

A Study on the Relation between Living Expenditure and Disposable Income of Urban Residents in Zhengzhou City

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Abstract: Since the reform and opening up, people's consumption level has been constantly improving and purchasing power has been increasing, among which the consumption of urban residents occupies the dominant position. It is of great significance to study the consumption level of urban residents for grasping the macro-balance and dynamic growth of the national economy. Based on the data of Zhengzhou Statistical Bureau from 2000 to 2018, this text empirically analyses the relationship between disposable income and living expenditure of urban residents in Zhengzhou. The results show that the disposable income of urban residents in Zhengzhou has a close relationship with their living expenditure. For every 1% increase in their per capita disposable income, the per capita living expenditure of urban residents in Zhengzhou will increase by 0.681888%. Therefore, increasing the disposable income can improve the consumption level of residents, thus promoting the development of production, and is conducive to achieving the goal of common prosperity. This text also puts forward some suggestions to improve the disposable income of urban residents.

1. Introduction

Disposable income(SR) refers to the income that households can obtain and use freely, including the wages of the main occupations of family members, as well as the income of the second occupation, other part-time jobs and occasional labor. Resident living expenditure(ZC) refers to the total expenditure for the consumption of individual residents and their families and the individual consumption of collective, including non-commodity expenditure for purchasing commodities and enjoying cultural services and living services. Over the past decade, the per capita disposable income of urban residents in Zhengzhou has increased rapidly, ranging from 15732 yuan in 2008 to 39042 yuan in 2018. Meanwhile, their per capita living expenditure has increased from 9700 yuan in 2008 to 26256 yuan in 18 years. The two trends are consistent.

2. Journals reviewed

Through reading and analyzing some existing literatures, we know that the disposable income of urban residents is closely related to the living expenditure. For example, Deng et al.(2015) believe that there is a high correlation between the annual average disposable income and living expenditure of urban residents in Shanxi Province, and the living expenditure of residents is largely determined by the disposable income. Zhang et al.(2016) think that urban residents are the main force of information consumption, and the impact of income growth on the evolution of information consumption structure is a major theoretical and practical issue in the bilateral structural reform of supply and demand. Liu et al.(2014) think that the income gap has a significant and long-term impact on consumption differences, and there is a significant negative correlation between the two. That is, the expansion of the income gap is an important reason for the declining consumption tendency of urban residents and the weak growth of consumption demand.

3. Empirical Analysis

Based on the data from 2000 to 2018, this text empirically analyses the relationship between disposable income and living expenditure of urban residents in Zhengzhou. The data used were collected from the data of Zhengzhou Statistical Bureau over the years.

3.1 Unit root test of time series

In order to avoid spurious regression, we use Eviews to conduct ADF test on the time series. According to the test results, both ZC and SR deny the original hypothesis at 1%, 5% and 10% significant levels, which indicates that the difference sequences of ZC and SR have no unit root and are stationary.

Table 1 ADF test

Variable	ADF	1%level	5%level	10%level	Unit Root
ZC	-5.236762	-3.959148	-3.081002	-2.681330	Non-existent
SR	-5.878735	-3.920350	-3.065585	-2.673459	Non-existent

3.2 Co-integration test of time series

In order to analyze whether there is a co-integration relationship between disposable income and living expenditure, the regression between two variables is made first, and then the stationarity of the regression residual is tested. The residual sequence obtained by OLS regression was tested by unit root test. The results show that at 1% significance level, it is less than the corresponding critical value, thus rejecting the original hypothesis. It shows that the residual series has no unit root and is a stationary series. It shows that there is a co-integration relationship between disposable income and living expenditure, and there is a long-term equilibrium relationship between them.

Table 2 Co-integration Test

Augmented Dickey-Fuller test statistic	-2.817447	0.0078
Test critical values:	1% level	-2.708094
	5% level	-1.962813
	10% level	-1.606129

3.3 Regression analysis

Using Eviews software, SR as independent variable and ZC as dependent variable, OLS method was used for regression analysis. The results were as follows:

Table 3 OLS analysis results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	62.01145	275.1262	0.225393	0.8244
SR	0.681888	0.012547	54.34486	0.0000
R-squared	0.994277	Mean dependent var		13221.16
Adjusted R-squared	0.993940	S.D. dependent var		7314.074
S.E. of regression	569.3651	Akaike info criterion		15.62622
Sum squared resid	5511002.	Schwarz criterion		15.72564
Log likelihood	-146.4491	Hannan-Quinn criter.		15.64305
F-statistic	2953.363	Durbin-Watson stat		0.425103
Prob(F-statistic)	0.000000			

$$\hat{ZC} = 62.01145 + 0.681888SR$$

According to the Table, the goodness of fit of the model is 0.994277, and the goodness of fit is high; the slope item passes the t test at the 1% significance level. Regression results show that every 1% increase in disposable income of urban residents in Zhengzhou will lead to an increase of 0.681888% in per capita living expenditure.

4. Countermeasures and Suggestions

The results show that increasing the disposable income of urban residents can improve their consumption level and promote the development of production. The following are some suggestions:

(1) Establishing a long-term mechanism for increasing urban residents' income. Improving the mechanism for coordinating the growth of workers' income and economic benefits. Improving the enterprise wage guidance line and the minimum wage system, and gradually raising the minimum wage standard and the treatment of retirees on the basis of improving benefits.

(2) Expanding employment and accelerating the development of labor-intensive industries, service industries and various types of small and medium-sized enterprises with large employment capacity.

(3) Standardizing the order of the labor market. Encouraging workers to start their own businesses and seek their own jobs and promoting various forms of employment.

(4) Improving the minimum living security system. Raising the minimum living security standards for urban residents in a timely manner.

References

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