An Empirical Study on the Influencing Factors of Residents' Consumption Level in China-Take Shanghai as an Example

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Abstract: *This paper makes an empirical analysis of the impact factors of Shanghai residents' consumption level by using the time data of Shanghai and the Eviews software from 1996 to 2015. The results show that disposable income of urban residents, consumption level of rural residents, savings, consumer price index and natural population growth rate have a positive correlation with the consumption level of Shanghai residents. The effect of disposable income and saving on the consumption level of residents in Shanghai is more obvious.*

Keywords: Disposable income, Savings, Consumer price index, Natural population growth rate

1. Introduction

Over the past 30 years, Shanghai's economy has achieved leap-forward development, especially from 1992 to 2007, the GDP has maintained double-digit growth for 16 consecutive years. After the global financial crisis in 2008, Shanghai's overall economic growth showed a downward trend of fluctuation, and the GDP growth rate dropped to 6.9% in 2015. This shows that the economic growth of Shanghai has changed from high-speed growth to medium-high-speed growth under the dual effects of external environment change and self-factors change. The economic growth platform shows a downward trend, and the driving force of growth begins to shift from investment-driven to consumption-driven and innovation-driven.

Although the consumption level of Shanghai residents is increasing year by year, due to many factors, especially the influence of traditional concepts and living habits, the growth rate of consumption level is far less than that of income level, and the contribution of consumption to the overall economy is still insufficient. In 2016, on the basis of a thorough study of the economic situation, the economic environment and the direction of development, the Shanghai Municipal Party Committee and the Municipal Government promulgated the "Outline of the Thirteenth Five-Year Plan for Shanghai's National Economic and Social Development" and formulated a grand blueprint for the development of the next five years. The Outline clearly states that new ideas should guide new development. We will accelerate industrial restructuring and upgrading, promote shared development and enhance the well-being of the people. We should establish and improve a fairer and more sustainable social security system, strive to build a well-off society in an all-round way by 2020, increase residents' income through multiple channels, enhance residents' willingness to consume, and improve the quality of life of residents.

Then, how to promote residents' consumption, how to make residents' consumption really play a pioneer role in stimulating economic growth, has become an important part of the reform of the economic structure of the Shanghai Municipal Party Committee and the municipal government and a major topic for economic workers to study.

2. Literature Review

Xiaofang Mu (2010)[1] Empirical analysis is made on the influencing factors of Shanghai residents' consumption level by using the statistics of Shanghai economy and residents' consumption. The results show that economic growth can promote the growth of residents' income, the growth of residents' income can promote the growth of residents' consumption, and the growth of residents' consumption can directly promote the economy. Growth is also significant. Qiong Tang (2014)[2] believes that consumption, as one of the "troikas" to promote economic growth, has not played its real role in the current domestic economic environment. China's rural population accounts for a large proportion, but the proportion of total consumption is very small, which directly affects the overall level of consumption in China. Therefore, expanding consumption can not only improve people's livelihood, but also promote economic growth. Xiaobin Lin (2013)[3] The analysis shows that residents' consumption has a pulling effect on economic growth, and the pulling effect of urban residents' consumption on the economy is obviously greater than that of rural residents' consumption. Aihua Han (2010)[4] made a regression analysis of the residents' consumption and economic growth, and the results show that the residents' consumption plays a more significant role in promoting economic growth than investment. Yingxue Liu(2013)[5] pointed out that in the current economic growth of the troika, relatively speaking, consumption should be higher than investment and import and export, and the impact of consumption on economic development is the most basic. In terms of influencing factors, Zhihong Yi(2012)[6] through empirical analysis of the factors affecting the growth of consumption in China, concluded that current income is the most direct and important factor affecting the consumption of residents, which corroborates the conclusion of the National Statistical

Bureau's "Seven Factors Around the Growth of Resident Consumption" Yujian Wang(2000)[7] uses domestic data to verify the consumption function theory, and finds that the consumption function is also affected by external environmental factors. Xiancang Fang and Yukun Wang (2013)[8] show that there is a stable relationship between social security expenditure and residents' consumption in Shanghai, and it can promote residents' consumption. Tingting Qian (2016)[9] Research found that Shanghai's per capital GDP, per capita disposable income and population aging are positively correlated with per capita consumption level.Xin Lu (2006)[10] validated the relationship between GNP and household consumption level by using Cointegration test, and found that there is a long-term stable relationship between them. After correcting the error of the model, it is found that the income changes of urban residents in Shanghai also have a great impact on consumption. TingHuang (2005)[11] pointed out that the income gap will affect people's propensity to consume, the smaller the income gap, the higher the propensity to consume, the greater the income gap, the lower the propensity to consume. At the same time, through the study found that the income gap of Shanghai residents is expanding, which makes a lot of social instability factors. At the same time, consumer spending has declined, indicating that consumption has been relatively shrinking.

Under the background of the current economic globalization, there are many factors that affect the consumption level of residents. However, how many factors are affecting the consumption level of residents, how the historical causes of these factors come into being, how these factors will develop and change in the future, what hidden factors are not known to us, what factors play a leading role in the current impact on the consumption level of residents, whether they can be predicted in advance or not What factors can be identified as the main factors in the future? And these factors are studied and analyzed, and the relevant conclusions are drawn. Constructive suggestions are put forward for the sustainable development of Shanghai's economy, improving people's livelihood and promoting the reasonable growth of residents 'consumption level. Therefore, on the basis of existing research literature, this paper uses the data of Shanghai Statistical Yearbook from 1996 to 2015, uses Eviews software and makes empirical analysis and Research on the consumption level of Shanghai residents from the perspective of economics.

3. Theoretical Analysis Framework

From the relevant data in Shanghai Statistical Yearbook, we can see that the consumption level of Shanghai residents has been on the rise, but the growth rate is not very large. To this end, I summarized five self-perceived factors that affect the growth of consumer spending, trying to take these factors as a starting point, put forward hypotheses and assumptions, carry out empirical analysis, and draw conclusions.

First of all, the most important factor is the disposable income of urban residents. It is the basic standard to measure the living standard of urban residents in a country or region, and plays a very important role in macroeconomic theory and empirical research and in the formulation of national macroeconomic policies. Ting Huang (2005) [11] In the empirical analysis of Shanghai residents'income and consumption, through the analysis of Shanghai residents' income and consumption status, it is found that there is a positive interaction between urban residents'disposable income and consumption level. Therefore, in view of this analysis, the following hypotheses are put forward:

Hypothesis 1: the disposable income of urban residents is positively correlated with the consumption level of residents.

In the first hypothesis, we consider the influence of the disposable income of urban residents on the consumption level of residents, but the disposable income of rural residents is also a branch of the disposable income of residents, so we should also consider the disposable income of rural residents while considering the disposable income of urban residents. China has a vast territory, a complex population structure and a large population base of more than 600 million rural residents. However, according to statistics, the disposable income of rural residents is very low compared with that of urban residents, which is not reasonable. We can imagine and look forward to, if we draw closer to the disposable income of rural and urban residents, then the overall level of consumption will show how prosperous the scene. Tao Jiang and Aiqin Zhang (2013) [12] Through the empirical study on the influencing factors of rural residents'consumption level, we get the conclusion that the disposable income of rural residents is positively correlated with their consumption level. Therefore, the following assumptions are made:

Hypothesis 2: disposable income of rural residents has a positive impact on Residents' consumption level.

Since ancient times, the broad masses of the Chinese people have always respected the ancient motto of "thrift, failure and extravagance". They have always adhered to the traditional virtues of thrift and diligence, and pursued the concept of living in peace and danger, thinking well-prepared, and living and working in peace and contentment. Therefore, they have developed the habit of saving, making China a saving country. So, when people save in order to be prepared and safe, does it affect the consumption level of residents? Xiancang Fang and Yukun Wang (2013) [8] In the study of social security, Preventive Savings and consumption of Shanghai residents, it is found that savings and consumption level are correlated. Therefore, here are the following assumptions:

Hypothesis 3: savings have a positive effect on Residents' consumption level.

The consumer price index (CPI) is an important index for economic analysis and decision-making, the detection and regulation of the total price level, and the national economic

accounting. It is closely related to the people's lives and occupies an important position in the national economic price system. Haiyan Zhang and Na Zhou (2014) [13] study that the consumer price index rose, indicating a decline in the purchasing power of money; on the contrary, if the consumer price index decreased, indicating a rise in the purchasing power of money. Therefore, the following assumptions are made:

Hypothesis 4: the consumer price index has an impact on the consumption level of the residents.

The role of natural population growth rate in residents' consumption level cannot be ignored. Shanghai, as the economic center of our country, has a large population, and per capita consumption is also very high. Then we will ask whether the natural population growth rate has any effect on the consumption level of residents. Chengxie Xu (2016) [14] Research found that there is a positive correlation between the natural population growth rate and the level of consumption. Therefore, the following assumptions are made: Hypothesis 5: the natural population growth rate has a certain impact on the consumption level of residents.

4. An empirical analysis of influencing factors of residents' consumption level

4.1 Source and description of data

Based on the above five hypotheses, this paper intends to analyze the influencing factors of consumption in Shanghai. The data mainly come from Shanghai Statistical Yearbook. The symbols of the variables are as follows: Table 1:

Table 1: Symbolic representation of variables

Explained variable	Symbol
Residents' consumption level	Y
Explanatory variable	Symbol
Disposable income of urban residents	X_1
Disposable income of rural residents	X_2
Savings	X_3
CPI	X_4
Natural population growth rate	X_5

The residents' consumption level is taken as the explanatory variable, and is recorded as: Y. The explanatory variable of disposable income of urban residents is defined as: X_1. The explanatory variable of the disposable income of rural residents is counted as: X_2. Explanatory variable savings are recorded as: X_3. The explanatory variable consumer price index is as follows: X_4. The natural growth rate of explanatory variables is X_5.

To sum up, through the statistical summary of the relevant data in the Shanghai Statistical Yearbook, we extract the data from 1996 to 2015 in Shanghai (Table 2):

4.2 Model selection of influencing factors of residents' consumption level

Based on the above analysis, this paper makes an empirical analysis of the time data of Shanghai in the past 20 years from 1996 to 2015 by using the data in Shanghai Statistical Yearbook and the indicators set above.

Table 2: Shanghai index data from 1996 to 2015

	Consumption level of Shanghai residents Y（yuan）	Disposable income of urban residents X1（yuan）	Disposable income of rural residents X2（yuan）	Savings X3（Hundreds of millions of yuan）	CPI X4（The price is 100 in 1978.）	Natural population growth rate X5（‰）
1996	7545	8159	4846	1868.34	511.5	-2.29
1997	8587	8439	5277	2109.18	525.8	-2.41
1998	9147	8773	5407	2372.94	525.8	-3.03
1999	9881	10932	5481	2597.12	533.7	-2.27
2000	11060	11718	5565	2627.07	547	-1.9
2001	11660	12883	5850	3109.5	547	-2.71
2002	12627	13250	6212	4915.54	549.7	-2.61
2003	14013	14867	6658	6054.6	550.1	-3.24
2004	15937	16683	7337	6960.99	561.9	-1.16
2005	17894	18645	8342	8432.49	567.3	-1.46
2006	20022	20668	9213	9480.28	574.2	-1.24
2007	22889	23623	10222	9326.45	592.3	-0.1
2008	25167	26675	11385	12083.66	626.5	-0.75
2009	26582	28838	12324	14357.65	624	-1.02
2010	32271	31838	13746	16249.29	643.4	-0.6
2011	35439	36230	15644	18920.43	676.7	-0.68
2012	36893	40188	17401	21512.01	695.9	0.26
2013	39616	43851	19208	23097.35	711.9	-0.54
2014	43007	47710	21192	24057.05	730.7	0.32
2015	45816	52962	23205	23384.73	748.4	-1.27
Source: Shanghai statistical yearbook.						

Data on Influencing Factors of residents' consumption level in Shanghai

Based on the above table, we establish the following time data regression equation:

$$Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5$$

4.3 Empirical results and analysis

Using the data in the table above, we first use the explanatory variables to plot scatter plots with the explanatory variables, respectively, as shown in the following figure 1-5.
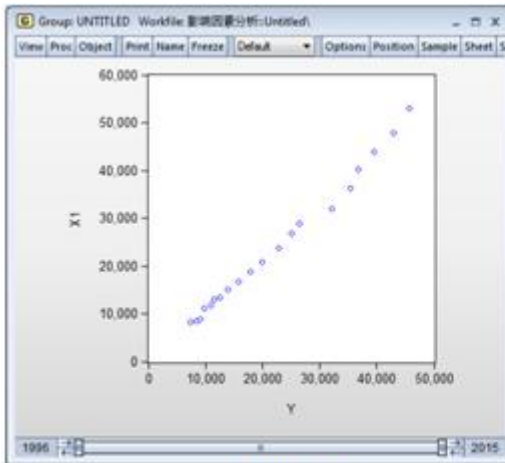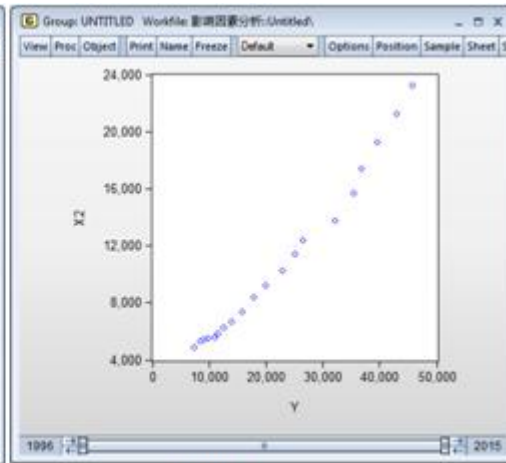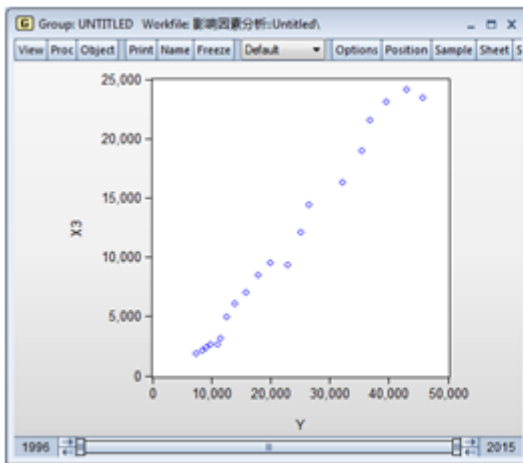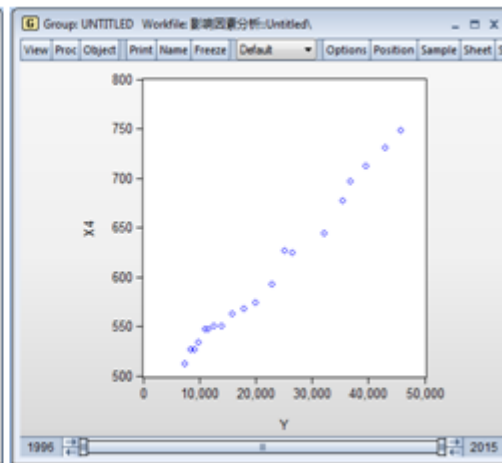

Figure 1

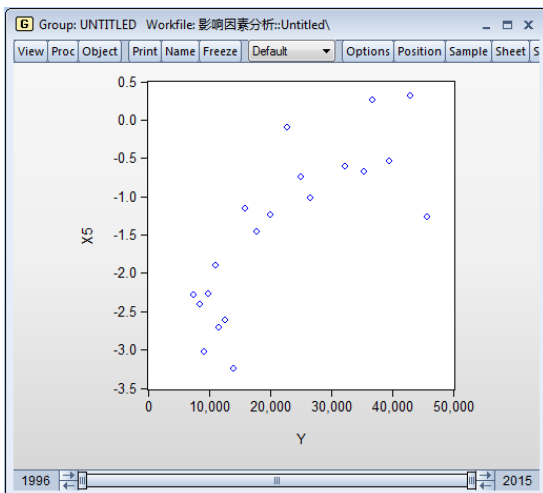Figure 2

Figure 3

Figure 4

Figure 5

From the scatter plots, it can be seen that the consumption level of Shanghai residents is linearly and positively correlated with the disposable income of urban residents, disposable income of rural residents, savings, and consumption price index, and the natural growth rate of population is approximately linearly and positively correlated.

Then the regression equation was regressed by Eviews software, and the following conclusions were drawn (Figure. 6):

```
Dependent Variable: Y
Method: Least Squares
Date: 12/19/16   Time: 21:21
Sample: 1996 2015
Included observations: 20
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Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1341.160	15629.07	-0.085812	0.9328
X1	0.728866	0.262346	2.778259	0.0148
X2	-0.413970	0.479021	-0.864199	0.4020
X3	0.444479	0.187646	2.368703	0.0328
X4	10.86157	32.69667	0.332192	0.7447
X5	406.2368	336.9308	1.205698	0.2479

R-squared	0.996238	Mean dependent var		22302.65
Adjusted R-squared	0.994894	S.D. dependent var		12551.80
S.E. of regression	896.9011	Akaike info criterion		16.67909
Sum squared resid	11262043	Schwarz criterion		16.97781
Log likelihood	-160.7909	Hannan-Quinn criter.		16.73741
F-statistic	741.4287	Durbin-Watson stat		1.771027
Prob(F-statistic)	0.000000			

Figure 6: Regression analysis of influencing factors of residents' consumption level in Shanghai

The following regression equation can be drawn from Figure. 6:

$$\hat{Y}_i = -1341.160 + 0.728866X_1 - 0.413970X_2 + 0.444479X_3 + 10.86157X_4 + 406.2368X_5$$

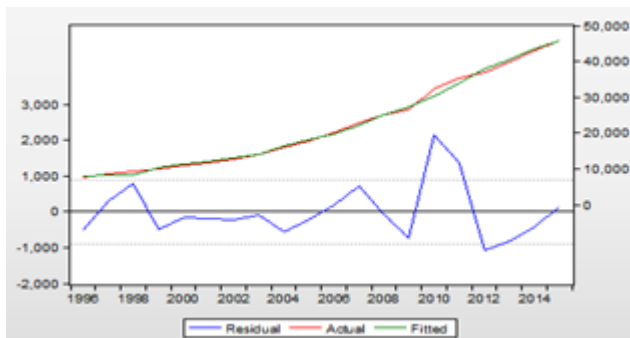After regression analysis with Eviews software, the following results can be obtained.(Figure 7):

Figure 7: Residuals map of influencing factors of residents' consumption level in Shanghai

Figure 7 shows the corresponding residual plots. ACTUAL represents the actual observed value, FITTED represents the fitting value, and RESIDUAL represents the residual error. As shown in Figure 6, the standard deviation is 896.9011. It can be seen from residual plots that most of the residual values fall within a positive or negative standard deviation.

R test: as shown in Figure 6, R^2=0.996238 and R^2 is very close to 1, It shows that the regression equation has high goodness of fit.

F test: original hypothesis H_0: $\beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = 0$

Alternative hypothesis H_1: β_1, β_2, β_3, β_4, β_5 Not all 0

The constructed statistics show that F = 741.4287 is known from Figure 6. At the significant level of alpha = 0.05, $F_{0.05}$ (5, 14) is between 2.90 and 3.33, which must be smaller than F. Therefore, the original hypothesisH_0 is rejected and the alternative hypothesis H_1 is selected, indicating that the overall regression effect of the model is remarkable at the significant level of α=0.05. Therefore, we believe that the disposable income of urban residents, disposable income of rural residents, savings, consumer price index, natural population growth rate have an impact on the consumption level of Shanghai residents.

T test: consider the significance test of any single variable X_j(j=1, 2,..., 5), which is equivalent to the following assumption.

Suppose: original hypothesis H_0: β_j =0

Alternative hypothesis H_1: $\beta_j \neq 0$

Construct t statistics, from Figure 6 can be obtained $|t_1|$ = 2.778259, in the significant level of α=0.05, look up the table: $t_{0.025}$ (14) = 2.145, known to be greater than $t_{0.025}$ (14) so reject the original hypothesisH0, select alternative hypothesisH1, indicating that the explanatory variable of urbanresidents' disposable income on the significant level ofα=0.05has a significant impact on the explained variable. Similarly, the explanatory variable savings have a significant impact on the explanatory variables, while the rural household disposable income, consumer price index and natural population growth rate have no significant impact on the explanatory variables.

DW test: original hypothesis H_0: ρ =0

Alternative hypothesis H_1: $\rho \neq 0$

Figure 6 shows that DW = 1.771027, at the significant level ofα=0.05, when n = 20, k = 5, look-up table can be d_l = 0.79, d_u = 1.99, DW and between d_u and $4 - d_u$,, so it is impossible to determine whether there is an autocorrelation.

At the significant level of α = 0.01, when n = 20, k = 5, the table can be obtained d_l = 0.60, d_u = 1.74, DW between,

so reject the original hypothesisH_0, choose alternative hypothesisH_1, there is no autocorrelation.

Multiple collinear test: List the correlation coefficient matrix of X_1, X_2, X_3, X_4 and X_5, as shown in the following figure (Figure 8)
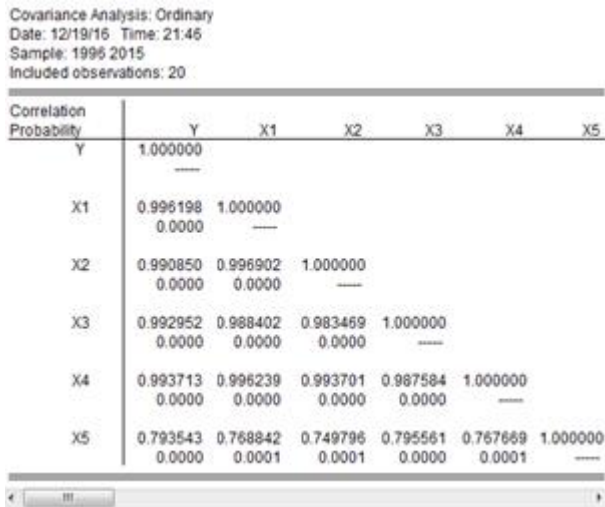

Figure 8: Explanatory variable correlation coefficient matrix

As shown in Figure 8 above, there is multiple collinearity. Therefore, stepwise regression can be used to eliminate Multiple collinearity. First, do the regression between Y and X_1, X_2, X_3, X_4 and X_5 respectively, as shown in table 3 below:

Table 3: First step of stepwise regression

Explained variable	C	X_1	X_2	X_3	X_4	X_5	R^2	F
Y=f(x₁)	1108.435	0.888773					0.992411	2353.846
t	2.199617	48.51645						
Y=f(x₂)	-589.1552		2.134285				0.981783	970.1061
t	-0.708411		31.14653					
Y=f(x₃)	5634.082			1.561336			0.985954	1263.468
t	9.709613			35.5453				
Y=f(x₄)	-77835.04				166.2892		0.987465	1417.929
t	-29.05546				37.6554			
Y=f(x₅)	35588.63					9258.522	0.629711	30.61063
t	11.96603					5.532688		

As can be seen from Table 3 above, at the significant level of α=0.05, R = 0.4227, F between 4.35 and 4.54; at the significant level of alpha = 0.025, the table shows that: $t_{0.025}$（18）=2.101，当 Y=f（X₁），Y=f（X₂），Y=f（X₃），Y=f（X₄），Y=f（X₅）, the values of R, F, T are greater than the values obtained by the table, but the table shows that The R2 value of X1 is the largest, so Y=1108.435+0.888773X₁ is selected as the initial regression model and stepwise regression is performed, as shown in Table 4 below:

Table 4: Second step of stepwise regression

Explained variable	C	X_1	X_2	X_3	X_4	X_5	R^2	F
Y=f(x₁, x₂)	1801.122	1.214049	-0.787768				0.993238	1248.597
t	2.626622	5.366584	-1.442317					
Y=f(x₁, x₃)	2636.356	0.571113		0.566438			0.995404	1840.747
t	4.312184	5.911894		3.326856				
Y=f(x₁, x₄)	-12259.66	0.739461			28.11186		0.992623	1143.711
t	-0.640627	3.447744			0.698797			
Y=f(x₁, x₅)	3344.665	0.842431				788.2472	0.994277	1476.805

t	3.182146	32.90875				2.354579		

From Table 4 above, at the significant level of α=0.05, the table shows that R = 0.4227, F is between 3.49 and 3.68; at the significant level of α = 0.025, the table shows that: $t_{0.025}$（17）=2.110 although the values of R and F are greater than the values of the table, but only when Y=f（X_1, X_3）and Y=f（X_1, X_5）the T value is greater than $t_{0.025}$（17）. Through the test, when Y=f（X_1, X_2）and Y=f（X_1, X_4）T values are less than $t_{0.025}$（17）do not pass the test, so we discard X2 and X4. When Y = f (X_1, X_3) and Y = f (X_1, X_5), the R^2 value of Y = f (X1, X3) is the largest, so choose Y = 2636.356 + 0.571113X_1 + 0.566438X_3 as the regression model, and then stepwise regression, as shown in Table 5 below:

Table 5: Third step of stepwise regression

Explained variable	C	X_1	X_2	X_3	X_4	X_5	R^2	F
Y=f(x_1, x_3, x_5)	3745.761	0.599396		0.464887		487.6098	0.996022	1335.212
t	4.089473	6.352033		2.648533		1.576484		

From table 5 above, at the significant level of α=0.05, the table shows that R = 0.4227, F is between 3.10 and 3.29; at the significant level of α= 0.025, the table shows that t $_{0.025}$ (16) = 2.120, and at Y = f (X_1, X_3, X_5), R and F are greater than the value of the table, but only if $\left|t_1\right|$ $\left|t_3\right|$, is greater than t 0.025 (16) and $\left|t_5\right|$ is less than t $_{0.025}$ (16), so give up X_5. To sum up, the final regression model is obtained: Y=2636.356+0.571113X_1+0.566438X_3. The regression model is then analyzed and tested again, as shown in Fig 9 below:

Figure 9: Regression analysis results after eliminating multiple collinearity

R test: as shown in Figure 9, R^2=0.995404, so R=0.997700 shows that the goodness of fit is very high.

F test: as shown in Figure 9, F = 1840.747, $F_{0.05}$ (2, 17) is between 3.49 and 3.68, so reject the original hypothesisH_0, choose alternative hypothesisH_1. It shows that the overall regression effect of the model is significant at the significant level of α =0.05.

T test: as shown in Figure 9, $\left|t_1\right|$ = 5.911894, look-up table:

$t_{0.025}$ (17) = 2.110, $\left|t_1\right|$ is greater than $t_{0.025}$ (17), so reject the original hypothesisH_0, choose alternative hypothesisH_1. It shows that at the significant level of α =0.05, the explanatory variable of disposable income of urban residents has a significant impact on the explanatory variable. Similarly, the influence of variable savings on explanatory variables is significant.

DW test: as shown in Figure 9, DW=1.508134. At the significant level of α = 0.01, when n = 20, k = 2, the table is obtained d_l = 0.86, d_u = 1.27, DW is between d_u and

$4 - d_u$, so there is no autocorrelation.

To sum up, the regression equation obtained by eliminating multiple collinearity through stepwise regression is a good regression equation, and the coefficients before the explanatory variables of disposable income X1 and savings X3 of urban residents are positive. And through the significance test, it shows that both hypothesis and hypothesis are verified. Therefore, it can be concluded that the disposable income and savings of urban residents have a significant positive impact on the consumption level of Shanghai residents. Among them, when the disposable income of urban residents increases by one unit, the consumption level of urban resident's increases by 0.571113; and when the savings increase by one unit, the consumption level of urban residents increases by 0.566438. In addition, t test is to explain the extent of the explanatory variables on the interpreted variables, so through the T value can be seen that the urban residents' disposable income on the level of consumption is higher than the degree of savings.

5. Conclusions and Policy Recommendations

5.1 Conclusions

Based on the time data of Shanghai from 1996 to 2015 in Shanghai Statistical Yearbook and Eviews software, this paper analyzes the influencing factors of Shanghai residents' consumption level and draws the following conclusions:

Conclusion1: In this paper, the consumption level of Shanghai residents to do a multi-factor analysis, through the test can be seen that there is a multicollinearity, so after eliminating the multicollinearity found that only urban

residents disposable income and savings on the consumption level of Shanghai residents have a significant effect. And through the t value, we can see that the disposable income of urban residents has a greater impact on the level of consumption than savings.

Conclusion 2: Although multiple collinearity was found in the regression equation in the multivariate analysis, we did a single factor analysis of the impact of Shanghai residents' consumption level in the stepwise regression method (Table 2-3). From the analysis results, it can be seen that the disposable income of urban residents in Shanghai has the greatest impact on the consumption level of Shanghai residents, and the effect is significant; the disposable income of rural residents is positively correlated with the consumption level of residents; the savings and consumption level of residents are positively correlated; the consumer price index and consumption level of residents are positively correlated. There is a positive correlation between the natural growth rate of population and the consumption level of residents.

5.2 Policy Recommendations

Based on the above conclusion, in order to further improve the consumption level of Shanghai residents, the following suggestions are put forward:

First, according to conclusion 1, under the new economic environment, Shanghai should accelerate the pace of optimizing the industrial structure, vigorously promote the development of the tertiary industry, establish and improve a fairer and more sustainable social security system, and gradually improve the income level of urban residents. Only by increasing the income of urban residents, can urban residents have more disposable money to consume, thus driving the overall level of consumption of residents.

From the statistical data, we can see that the annual savings rate in Shanghai is higher than the economic growth rate, and the savings amount has been maintained at a higher level. Because of the huge population base, the per capital savings are not high, and the distribution of different strata is uneven. At the same time, the savings are too high, indicating that the proportion of residents spending on consumption is small. In the process of economic development, these are unreasonable phenomena. Therefore, while speeding up the level of residents' income, corresponding measures should be taken to rationally optimize the structure of residents' savings, improve the people's livelihood infrastructure and social security system, change traditional concepts, and allow residents to convert savings into consumption, thus stimulating the growth of consumption level and making Shanghai residents' savings and consumption to be healthy together. Good direction.

Second, according to conclusion 2, the disposable income of rural residents is also an important part of the income of residents. More than two million permanent residents in Shanghai have a huge base and great potential. However, compared with the disposable income and consumption expenditure of urban residents, the disposable income and consumption expenditure of rural residents are still at a low

level. For example, in 2015, the per capital disposable income of urban residents in Shanghai was 52962 yuan, the per capital consumption expenditure was 36946 yuan, the per capita disposable income of rural residents was 23205 yuan, and the per capita consumption expenditure was 16152 yuan. In absolute terms, the per capital disposable income and per capita consumption expenditure of rural residents were less than 50 percent of urban residents. Let the rural residents and urban residents have the same income and expenditure, then the added value is more than 50 billion yuan. The data prove that there is much room for rural growth in terms of per capita disposable income and per capita consumption expenditure. Therefore, spare no effort to improve the income level of urban residents, but also strive to increase the income of rural residents. Although the influence of urban residents' disposable income on the level of consumption is higher than that of rural residents' disposable income on the level of consumption, we can not let it go. The results I hope will be: to intensify the policy of benefiting the people in rural areas, to provide farmers with Multichannel employment opportunities, to increase their disposable income, to reduce the disparity between the disposable income of rural and urban residents, to make both farmers and urban residents prosperous, and to make the consumption level of Shanghai as a whole a new station. The steps will contribute to the sustainable development of Shanghai's economy.

Consumer price index (CPI) is positively correlated with the consumption level of residents. Higher CPI means higher prices. People have to spend more money to buy the same amount of goods. This situation will increase the burden of household expenditure unless the income level of residents is equal to or larger than the price rise. Otherwise, it will be extremely unfavorable to the growth and stability of consumption level, and even may occur the phenomenon of regression of consumption level. If so, it will inevitably have a negative effect on the economic development of Shanghai. Therefore, in order to improve the consumption level of Shanghai residents and maintain social stability and unity, we must strictly control the growth of the total level of consumer price index, and ensure that the actual consumption capacity and consumption level of Shanghai residents will not decline because of the rise of consumer price index.

Thirdly, according to conclusion 2, there is a correlation between natural population growth rate and consumption level. This conclusion shows that natural population growth rate has a certain impact on consumption level of Shanghai residents, but the impact is not significant. Thanks to the implementation of the family planning policy in the 1970s, China's population growth has been effectively controlled. The state has taken this opportunity to emancipate the mind, deepen the reform of the economic system, shake off the constraints of population pressure on the state and family, and laid a solid foundation for the economic take-off in the next 30 years. Despite the data calculation and analysis, it is proved that there is only a correlation between the natural population growth rate and the consumption level of residents at this stage, but the declining birth rate and the aging population seriously affect and restrict the coordinated development of Shanghai's economy, resulting in the gradual

weakening of the population dividend. At present, the most serious population problem in Shanghai is the aging problem. The aging of the population has posed a serious challenge to Shanghai's social security, medical security, pension payment, family pension and consumer industry. Therefore, Shanghai must further improve the government's financial investment in pension welfare and formulate a plan. A practical old-age security system, vigorously develop the old-age service industry, open up a new old-age model, reduce the impact of aging population on consumption. Fortunately, the new two-child policy introduced by the state in recent years has played a very important role in the long-term balanced development of Shanghai's population, the alleviation of population composition, the change of family structure, the improvement of the low fertility rate and the alleviation of the pressure on the elderly in the future. The Second Birth New Congress has completely reversed the embarrassing situation that the natural growth rate of Shanghai population has been negative for many years, and made the population structure of Shanghai more reasonable. This requires the Shanghai Municipal Party Committee and the municipal government to formulate and implement relevant supporting policies as soon as possible to actively respond to the arrival of a new baby boom.

Population aging and the new policy will change people's consumption propensity and family consumption expenditure structure, forcing us to re-examine the impact of natural population growth rate on the level of consumption. Therefore, the role of natural population growth rate on the level of consumption can not be ignored, although only the current correlation, the future is likely to rise to a positive correlation.

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