fit between economic level and residents' well-being in 2016 is shown in Figure 2.

Table 2 Descriptive Statistics For Individual-Level Variables

Variables	Variable Description	Obs	Mean	Std. Dev.	Min	Max
Happiness	1-5 poor happiness- good happiness	19397	3.795	0.921	1	5
Economic capital	Total revenue in 2015 (10,000rmb)	19415	2.287	5.333	0	305
Human capital	Years of education	19382	8.740	4.335	0	22
Social capital	The number of local close friends	19415	6.455	6.196	0	20
Healthy capital	1-5 poor health- good health	19415	3.607	1.006	1	5
Gender	1=male 0=female	19415	0.475	0.499	0	1
Urbanization	1=urban resident 0=rural resident	19415	0.360	0.480	0	1
Regional	1=western region 2=central region 3=eastern region	19415	2.250	0.847	1	3
Age	Year old	18201	44.375	13.416	16	65
Age2	Age ² /100	18201	21.491	11.291	2.560	42.250

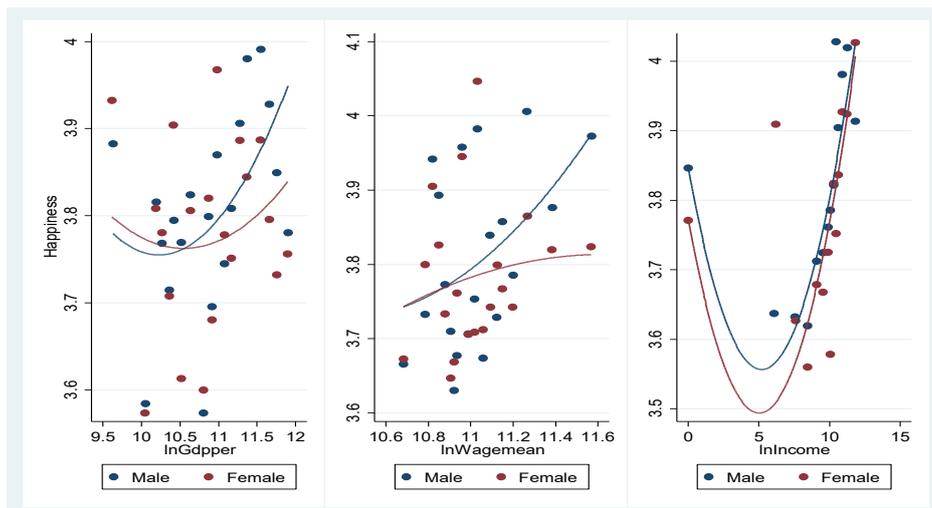


Fig.2 Economic Level and residents' Happiness

Note: All data in the graph except for the happiness index are logarithmic values

At the economic level, the development of the country's economic level is conducive to the happiness of residents, GDP per capita, the average wage of employees and the total income of residents are all significantly and positively correlated with the happiness of residents. Taking the matched data for 2015 as an example, the correlation coefficients between the country's economic level and residents' happiness are $0 < \text{the coefficient of the average wage of employees} < \text{the}$

coefficient of GDP per capita < the coefficient of the total income of residents, and the coefficient of happiness of women < the coefficient of happiness of men. This means that people's total income significantly impacts their happiness, including wages and other income. GDP per capita, on the other hand, reflects the economic level of society. The higher the overall level of society, the stronger the economy will be, and people's happiness will increase. Secondly, women's happiness may be lower than men's because women are still at a disadvantage in the workplace, such as the gap between male and female salaries and personality traits.

5. Empirical Results and Analysis

5.1 Empirical Results for Gender Classification

This paper first examines the mechanism of the impact of urbanization on residents' well-being in the context of common prosperity at the gender-disaggregated level. The models in Table 3 are all estimated using ologit models. Further tests show that the core explanatory variables of total urban population, population density and land area are broadly consistent in their estimates before and after taking logarithms, indicating the robustness of the empirical findings. Table 3 reports the estimation results for the total sample size of 18,170, the male sample size of 8,474 and the female sample size of 9,696.

Table 3 Estimation Results Of the Gender Classification on the Model of residents' Well-Being

Variables	Full sample		Male sample		Female sample	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
lnPopulation	-0.8388*** (0.2799)		-1.1116*** (0.4174)		-0.5959 (0.3781)	
lnPopulation2	0.0698*** (0.0229)		0.0944*** (0.0342)		0.0471 (0.0308)	
lnDensity		0.4733*** (0.1138)		0.2866* (0.1659)		0.6013*** (0.1569)
lnDensity2		0.0675*** (0.0155)		0.0390* (0.0224)		0.0900*** (0.0214)
lnArea		0.4779 (0.2971)		0.4821 (0.4416)		0.4790 (0.4023)
lnArea2		-0.0220 (0.0161)		-0.0204 (0.0239)		-0.0239 (0.0217)
lnIncome	-0.1361*** (0.0180)	-0.1402*** (0.0180)	-0.1866*** (0.0269)	-0.1946*** (0.0270)	-0.1010*** (0.0252)	-0.1032*** (0.0252)
lnIncome2	0.0120*** (0.0017)	0.0124*** (0.0017)	0.0187*** (0.0025)	0.0195*** (0.0025)	0.0085*** (0.0025)	0.0087*** (0.0025)
Eduyear	0.0347*** (0.0041)	0.0353*** (0.0041)	0.0391*** (0.0066)	0.0395*** (0.0066)	0.0393*** (0.0054)	0.0401*** (0.0054)
Friend	0.0244*** (0.0023)	0.0241*** (0.0023)	0.0234*** (0.0032)	0.0228*** (0.0032)	0.0275*** (0.0032)	0.0273*** (0.0032)
Health	0.5220*** (0.0157)	0.5202*** (0.0157)	0.5171*** (0.0233)	0.5164*** (0.0233)	0.5253*** (0.0213)	0.5238*** (0.0214)
Urban	-0.1304*** (0.0323)	-0.1229*** (0.0331)	-0.2098*** (0.0474)	-0.1847*** (0.0484)	-0.1101** (0.0449)	-0.1154** (0.0459)
Age	-0.0480*** (0.0071)	-0.0486*** (0.0071)	-0.0776*** (0.0107)	-0.0793*** (0.0107)	-0.0437*** (0.0098)	-0.0446*** (0.0098)
Age2	0.0644*** (0.0084)	0.0653*** (0.0084)	0.1029*** (0.0127)	0.1048*** (0.0127)	0.0581*** (0.0116)	0.0594*** (0.0116)
Cons	Yes	Yes	Yes	Yes	Yes	Yes
N	18170	18170	8474	8474	9696	9696

Note: *, **, *** denotes 10%, 5%, 1% level of significance respectively. The direction and significance of the coefficients for the city size indicator are generally consistent before and after taking logarithms. To keep the regression results comparable, the regression removed samples with missing values.

The regression reveals that the coefficients of the squared terms of total urban population and population density are both significantly positive. In contrast, the coefficient of the squared term of the land area is negative but not significant, indicating that the effects of total urban population and population density on residents' happiness are both in a positive U-shape, while the effects of land area are in an inverted U-shape. The theoretical inflexion point lies to the left of the current city size range. The direction of elasticity of city size on residents' happiness is not reversed. Further calculation shows that the total effect of the total city population and population density is positive, while the total effect of the land area is negative. We then ran regression estimates on the male and female sub-samples. The results differed from the full-sample model in that the male and female samples showed more significant differences in the factors influencing subjective well-being. The population density coefficient for females is significantly higher than that for males, indicating that females prefer places with a high concentration of people because they generally possess higher perceptual skills, are easily influenced by their surroundings and are curious about what is going on around them. They also like shopping and lively places. However, men are rational people, and most boys tend to be quiet and solitary, less susceptible to outside distractions and prefer places with fewer people, while girls prefer places with more people. In summary, increased population density is the main driver of increased resident well-being compared to the simple expansion of total urban population or land area, which increases monotonically with population density but decreases monotonically with land area, with total urban population falling somewhere in between.

5.2 Empirical Results on Household Classification

Table 4 -1 Estimation Results of the Household Classification on the Model of residents' Well-Being

Variables	Urban level			
	Male sample		Female sample	
InPopulation	-0.3974		-0.5665	
	(0.6338)		(0.5774)	
InPopulation2	0.0307		0.0441	
	(0.0517)		(0.0470)	
InDensity		0.0223		0.4038*
		(0.2245)		(0.2109)
InDensity2		0.0118		0.0623**
		(0.0314)		(0.0299)
InArea		-0.2398		0.0667
		(0.6063)		(0.5506)
InArea2		0.0154		-0.0044
		(0.0334)		(0.0303)
InIncome	-0.1848***	-0.1918***	-0.0721	-0.0682
	(0.0498)	(0.0500)	(0.0533)	(0.0534)
InIncome2	0.0178***	0.0186***	0.0055	0.0051
	(0.0045)	(0.0046)	(0.0051)	(0.0051)
Eduyear	0.0556***	0.0542***	0.0518***	0.0517***
	(0.0105)	(0.0105)	(0.0088)	(0.0088)
Friend	0.0271***	0.0268***	0.0380***	0.0378***
	(0.0053)	(0.0054)	(0.0054)	(0.0054)
Health	0.5600***	0.5596***	0.5221***	0.5210***
	(0.0421)	(0.0421)	(0.0381)	(0.0380)
Age	-0.0855***	-0.0879***	-0.0361**	-0.0366**
	(0.0192)	(0.0193)	(0.0167)	(0.0167)
Age2	0.1144***	0.1167***	0.0472**	0.0480**
	(0.0234)	(0.0235)	(0.0202)	(0.0202)
Cons	Yes	Yes	Yes	Yes
N	3098	3098	3699	3699

Table 4 -2 Estimation Results of the Household Classification on the Model of residents' Well-Being

Variables	Rural level			
	Male sample		Female sample	
lnPopulation	-1.6633***		-0.6115	
	(0.5579)		(0.5025)	
lnPopulation2	0.1434***		0.0485	
	(0.0459)		(0.0410)	
lnDensity		0.7007***		0.8438***
		(0.2510)		(0.2422)
lnDensity2		0.0890***		0.1215***
		(0.0333)		(0.0323)
lnArea		1.6761**		1.2939**
		(0.6672)		(0.6204)
lnArea2		-0.0814**		-0.0643*
		(0.0357)		(0.0329)
lnIncome	-0.1895***	-0.2000***	-0.1071***	-0.1151***
	(0.0324)	(0.0326)	(0.0290)	(0.0292)
lnIncome2	0.0195***	0.0206***	0.0090***	0.0098***
	(0.0031)	(0.0031)	(0.0029)	(0.0029)
Eduyear	0.0304***	0.0310***	0.0329***	0.0369***
	(0.0087)	(0.0087)	(0.0069)	(0.0070)
Friend	0.0211***	0.0202***	0.0216***	0.0211***
	(0.0040)	(0.0040)	(0.0040)	(0.0041)
Health	0.4989***	0.4921***	0.5300***	0.5264***
	(0.0281)	(0.0283)	(0.0260)	(0.0262)
Age	-0.0739***	-0.0766***	-0.0453***	-0.0468***
	(0.0131)	(0.0132)	(0.0122)	(0.0122)
Age2	0.0973***	0.1003***	0.0610***	0.0636***
	(0.0153)	(0.0153)	(0.0143)	(0.0143)
Cons	Yes	Yes	Yes	Yes
N	5376	5376	5997	5997

Note: *, **, *** denotes 10%, 5%, 1% level of significance respectively. The direction and significance of the coefficients for the city size indicator are generally consistent before and after taking logarithms. To keep the regression results comparable, the regression removed samples with missing values.

The regressions show that the coefficients of the squared terms for total urban population and population density are both positive and more significant at the rural level. The coefficient of the squared term for land area is largely negative except for the urban male sample, for which only the squared term at the rural level is significant, suggesting that the effect of total urban population and population density on the happiness of residents is in a positive U-shape, with the value reaching the inflexion point and tending to increase. In contrast, the effect of land area on well-being is inverted U-shaped, except for the urban male sample, indicating a downward trend after reaching the inflexion point. The non-linear inflexion points for the three indicators of the male sample at the rural level are calculated to be 3.3014, 0.1952, and 29.5978, respectively. With the theoretical inflexion point located at the far left of the current interval, the direction of the elasticity of the effect of urban size on the well-being of the population is not reversed. We then analyze the sample at the urban and rural levels. And the findings show that there are considerable differences between urban and rural areas in terms of the factors influencing happiness, with rural areas having significantly and much higher population densities than urban areas, partly probably due to the somewhat slower pace of life in rural areas compared to the stresses that some fast-paced urban lives and jobs bring to people, plus a substantially improved ecological environment. The second is that people in rural areas do not have high expectations of life and are therefore more likely to feel happy. The step-by-step analysis reveals that the level of education in urban areas is much higher than that in rural areas, which indicates that the possible unequal distribution of educational resources in society tends to produce serious inequality of opportunity and thus affects people's

subjective evaluation of well-being. Inequality in educational resources subsequently brings about a shift in social capital, including differences in status and social position. It also creates imbalances in people's income gaps and spirituality, ultimately affecting the evaluation of subjective well-being.

5.3 Empirical Results for the Central and Eastern Regions

The results of the estimation of the well-being of the residents by region in the central and eastern regions are detailed in Table 5. The first step of the regression for the eastern region shows that the coefficients of the variables of the total urban population, population density and land area have a significant positive effect. The coefficient of human capital is the lowest and health capital is the highest among the three regions. The second step of the regression for the central region shows that the coefficient of total urban population weakly becomes negatively significant, the coefficient of population density starts to turn negative but insignificant, and the coefficient of economic capital becomes positive but insignificant. The third step of the regression results for the western region sample shows a significant negative effect of the coefficients on the total urban population and population density variables. At the same time, the land area is negative and still not significant.

Table 5 Estimation Results Of the Model of residents' Well-Being by Regional Classification in the East and West of China (Linear)

Variables	Eastern Region		Central Region		Western Region	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
lnPopulation	0.1583*** (0.0321)		-0.1347* (0.0690)		-0.1735*** (0.0360)	
lnDensity		0.1296*** (0.0404)		-0.2751*** (0.0786)		-0.2008*** (0.0367)
lnArea		0.1667*** (0.0329)		-0.0256 (0.0749)		-0.0521 (0.0486)
lnIncome	-0.0097** (0.0045)	-0.0092** (0.0045)	0.0052 (0.0069)	0.0037 (0.0070)	-0.0164** (0.0069)	-0.0151** (0.0069)
Eduyear	0.0414*** (0.0057)	0.0412*** (0.0057)	0.0505*** (0.0088)	0.0488*** (0.0088)	0.0522*** (0.0076)	0.0536*** (0.0077)
Friend	0.0286*** (0.0031)	0.0287*** (0.0031)	0.0194*** (0.0050)	0.0192*** (0.0050)	0.0204*** (0.0045)	0.0195*** (0.0045)
Health	0.5667*** (0.0223)	0.5685*** (0.0223)	0.4969*** (0.0335)	0.5088*** (0.0336)	0.4776*** (0.0300)	0.4742*** (0.0301)
Urban	-0.0776* (0.0422)	-0.0680 (0.0430)	-0.0468 (0.0719)	0.0418 (0.0758)	-0.2355*** (0.0658)	-0.2105*** (0.0662)
Gender	-0.2283*** (0.0403)	-0.2299*** (0.0404)	-0.2518*** (0.0635)	-0.2472*** (0.0636)	-0.2491*** (0.0574)	-0.2597*** (0.0575)
Age	-0.0303*** (0.0101)	-0.0310*** (0.0101)	-0.0727*** (0.0155)	-0.0731*** (0.0155)	-0.0705*** (0.0137)	-0.0723*** (0.0137)
Age2	0.0407*** (0.0120)	0.0414*** (0.0120)	0.0964*** (0.0181)	0.0967*** (0.0181)	0.0961*** (0.0162)	0.0987*** (0.0162)
Cons	Yes	Yes	Yes	Yes	Yes	Yes
N	9471	9471	3928	3928	4771	4771

Note: *, **, *** denotes 10%, 5%, 1% level of significance respectively. The direction and significance of the coefficients for the city size indicator are generally consistent before and after taking logarithms. To keep the regression results comparable, the regression removed samples with missing values.

The regression results show that city size has a positive effect on the well-being of residents in the eastern region and an inverse effect on residents in the western and central regions, indicating that the eastern region has better economic development and is suitable for population agglomeration, while the eastern coastal region is the first to start the process of working in China and has better business conditions and a better market environment, these quality conditions attract a large number of workers and rural population. In contrast, the western and eastern regions have less agglomeration cohesion for population agglomeration because the residents' lives and

production are more dispersed due to the topography. In terms of personal characteristics variables, the human capital coefficient is higher in the west and lower in the east, indicating that the level of education in the east does not bring residents a greater sense of well-being. In contrast, in the west, the opposite is true, probably because there are more highly educated people and educational resources in the east, so higher education is not as popular in the region as it is in the west. The lower health capital coefficient in the west and the higher health capital coefficient in the east suggest that the level of health care coverage and the residents' awareness of taking care of themselves are higher in the east, while in the west the level of health care services is still relatively backward due to the slow development of the region, thus leading to a lower sense of well-being among the residents.

Table 6 Estimation Results Of the Model of residents' Well-Being by Central-West Regional Classification (Non-Linear)

Variables	Eastern Region		Central Region		Western Region	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
lnPopulation	-1.2161** (0.5640)		-0.7453 (1.7974)		-1.3923*** (0.3599)	
lnPopulation2	0.1132** (0.0465)		0.0482 (0.1445)		0.0984*** (0.0288)	
lnDensity		-0.2955 (0.2424)		1.6583** (0.7050)		0.5115* (0.2812)
lnDensity2		-0.0727* (0.0405)		0.3268*** (0.1170)		0.0887*** (0.0336)
lnArea		-0.4969 (0.4724)		2.1051 (1.4156)		-1.3771 (1.1148)
lnArea2		0.0378 (0.0268)		-0.1169 (0.0763)		0.0657 (0.0556)
lnIncome	-0.1374*** (0.0264)	-0.1449*** (0.0264)	-0.1699*** (0.0408)	-0.1621*** (0.0409)	-0.1232*** (0.0340)	-0.1194*** (0.0339)
lnIncome2	0.0123*** (0.0025)	0.0131*** (0.0025)	0.0174*** (0.0040)	0.0164*** (0.0040)	0.0107*** (0.0033)	0.0104*** (0.0033)
Eduyear	0.0340*** (0.0059)	0.0346*** (0.0058)	0.0442*** (0.0089)	0.0403*** (0.0090)	0.0481*** (0.0077)	0.0467*** (0.0078)
Friend	0.0286*** (0.0031)	0.0282*** (0.0031)	0.0197*** (0.0050)	0.0188*** (0.0050)	0.0195*** (0.0045)	0.0195*** (0.0045)
Health	0.5653*** (0.0223)	0.5645*** (0.0223)	0.4905*** (0.0335)	0.5000*** (0.0337)	0.4673*** (0.0302)	0.4666*** (0.0302)
Urban	-0.1313*** (0.0435)	-0.0945** (0.0447)	-0.1219 (0.0744)	-0.0268 (0.0784)	-0.3040*** (0.0681)	-0.2940*** (0.0692)
Gender	-0.2483*** (0.0407)	-0.2528*** (0.0407)	-0.2910*** (0.0642)	-0.2776*** (0.0644)	-0.2690*** (0.0577)	-0.2706*** (0.0578)
Age	-0.0363*** (0.0101)	-0.0375*** (0.0102)	-0.0811*** (0.0156)	-0.0808*** (0.0156)	-0.0752*** (0.0137)	-0.0752*** (0.0137)
Age2	0.0478*** (0.0121)	0.0493*** (0.0121)	0.1075*** (0.0183)	0.1067*** (0.0183)	0.1023*** (0.0163)	0.1015*** (0.0163)
Cons	Yes	Yes	Yes	Yes	Yes	Yes
N	9471	9471	3928	3928	4771	4771

Note: *, **, *** denotes 10%, 5%, 1% level of significance respectively. The direction and significance of the coefficients for the city size indicator are generally consistent before and after taking logarithms. To keep the regression results comparable, the regression removed samples with missing values.

The regression sample reveals that the coefficients on the squared terms for the total population are all positive and more significant in the eastern and western regions. The squared coefficients of population density are positive and significant except for the eastern region. The squared coefficients for the land area are positive and insignificant except for the central region. This suggests that the total urban population has a positive U-shape on the happiness of residents, with values trending downwards first and then upwards after reaching an inflexion point, while

population density also has a positive U-shape for land area except for the eastern regions and for land area except for the central regions, and a step-by-step analysis shows that population density is clearly the most important factor in increasing the happiness of residents compared to total urban population or land area expansion. The non-linear inflexion points for the three indicators in the western region are 11.8168, 0.5595 and 35.6040. The theoretical inflection point is located on the left side of the existing interval, that is, the elastic direction of the effect of urban size on residents' well-being will not be reversed. We then regressed the regional classification, and the results of the study show that there is a significant difference in the influence of land area on happiness, with the western region being significantly higher than the central region, probably because the western region is higher and more expansive, with a slightly less developed industrial base and a lower level of consumption among residents, making it easier to feel happy. At the same time, urbanization will bring increased income, more employment opportunities and a unique sense of superiority, which to a certain extent enhances residents' subjective sense of well-being. On the other hand, when the population continues to cluster in such towns and cities, overcrowding in towns and cities will lead to a series of social problems such as environmental degradation, traffic congestion, social crime and high property prices, which may reduce the quality of life and happiness of residents.

6. Summaries and Discussion

This paper constructs a people-centered relationship system and an analytical framework for happiness research, and analyzes the impact on residents' happiness from the perspective of urban population, population density, land area, and personal capital. Through the results of the study, it is found that the total urban population and population density have a significant positive impact on the happiness of residents, while the land area has a negative impact, indicating that urban expansion has improved the happiness of residents to a certain extent. These data all show that the population agglomeration and large-scale cities and towns caused by urbanization and urban expansion are the main reasons for the happiness of residents and the realization of common prosperity.

Based on the research conclusions of this paper, some policy suggestions are put forward that will help achieve common prosperity, reasonably guide the development of urbanization, and enhance the happiness of residents:

First, build a fair and reasonable distribution system. Although the Constitution gives women equal rights with men, the influence of "male superiority over female inferiority" in real life has always existed, and we should further improve it on the basis of the original policy system. At the same time, we should strengthen the socialized supervision system and give full play to social security at all levels. While providing health benefits such as childbirth, we will give women more employment and training opportunities and create a better employment platform.

Second, implement the concept of people-centered development. Achieving common prosperity is a long-term process, and at this stage, the differences in individual capital accumulation are mainly due to the uneven distribution of public resources. To this end, it is necessary to establish a system of balanced allocation of urban and rural education resources, vigorously promote educational fairness, give priority to the development of rural education, and use a fair education system to promote fairness in the whole society, so as to narrow the gap and achieve common prosperity for mankind. At the same time, we need to improve the rural medical and health service systems, balance the unequal medical resources between urban and rural areas, and also improve the social security system that unites urban and rural areas and reform the existing social security system.

Third, reduce the impact of population movements. Population mobility is an important embodiment of economic freedom and social vitality, and to some extent, it represents the allocation efficiency of the labor market, but large-scale population movement will also cause some problems. First of all, we should coordinate the development of urban and rural areas, fully implement the strategy of rural revitalization, relax the restrictions on urban settlement, accelerate and improve the mechanism for the urbanization of the agricultural transfer population, and

gradually narrow the gap between the urbanization rate of the household registration population and the urbanization rate of the permanent population. At the same time, we should improve the governance system for population mobility, improve the institutional mechanism to support the rational two-way flow of talent, capital, infrastructure and other elements of resources between urban and rural areas, promote the use of work to supplement agriculture, urban belt and rural areas, and promote the coordinated development of urban and rural areas and the coordinated development of regions.

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References

- [1] Li Shi, Zhu Mengbing. Promoting the Reform of Income Distribution System and the Realization of Common Prosperity [J]. *Journal of Management World*, 2022, 38(01): 52-61+76+62.
- [2] Li Lanbing, Gao Xuelian, Huang Jiuli. Prospects for Major Issues of China's New Urbanization Development during the "14th Five-Year Plan" Period [J]. *Journal of Management World*, 2020, 36(11): 7-22.
- [3] Li Shu, Chen Gang. The Employment Effects of Happiness - An Empirical Study on Happiness, Employment and Recessive Reemployment [J]. *Economic Research Journal*, 2015, 50(03): 62-74.
- [4] Lu Dadao, Chen Mingxing. Several viewpoints on the background of compiling the "National New Urbanization Planning (2014-2020)" [J]. *Acta Geographica Sinica*, 2015, 70(02): 179-185.
- [5] Lei Xiaoyu, Gong Liutang. The Effect of Urbanization on the Household Consumption Rate: Theoretical and Empirical Analysis [J]. *Economic Research Journal*, 2014, 49(06): 44-57.
- [6] Zhong Funing, Luo Biliang, Wu Guobao, Zuo Ting, Xi Yinsheng, Zhao Wen. A Conversation by Writing on "Accelerating Rural Revitalization and Solidly Promoting Common Prosperity" [J]. *Journal of Nanjing Agricultural University (Social Sciences Edition)*, 2022, 22(03): 1-18.
- [7] Gu Tianzhu, Ji Yueqing, Zhong Funing. Urbanization, Life Service Outsourcing and Low-skilled Service Industry Expansion: A Discussion Based on the Perspective of Absorbing Rural Labor Transfer [J]. *Journal of Nanjing Agricultural University (Social Sciences Edition)*, 2021, 21(02): 136-147.
- [8] Moretti E. Workers' Education, Spillovers, and Productivity: Evidence from Plant-Level Production Functions [J]. *American Economic Review*, 2004, 94(3): 656-690.
- [9] Morikawa, Masayuki. Population density and efficiency in energy consumption: An empirical analysis of service establishments [J]. *Energy Economics*, 2012, 34(5): 1617-1622.
- [10] Buch T, Hamann S, Niebuhr A, et al. What Makes Cities Attractive? The Determinants of Urban Labor Migration in Germany [J]. *Urban Studies*, 2014, 51(9): 1960-1978.