

# Urbanization Construction, Economic Growth and Residents' Happiness in Jiangsu Province

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## Abstract

Under the background of common prosperity, the development of new urbanization should take urban agglomeration as the main body and residents' happiness as the guide, and build a people-oriented urbanization structure system. Based on the China City Statistical Yearbook and China Labor-force Dynamics Survey data, this paper investigates the impact mechanism of the development of new urbanization and the economic status of residents on residents' happiness. The results show that urbanization and residents' economic status can promote residents' happiness, and large cities have a greater sense of belonging, while the residents who live in medium-sized urban areas have insufficient happiness. Given the research results, the process of urbanization development, Jiangsu should build a rational urban scale and coordinate regional economic growth.

## Keywords

Jiangsu Province; Residents' Happiness; Urbanization; Economic Growth; Policy Path.

## 1. Introduction

Urbanization is an important way for economic growth and common prosperity. Since the Third Plenary Session of the 15th Central Committee of the Communist Party of China in 1998 made a special discussion on small and medium-sized cities and towns, Chinese urbanization has developed rapidly. According to international experience, when the urbanization rate is about 70%, it will enter a stage of slow development or even stagnation. Although domestic urbanization has made progress in stages after experiencing rapid development, it has gradually entered a bottleneck period (Gao and Wei, 2013). Society and cities need to develop and progress sustainably, so China is in dire of a new type of urbanization that is in line with the Chinese national policy path. Since the 18th National Congress of the Communist Party of China proposed a new-type urbanization in 2012, the state has promoted urbanization to a strategic level, and the introduction of new-type urbanization development plan has made new-type urbanization more theoretical and practical. In addition, the construction of urbanization should be based on the current situation of the country, and insisted on promoting the development path of urbanization with people as the core. Jiangsu, as one of the first provinces to explore new urbanization in China, is also one of the fastest economic development of provinces in China. Since the 18th National Congress of the Communist Party of China, Jiangsu has implemented the decision-making and deployment of the Party Central Committee and the State Council to improve the quality-oriented and build people's urbanization. Under the background of common prosperity, China is currently in the process of continuous development of new urbanization, and residents' happiness has become the core of urbanization (Gu et al., 2021). Relevant departments and cities at all levels across the country responded to the unified deployment of the Party Central Committee, actively promoted the construction of new-type of urbanization based on people, and worked hard to explore the path of building new-type of urbanization with Chinese characteristics.

An important manifestation of the development of new urbanization is the realization of human urbanization (Gu, 2019). This paper takes the data given in the China City Statistical Yearbook as samples, and analyzes the impact mechanism of urbanization and economic growth on residents' happiness by studying the relationship between urbanization and residents' happiness under the background of the common prosperity of cities at all levels across the country. And then provide a feasible and realistic path for Jiangsu Province to promote the sustainable development of new-type urbanization.

## 2. Analysis Framework and Data Sources

### 2.1. Analysis Framework

Since the 1950s, residents' happiness has gradually become a hot topic in academic circles, the most representative of which is the "Easterlin Paradox" advocated by Easterlin, that is, personal utility is positively correlated with one's own income level and negatively correlated with the average income level of society. Some people had proved the formation mechanism of the "Easterlin Paradox" by constructing a multi-layered dynamic happiness analysis paradigm and putting forward the opposite point of view from the macro perspective, that is, the development of regions can significantly enhance the level of residents' happiness (Li and Shi, 2017). It should be noted that the development of a region is not always positively correlated with the improvement of residents' happiness levels. And according to the theory that the interaction between the scale effect and the crowding effect, they led to an inverted U relationship between residents' happiness and urbanization (Lu et. al., 2017). In the early stages of urbanization, the size of the city continued to grow, and the urban household registration population also increased year by year. More and more floating population influx into the city and stabilized employment, becoming part of the urban resident population. This kind of scale effect which brought about the happiness index of residents is continuously improving; and if the urban population is large to a certain extent, the crowding effect brought by the huge population size will make the people's happiness index decrease. Therefore, although the development of urbanization has facilitated the improvement of residents' happiness, it does not mean blind urban development. In general, the development of urbanization can impact the improvement of residents' happiness through the "Population", "Area" and "Density", as well as "Wagemean", "Gdpper" and "Deposit".

### 2.2. Data Source and Sample Description

The main research objects of this paper are the development of cities at the prefecture level and above, the status quo of residents' property, and the happiness index of each city, respectively, to investigate the impact of urban development and residents' property on residents' happiness. Considering research needs and data availability, this paper uses data from China City Statistical Yearbook and China Labor-force Dynamics Survey. The selection of specific variables is: 1. The China City Statistical Yearbook, "Population", "Area", "Wagemean", "Gdpper", "Deposit" and other data; 2. The China Labor-force Dynamics Survey data, "Happiness" and other data.

After merging the China Labor-force Dynamics Survey and China City Statistical Yearbook by code, it can be found that there are large differences in the rate of urbanization and economic growth, among which the most outstanding, that the maximum of "Area" data is 59.3929 thousand square kilometers, but the minimum is only 10.569 thousand square kilometers. While the data of "Density" is not obvious: the maximum data of each thousand square kilometers is 2.28 million and the minimum is 31,000; the data of economic development about "Gdpper", "Wagemean" and "Deposit", there is a large difference between the maximum values and the minimum. The main variable "Happiness" did not show a big variation: the maximum

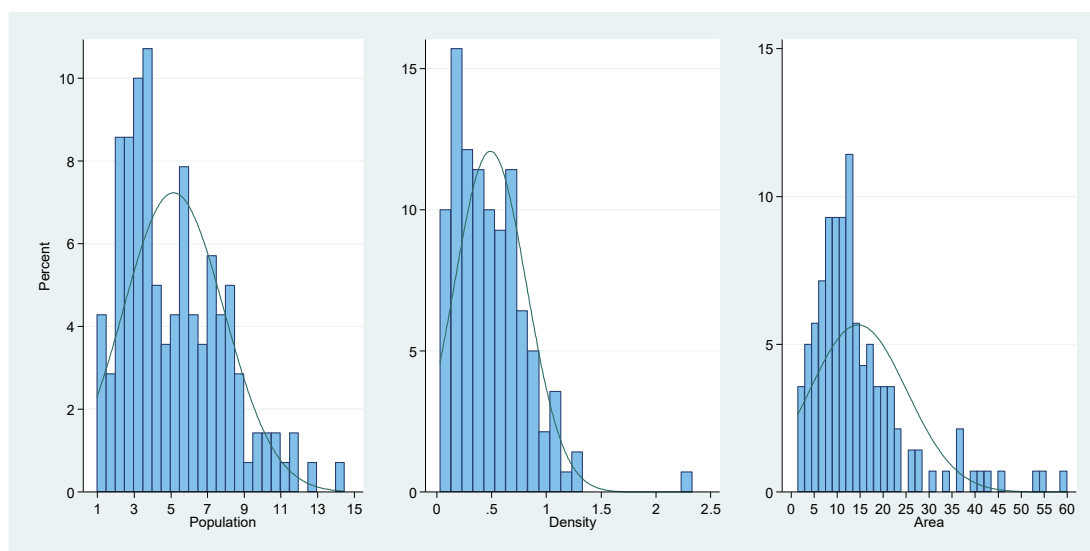
is 4.574, the minimum is 3, and the standard deviation is 0.257. The variable descriptions of the sample cities are shown in Table 1.

**Table 1.** Variable descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Happiness	143	3.776	0.257	3.000	4.574
Population	143	5.173	2.833	0.970	14.460
Density	143	0.504	0.348	0.031	2.280
Area	143	14.428	10.569	1.456	59.329
Gdpper	143	5.620	3.293	1.189	16.741
Wagemean	143	6.047	1.311	4.102	12.275
Deposit	143	4.776	4.210	1.295	24.661

### 3. New Urbanization Construction and Economic Development

#### 3.1. Chinese Urbanization Construction



**Figure 1.** Urbanization construction status

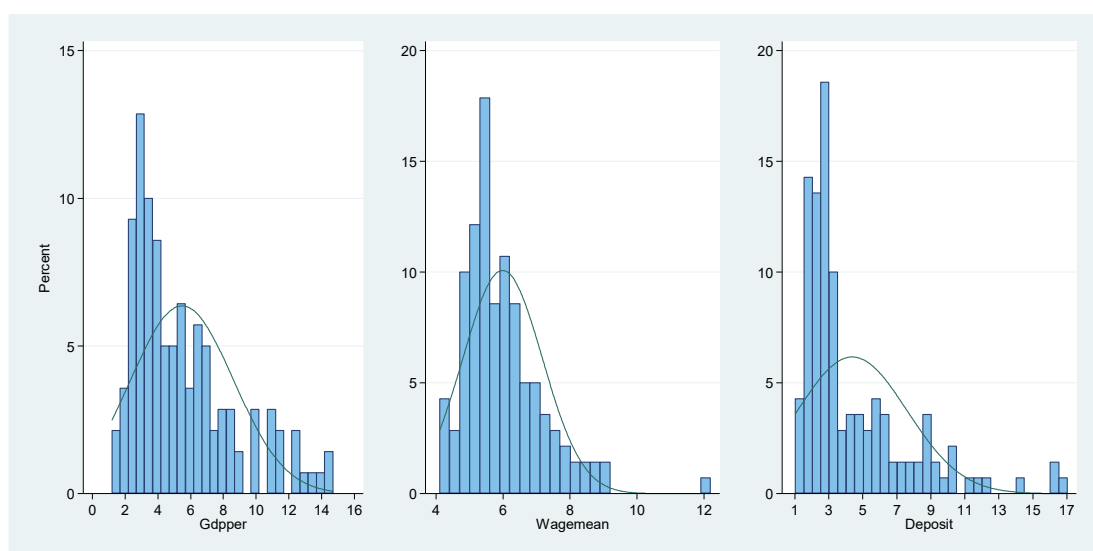
Note: “Population” “Density” “Area” are logarithmic values

The construction of urbanization is an important part of China’s economic development, and it is also a hot topic of debate among people in the field of economics. China is a big agricultural country, and farmers account for a large proportion of the total population. For farmers, inelastic agricultural products reduce their income due to the increase in supply, but urbanization can mitigate this issue, to reduce the area of agricultural products to a certain extent, so that the price of agricultural products can be maintained at a certain level. Therefore, urbanization is very important for the realization of common prosperity and residents’ happiness in China. Since the promulgation of the urbanization policy, there will inevitably be many contradictions to be resolved in the process of urbanization. Because of the different geographical and social conditions, the path of urbanization in different regions should also be different. According to the data provided by the China City Statistical Yearbook, although the development of China's urbanization has reached a new stage, that is, the development of urbanization centered on people, there is still a problem that the growth of land urbanization is much higher than that of population urbanization (Gu et al., 2020). From the histogram of urbanization development (Figure 1), it can be plainly seen that although the data in the percent

of “Population” conforms to a normal distribution, but the data in the percent of “Density” and “Area” conforms to discrete. In the graph the peak of data of “Area” is much higher than the peak of “Density”. This shows that although the data of “Population” continues to rise with the increase in the urbanization rate, the expansion of urban size is greater than the population, so that the data of “Population” and “Density” are not as significant as the increase in the urban area. And this unbalanced development will ultimately lead to waste of land resources and affect the inclusive employment of cities, which will eventually inhibit the sustainable development of cities, and is not conducive to the realization of economic growth and the improvement of residents' happiness.

### 3.2. Chinese Economic Growth

Although economic growth is only one of many factors influencing residents' happiness, its impact cannot be underestimated. According to the “Easterlin Paradox”, the conclusion of its microscopic part can be expressed as the increase in personal income can significantly boost happiness. Based on the empirical investigation and analysis of the China Labor-force Dynamics Survey, one study found that income has a positive impact on the improvement of happiness in general, and the perception of fairness has a greater effect on happiness than income. It's an important way to gain happiness. According to the histogram of residents' economic status formed by the data provided by the China City Statistical Yearbook (Figure 2), the data of middle cities in the percent of “Gdpper” are performed to be relatively more concentrated, indicating that the living standards of the residents of each city are not much of different, the abundance of commodities and infrastructure services in cities can meet the living needs of the residents at that time. After taking the logarithm of the data on “Wagemean” of each city, there is still a discrete situation; and from Figure 2, the data of “Wagemean” and “Deposit” account for the majority, and the number of cities with high wages and high savings cannot be ignored. The large differences in “Wagemean” of various cities may subtly make the residents feel a greater sense of unfairness, which is not conducive to the happiness of residents.



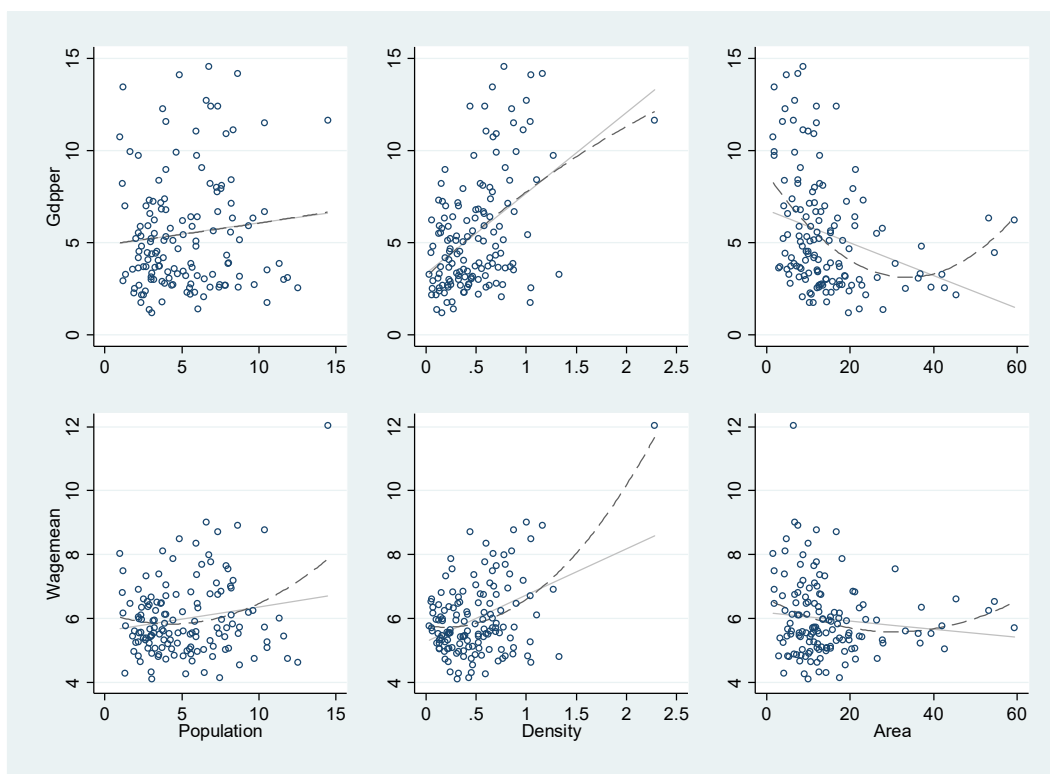
**Figure 2.** Urban economic distribution

Note: “Gdpper” “Wagemean” “Deposit” are logarithmic values

### 3.3. Urbanization Construction and Economic Growth

Urbanization has played a role in promoting residents' income: the denser the population, the higher the personal income. This is because the rapid development of urbanization has driven a large-size population to flow from rural areas to cities and gradually become permanent

residents. The scale effect generated by population aggregation has improved work efficiency. Compared with rural areas where the population is more dispersed, cities and towns have a larger population density and market size (Manning, 2004), the division of labor, the learning effect and the matching effect are also better (Moretti, 2004), and the provided secondary and tertiary industries greatly promote the increase in the income of the incoming population (Mazzolari and Ragusa, 2013). What deserves more attention is that most of the data are performed to be located in the lower left part of the image from the top, and only a few data (usually representative large cities) are located in the upper right part of the image. The imbalance distribution is more obvious in “Wagemean” of residents, the reason is that with the expansion the of urban size and the improvement of urban economic growth levels, it is difficult for migrants from small and medium-sized cities to enter high-income industries. Large cities that are also densely populated have gathered massive highly-skilled which means high-income laborers. In addition, the differences in the geographical environment and policy factors of various cities have gradually increased the income gap between large cities and small cities. This extreme and unbalanced construction of urbanization will bring about future urbanization and economic growth with potential hidden dangers (Buera and Kaboski, 2012).



**Figure 3.** Urbanization construction and economic growth

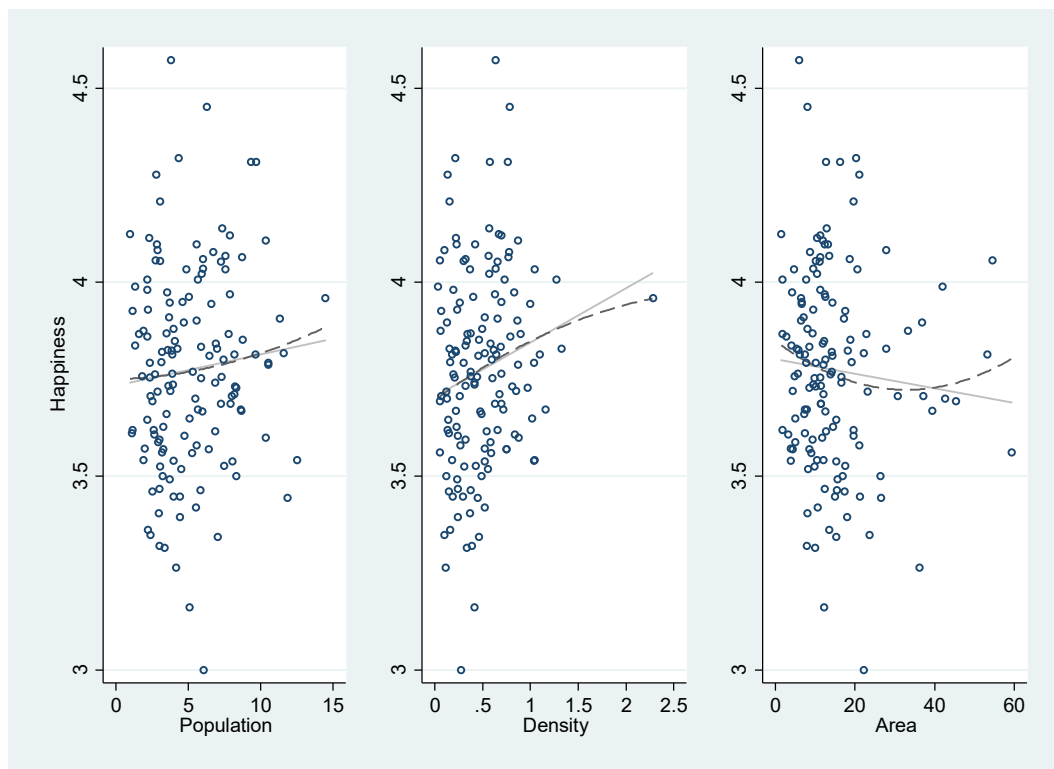
Note: “Population” “Density” “Area” “Gdpper” “Wagemean” are logarithmic values

## 4. The Source of Residents’ Happiness

### 4.1. Urbanization and Residents’ Happiness

From the overall fit results, it is relatively obvious that the development of urbanization has played a role in promoting the happiness of residents. The “Population” and “Density” are significantly positively correlated with the “Happiness”, after the quadratic fitting, which presents a U-shaped curve (dotted line). The correlation coefficients between the data of “Population” and “Happiness” are as follows: “Area” coefficient  $< 0 <$  “Population” coefficient  $<$  “Density” coefficient. When the “Population” is decomposed into the two dimensions of “Density” and “Area”, the “Density” can be clearly seen that it plays a major role in the positive

relationship of “Happiness”. This can be understood as the fact that people are born with the characteristics of gregarious living, due to the unbalanced between the improvement of urban land area and population, there is an inverse movement between the two. Large cities can bring more a sense of belonging to residents, while a medium-sized city is relatively less happy. Most of the small cities distribute in the central or western regions in China. Compared with medium-sized cities, the pressure of employment competition is lower, people are easier to establish their own relationship network, and it is more able to achieve a relative balance between work and life; regions such as Beijing, Shanghai, Guangzhou, Shenzhen, and other first-tier cities and other big cities in the new first-tier cities, the large-size population inflow means that the inflow population is eager to pursue a higher standard of living. As an example of urban settlement willingness, the analysis shows that the lifestyles of large cities are more favored by the floating population than those of medium-sized cities; however, medium-sized cities are in an embarrassing position: the level of public services in the cities is far less than that of large cities, and although the pressure of life is not as good as that of big cities and as comfortable as the residents living in small cities. Therefore, the uneven psychological gap will affect the happiness of residents. The relevant change trends are shown in Figure 4.



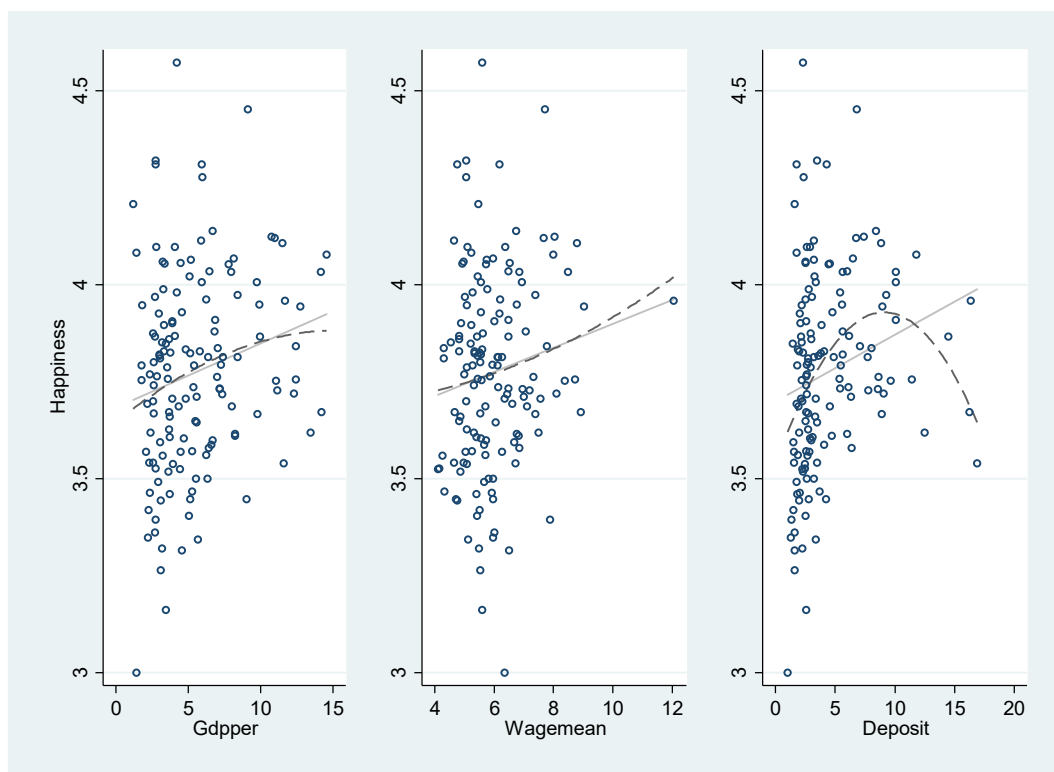
**Figure 4.** Happiness trends for urbanization construction

Note: “Population” “Density” “Area” are logarithmic values

#### 4.2. Economic Growth and Residents’ Happiness

From the overall fit results, under the linear assumption, the economic growth status of residents is significantly related to the data of “Happiness” positive correlation. The correlation coefficients between economic growth and “Happiness” are:  $0 < \text{“Gdpper” coefficient} < \text{“Wagemean” coefficient} < \text{“Deposit” coefficient}$ . In the fitting of the nonlinear relationship (dotted line), the data of “Gdpper” and “Wagemean” show a less obvious U-shaped relationship with “Happiness”, while the data of “Deposit” and “Happiness” show a more obvious inverted U-shaped relationship. Combined with the percent histogram of economic growth status (Figure 2), numerous Chinese residents do not get wages that are much higher than the

minimum living standard, and most of what they get is the equivalent cost of maintaining and reproducing labor. Chinese residents have always been thrifty and simple in their behavior, which makes them choose to use less money to maintain clothing, food, housing, and transportation, and in this way to find a “minimum standard of living” that suits them, and they can get out of the few wages. A larger portion is saved for future children’s education. Therefore, although there is a positive correlation between resident savings and residents’ happiness in the linear fitting, the existence of this lifestyle makes the effect of “Deposit” on “Happiness” reverse from positive to negative. Because of the information pointed out in the microscopic part of the “Easterlin Paradox”, that is, personal income and the acquisition of happiness are positively correlated, has been recognized by many people, and the difference between income will inhibit the data of “Happiness”. Therefore, although the linear and nonlinear fitting relationships are positively correlated, the correlation coefficient is not obvious. The relevant change trends are shown in Figure 5.



**Figure 5.** Happiness trends for economic growth

Note: “Gdpper” “Wagemean” “Deposit” are logarithmic values

## 5. The Development of New-type Urbanization in Jiangsu

From 2011-2020 statistics on population changes in inland-level cities in Jiangsu Province (Table 2), it can be found that: the population of 13 prefecture-level cities is increasing year by year. The average resident population of Xuzhou is 10.101 million on average, but Zhenjiang’s resident population is only 2.764 million. As for the four cities of Suzhou, Wuxi, Changzhou, and Nanjing, which have a relatively high level of urbanization, Changzhou’s population is in the middle position: Suzhou ranks 4th; Nanjing ranks 5th; Wuxi ranks 9th; Changzhou ranks 12th. Affected by the epidemic in 2020, there may be a slight difference in the caliber of the statistical population data, resulting in large changes in the data in 2020 compared with 2019.

**Table 2.** Population changes in Jiangsu cities from 2011 to 2020

City	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Nanjing	636.4	638.5	643.1	648.7	653.4	663.0	681.0	697.0	710.0	932.0
Wuxi	468.0	470.1	472.2	477.1	480.9	486.0	493.0	497.0	503.0	746.0
Xuzhou	976.7	990.5	1006.9	1023.5	1028.7	1041.0	1039.0	1045.0	1042.0	908.0
Changzhou	362.9	364.8	365.9	368.6	370.9	375.0	379.0	382.0	385.0	528.0
Suzhou	642.3	647.8	653.8	661.1	667.0	678.0	691.0	704.0	723.0	1275.0
Nantong	764.9	765.2	766.5	767.6	766.8	767.0	764.0	763.0	760.0	773.0
Lianyungang	505.2	511.0	520.2	526.5	530.6	534.0	533.0	534.0	534.0	460.0
Huai'an	543.2	546.8	553.0	560.3	564.5	568.0	561.0	561.0	560.0	456.0
Yancheng	820.7	822.4	823.8	828.5	828.0	831.0	826.0	825.0	821.0	671.0
Yangzhou	460.1	458.4	459.8	461.3	461.1	462.0	460.0	459.0	457.0	456.0
Zhenjiang	271.9	271.4	271.8	272.1	271.7	272.0	271.0	271.0	270.0	321.0
Taizhou	507.1	506.4	507.8	508.5	507.9	508.0	505.0	503.0	501.0	452.0
Suqian	555.1	560.3	572.1	580.7	586.3	592.0	591.0	591.0	592.0	499.0

Source: The data used are from China City Statistical Yearbook

From the statistics of “Gdpper” in Jiangsu from 2011 to 2020 (Table 3), it can be found that with the advancement of time, the data of “Gdpper” of Jiangsu cities has increased year by year, and the average has increased from 59,950 yuan in 2011 to 118,240 yuan in 2020. Suzhou, Wuxi, Nanjing and Changzhou ranked the top four in terms of “Gdpper”, and the growth rates of the four cities were all at the forefront. Affected by the epidemic, the “Gdpper” of Jiangsu has declined in 2020.

**Table 3.** Changes in per capita GDP of cities in Jiangsu from 2011 to 2020

City	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Nanjing	7.626	8.853	12.460	10.755	11.817	12.726	14.110	15.289	16.568	15.932
Wuxi	10.744	11.736	17.098	12.639	13.094	14.126	15.012	17.427	18.004	16.585
Xuzhou	4.141	4.688	4.405	5.766	6.151	6.685	10.334	7.692	8.114	8.067
Changzhou	7.749	8.504	11.915	10.442	11.222	12.272	14.610	14.928	15.639	14.794
Suzhou	10.213	11.403	19.902	12.993	13.670	14.556	14.843	17.377	17.917	15.847
Nantong	5.601	6.251	6.570	7.746	8.424	9.270	12.178	11.532	12.829	12.990
Lianyungang	3.212	3.647	3.434	4.428	4.842	5.299	6.913	6.133	6.952	7.130
Huai'an	3.518	3.999	3.899	5.074	5.646	6.245	7.291	7.320	7.854	8.751
Yancheng	3.822	4.317	4.218	5.312	5.830	6.328	8.576	7.599	7.915	8.873
Yangzhou	5.895	6.569	7.070	8.265	8.965	9.915	13.357	12.094	12.886	13.278
Zhenjiang	7.398	8.365	10.762	10.265	11.035	12.060	15.246	12.691	12.898	13.158
Taizhou	5.240	5.838	5.919	7.271	7.948	8.833	12.250	10.999	11.073	11.754
Suqian	2.784	3.172	2.983	3.996	4.385	4.831	5.910	5.591	6.284	6.550

Source: The data used are from China City Statistical Yearbook

By comparing and analyzing the impact mechanisms of urbanization and residents' income on residents' happiness in some domestic cities, it is concluded that although urbanization can improve residents' happiness, the differences between regional social conditions and environmental conditions make residents' economic conditions worse. The correlation

coefficient for happiness is not obvious. In 2021, in the list of “China’s happiest cities” in the “China economic life survey” jointly sponsored by the National Bureau of Statistics of China and CCTV, five cities in Jiangsu were shortlisted: Nanjing, Xuzhou, Suzhou, Wuxi and Taizhou. It is not difficult to find that most of the shortlisted cities are located in the southern area with developed economic growth and comprehensive public service facilities. Therefore, the development of new-type urbanization in Jiangsu urgently needs to be people-oriented, it is not blindly considering that urbanization is the key to improving residents’ happiness, but should implement more fiscal expenditures to meet the needs of urban residents.

## 6. Conclusion and Recommendations

According to the above research conclusions, the development of new-type of urbanization in Jiangsu should pay attention to the following points:

At first, build rational urbanization to avoid the problem of unbalanced expansion of population and urbanization. On the one hand, the expansion of urbanization can bring more commercial land and human resources to the city, and drive the expansion of regional infrastructure and real estate, which is conducive to exerting the radiation effect of the central city to increase the income of residents. But on the other hand, the unbalanced construction of urbanization would lead to a waste of resources. The gradually increasing housing prices and consumption reduce the sense of gain and happiness of local residents and migrant workers, which is not conducive to population inflow. Therefore, the construction of urbanization needs to be reasonable and practical, and the carrying capacity of the county should be enhanced according to local conditions. For the in-situ urbanization can be adopted for county towns that meet the standard of urbanization; for the developing urban, relevant resources need to be attracted and absorbed in time to improve the quality of life of residents.

The second is to coordinate regional economic development, and shorten the gap between regional development. The gap between the economic development in different regions of Jiangsu still exists and is obvious. We should closely follow the policy, and then combine regional characteristics to help the rapid economic development of northern regions to alleviate the current imbalance in the development of various regions. For example, the northern Jiangsu ecological economic zone which is focusing on ecological areas and agricultural areas, actively promotes the development of an appropriate size of agriculture and the tourism industry, and forms the rural matrix of the ecological green lung area; for the southern of Jiangsu, promote the concentration of population and other factors to the advantageous areas, and further expand the scale effect of the city to enhance the level of development per capita. Compared with the southern region, there are still obvious differences in the size and development of cities in the central and northern. Therefore, in the process of building new-type urbanization in the central and northern regions, attention should also be paid to the efficiency of economic development in order to achieve sound and rapid economic development.

At last, the development of new urbanization should revolve around the urbanization of people, that is, the development of urbanization should play an important role in promoting residents’ sense of happiness. While equalization of public services and ensuring the employment of residents are the key to residents’ happiness. On the one hand, the realization of equalization of public services needs to be guided by the actual needs and the opinions of urban residents including the inflowing population. On the other hand, the government should give full play to its public service functions, build a sound resident employment training system, integrate social forces, and provide residents with vocational education and training. In addition, attention should be paid to the richness and timeliness of training content, and while actively integrating

existing resources, the training system should meet the needs of the social labor market, to realize the modernization of residents' employment.

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