

Research on the Influencing Factors of Urban Employment in Anhui Province

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Abstract

Employment is the thing, which is an important means of livelihood of workers. It is the employment that excessively affects the whole social production and development.. The problem of employment has been continuously plagued social and economic development for a fairly long time. Solving the employment issues has extremely important economic and social significance. At present, the Party and government have always put common people first and also actively given top priority to employment in ensuring stability in the six fields, and innovatively implemented the employment priority strategy and active employment policy. Since the 18th National Congress of the Communist Party of China, the CPC has been gradually made it clear to " Make great progress in fuller and higher quality employment " , and solidly promote common prosperity. In order to have a deep insight into correlative reasons and further analyze the factors affecting the number of urban employment, this paper takes Anhui Province as an example, with the aid of the regression model of econometrics. On account of the results of the model, we try to find some meritorious suggestions for improving the standard and mass of urban employment in Anhui Province in the near future.

Keywords

Influencing Factors; Employment Number; Regression Analysis.

1. Background Status

Employment is the biggest livelihood of the human-being. For the time being, China's industrial structure is unbalanced, labor security is not sound, with the continuous development of China's economy, multitudes of people have swarmed into cities, and the number of college graduates has increased year by year, and the problem of employment difficulties has become increasingly prominent. In recent years, China's employment situation has been affected by factors such as downward pressure on the economy, profound adjustments in the economic structure, the widespread application of smart big data, and the international environment, Sino-US trade frictions, the Covid-19 epidemic, and frequent regional disasters. Employment has been under variously multiple pressures. The party and the government put human-being employment as a pivotal position , and have adopted a series of measures to improve the pattern of employment, protect people's livelihood, and stabilize employment. This article uses the four factors of "Gross production value, resident consumption level, fiscal expenditure and total urban wages" and takes Anhui Province as an example to study and analyze, which has important practical significance for finding ways to improve employment.

2. Literature Review

Domestic scholars have successively conducted in-depth studies on the factors affecting employment in China's cities and towns. For example, Zhao Li (2014) and others believe that two types of macroeconomic factors and technological progress factors will directly affect

urban labor and employment; Zheng Xiaofei (2018) shows that personal disposable income, interest rates, and inflation are the main influencing factors. The research idea of this article is to combine predecessors' research on employment in Chinese cities and towns, narrow the region to Anhui Province, select four specific indicators to explore whether they are the main influencing factors, and make relevant decisions and based on the current national implementation of the decision and the future planning , we according to the final research results, putting forward some useful and beneficial policy suggestions that are conducive to improving the employment situation in Anhui Province.

3. The Selection of Variables

Select the corresponding indicators based on the "Anhui Statistical Yearbook" with data from 2000 to 2018. Take the number of employed persons in the cities and towns of the research object as the explanatory variable Y (Unit: ten thousand people), and select the following 4 indicators to represent explanatory variables, and set them as X_1, X_2, X_3, X_4 .

(1) Anhui GDP X_1 (Unit: 100 million yuan)

This variable has a certain impact on the total number of urban employment. When the economy is flourishing, there is more demand for labor, while when it comes to stagnant, there is less demand for labor.

(2) Resident consumption level X_2 (Unit: yuan)

The consumption level of residents affects the supply of labor. In the long run, income is the basis and prerequisite of consumption. The government is bound to perfect the income distribution system to shrink the income disparities and raise the income and consumption level of common people. As a result, the level and quality of consumer goods supply will increase, and the level of consumption will be improved. The supply of labor will be improved. To meet higher-level life needs, people must increase their income through labor to meet their own consumption needs, which directly affects the quality of labor supply and ultimately stimulates the increase in labor supply.

(3) Government expenditure X_3 (Unit: ten thousand yuan)

The Anhui Provincial Government implements a proactive fiscal policy for macro-control, adjusts the economic structure, increases fiscal expenditures, narrows the gap between the rich and the poor, expands employment, stimulates domestic demand, increases public investment, supports the industrial economy, forms new economic growth points, and promotes the economy of Anhui Province Balance sustainable development. A proactive fiscal policy is a necessary prerequisite for stable economic development and a steady improvement in people's lives. It has an effect on the socialist market economy that cannot be underestimated.

(4) Total wages of urban people X_4 (Unit: ten thousand yuan)

When companies hire labor, they are also following the principles of the socialist market economy. In an ordinary way, when the net profit of the enterprise keeps increasing, the willingness and tendency to increase labor demand will arise to a certain extent. Therefore, the wage level, as a measure of the value of labor, will also affect the supply of labor

4. Data Collection and Processing

This article uses the above-mentioned relevant data from the 2000-2018 "Statistical Yearbook of Anhui Province" for secondary processing and sorting.

Table 1. Relevant data

Year	Y	X ₁	X ₂	X ₃	X ₄
2000	652.9	3125.33	4080	3224688	2755252
2001	641.5	3502.78	4390	4037988	2957016
2002	659.1	3827.66	4813	4568579	3371312
2003	683.2	4307.77	5348	5074398	3610004
2004	694.4	5129.12	5691	6015280	4214523
2005	730.5	5675.85	7531	7130633	4841315
2006	755.9	6500.31	8374	9402329	5710401
2007	818.1	7941.61	9931	12438342	7089072
2008	901.9	9517.68	10964	16471253	8444708
2009	936.2	10864.68	12183	21419217	9742920
2010	973.5	13249.78	14009	25876135	12251179
2011	1038.3	16284.92	16075	33029911	15901381
2012	1141	18341.67	17260	39610080	19259839
2013	1226.2	20584.04	19114	43496871	24637193
2014	1277.4	22519.65	20667	46640973	26315988
2015	1292.1	23831.18	21760	52390076	28238432
2016	1327.5	26307.7	23831	55229501	30128307
2017	1378.5	29676.22	26237	62038110	33237088
2018	1385.3	3410.91	30090	65721484	43548900

(1) Model setting and estimation

1. Based on the above indicators and data, the model is established as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \mu_i$$

In this formula, β_0 represents a constant term, μ_i acts as random interference items, $\beta_1, \beta_2, \beta_3, \beta_4$ respectively take for the correlation coefficient of X_1, X_2, X_3, X_4 . Use this model to perform multiple linear regression analysis to determine the degree of influence of each variable.

2. Article applies Eviews10 , the software estimates the parameters, and the purpose is to obtain the degree of influence of each reference factor on the urban employment population and to judge its significant effect through systematic analysis.

3. Unit root test:

The test result gets the adjoint probability $P = 0.0007 < 0.05$, Does not contain unit roots, that is, the residual sequence is stationary, Y with X There is a co-integration relationship, the null hypothesis is rejected, and nothing should be included in the test equation.

4. Make a preliminary estimate of the explained variables and explanatory variables, and the results obtained by the least square method are as follows:

The initially established model is:

$$Y = 600.5319 - 0.058437X_1 + 0.037573X_2 + 2.23E - 05X_3 + 4.53E - 06X_4$$

(2) Economic significance test:

The model test results show that $\beta_2, \beta_3, \beta_4 > 0$, indicating that the impact of residents' consumption level, fiscal expenditure and total urban wages on the number of urban employees is positively correlated, which is in line with the actual economic significance and passed the test. but $\beta_1 < 0$, may be due to the fact that the urban-rural dual structure has affected the expansion of the total scale; the upgrading of the economic structure and the increase in the organic composition of capital have weakened the role of economic growth in absorbing labor, and the structural contradiction between talent quality and market demand has also affected In order to expand the scale of employment, these various conditions may lead to a " empty state " of jobs created by economic growth . Or the model may also have multicollinearity. Therefore, it is necessary to carry out statistical tests and econometric tests and corrections on the original model.

(3) Statistical inspection:

From the results, it can be concluded that the model $R^2 = 0.992958$, after adjustment $\bar{R}^2 = 0.990946$ is also very high; the F statistic is 493.5047, also passed the test, obviously significant; but in $\alpha = 0.05$, under the level, only X_4 fails the t test, that is X_4 , there is no significant effect on the explained variable.

5. Econometrics Test and Revision

1. Multicollinearity test

Table 2. Correlation

Correlation					
	Y	X_1	X_2	X_3	X_4
Y	1.000000	0.982969	0.985405	0.991899	0.966855
X_1	0.982969	1.000000	0.996858	0.996022	0.994037
X_2	0.985405	0.996858	1.000000	0.992611	0.986547
X_3	0.991899	0.996022	0.992611	1.000000	0.985634
X_4	0.966855	0.994037	0.986547	0.985634	1.000000

Using the auxiliary regression method, it can be seen that the correlation coefficient between the variables is strong, that is, the F value is very significant, and the variables can be expressed linearly with each other, indicating that the model has serious multicollinearity. And it can be obtained through the correlation coefficient, The correlation coefficient of X_3 is the largest, that is, the correlation is the strongest. Therefore, the stepwise regression method is used to establish the inclusion X_3 . To solve the multi-collinearity problem, the optimal model results obtained are as follows:

$$Y = 594.8605 - 0.045203X_1 + 0.032516X_2 + 2.08E - 05X_3$$

2. Heteroscedasticity test

Table 3. Heteroscedasticity test

Heteroskedasticity Test: White			
F-statistic	0.984943	Prob. F(9,9)	0.5088
Obs*R-squared	9.427934	Prob.Chi-Square(9)	0.3987
Scaled explained SS	7.683045	Prob.Chi-Square(9)	0.5664

Using the White test, the test results obtained are as follows: the probability value of the output results is greater than 0.05, and the original hypothesis that there is no difference not being rejected. In other words, the model has no secondary. Thus, there is no heteroscedasticity.

3. Autocorrelation test

Obtained from the regression results, $DW = 1.624390$. Look up the meter, $d_L = 0.967 < DW < d_U = 1.685$, The value of DW is between the two, it is impossible to determine whether there is autocorrelation, adopting LM test method. The results obtained by the inspection method are shown in the figure.

Table 4. LM test

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	1.473884	Prob. F (2,13)	0.2649
Obs*R-squared	3.511940	Prob.Chi-Square(2)	0.1727

All Probabilities obtained are greater than 0.05. Therefore, the model does not have first-order serial correlation. Therefore, this model does not have autocorrelation. The final model:

$$Y = 594.8605 - 0.045203X_1 + 0.032516X_2 + 2.08E - 05X_3$$

$R^2 = 0.992699$, $\overline{R^2} = 0.991239$, which is improved compared to the original model. $F = 679.8326$.

6. Empirical Results

This article studies the impact of the four major factors of GDP, resident consumption level, fiscal expenditure, and total urban wages on the number of urban employment in Anhui Province, and produce the related summing-ups: The economic policy of expanding fiscal expenditure makes a difference to the increase in urban employment. It is very effective; the increase in the consumption level of residents will greatly stimulate the increase in labor supply; the total salary of residents has an insignificant influence on the explained variables and does not play a significant role; and in terms of GDP, in a short period, it will have a certain passive effect, which may possibly be ascribed to the upgrading of the economic structure and the increase in the organic composition of capital, which weakens the role of economic growth in absorbing urban labor. Based on the actual economic situation, it is reasonable to speculate that with the vigorous development of the tertiary industry and the introduction of strategic policies for rural revitalization, more urban populations choose to return to their hometowns for employment and seek the development of the tertiary industry, especially the tourism and service industries, such as: The rise of country houses and so on. On the one hand, it solves the problem of rural labor shortage, on the other hand, it is more conducive to stimulating rural economic growth and narrowing the gap between urban and rural people's lives, injecting new vitality into rural revitalization so that farmers can share in the benefits of industrial value-added.

7. Policy Measures

1. Transform the mode of economic growth and ease the contradiction between population urbanization and urban employment. The government should change the extensive economic growth mode, promote the overall economic growth from "quantity" to "quality", actively expand domestic demand, realize the upgrade of residents' consumption, and strive to achieve

rapid employment growth while economic growth, and create a large number of employment opportunities, easing the employment pressure.

2. As the main body of the market economy, the government should make rational use of macro-control. Expansion of expenditure through economic and fiscal means, continue to implement expansionary fiscal and monetary policies, appropriately increase the money supply, reduce the inflation rate, accurately locate the beneficiaries, and help stimulate employment. Secondly, it is possible to broaden investment channels, use bonds or stocks to raise funds from the society, realize the diversification of investment entities, in order to create more employment opportunities and reduce labor barriers to entry.

3. Change the concept of employment, reduce employment discrimination, and focus on fair competition. Nowadays, employment discrimination against women, college students who have just entered the society, or the elderly is still serious. Enterprises must uphold the principle of "Fairness, Openness, and Justice" when hiring labor, and cannot allow inherent traditional thinking to bury talents.

4. Encourage the development of small and medium-sized enterprises and non-public enterprises. Small and medium-sized enterprises are the main force in increasing competitiveness and absorbing employment. The non-public ownership economy has become one of the most dynamic parts of China's national economy and will be a strong and stable driving force for the development of the national economy. Vigorously promote the development of small and medium-sized enterprises and the non-public economy, and play a main role in absorbing a large number of social idlers and laid-off workers from state-owned enterprises, and maintaining social stability.

5. Optimize the industrial structure and promote the development of productivity. The adjustment and upgrading of the industrial structure is conducive to speeding up the rational flow and allocation of labor between industries and between urban and rural areas. In the process of urbanization, a reasonable industrial structure can create more jobs under the same level of economic development, so that urbanization can better play the role of absorbing rural surplus labor, and at the same time alleviate the employment pressure of urban employment tensions. Vigorously develop the tertiary industry and accelerate the innovation of science and technology to boost the development of emerging industries. Such as: finance, insurance, information consulting and other industries that are closely connected with the market economy and have high added value. Full consideration should be given to the impact of changes in the industrial structure on the stock and increase in employment, and the level of employment in both urban and rural areas should be maximized.

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