

An Empirical Study on the Urban Poverty in Guizhou

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Abstract

Based on the GQ model and the Beta model of the Lorenz curve, this paper uses the POVCAL software of the World Bank to calculate the Gini coefficient and the FGT index with the per capita disposable income data of Guizhou urban residents from 1997 to 2015, and analyzes the trends and characteristics of urban poverty in Guizhou. The results show that before 2008, the urban poverty of Guizhou changed from shallow absolute poverty to relatively violent relative poverty. Since 2008, the relative poverty has been stable, but still needs attention. At the same time, Guizhou faces a new type of urban poverty.

Key words: Urban poverty; Gini index; FGT; Guizhou

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INTRODUCTION

Because poverty has been the important issue in the process of social development, the government greatly carries the poverty reduction work steps forward, which is not only conducive to sustainable economic growth but also a necessary move to achieve social stability. The World Bank came up with two goals in 2013, which were “Ending abject poverty and increasing the income

of 40% of the population at the bottom of society in 2030 and Promoting shared prosperity.” Moreover, the organization also claimed that the ratio of the population of abject poverty across the world to the global population would be decreased to less than 10%. Meanwhile, as a developing country with a large poverty population, China has made a lot of efforts in the poverty reduction work, which has achieved remarkable achievements, and set a goal “Eliminating absolute poverty by 2020.” Although the rapid growth of economy has reduced the quantity of the absolute poverty population in China, there were still 70.17 million people living below the poverty line of 2,300 yuan by the beginning of 2015 and poverty incidence remained 7.2%. As a result, the poverty issue is still under severe situations.

Guizhou Province is the typical example of the poverty issue in China. However, to date almost all the statistical data, such as the poverty population and the poverty incidence of Guizhou Province are based on the rural area, where the poverty issue is severe. As a result, the poverty issue in the rural area has gotten more attention, while the poverty issue in the urban area has been concealed to some extent. Because of the rural-urban differences in terms of the resource allocation, governance system and the market system, the rural-urban developmental level has become severely imbalanced. In addition, the urbanization has developed in an accelerated manner, wherefore the resident income difference in the urban area has been expanding. The dual economic structure of urban and rural areas puts obstacles in the way of China trying to promote the socio-economic development as well as imposes restrictions on carrying out the poverty reduction work in Guizhou Province to some extent.

This article considers that the poverty in the rural area serves as a key issue in the process of building a well-off society in an all-round way, while the poverty issue can't be ignored in the urban area, where the income gap has been widening. Hence the poverty incidence, poverty

depth index and poverty severity index under different poverty lines will be measured by virtue of POVCAL in terms of the grouped data of the household income level of the permanent residents in cities and towns in the *Statistical Yearbook of Guizhou* (1998-2016) in this article. In addition, the empirical analysis of poverty situations in cities and towns of Guizhou Province during 1997-2015 will also be carried out in this article.

1. LITERATURE REVIEW

Scholars home and abroad have studied the poverty issue in a time-honored manner. It turns out that it is bound to involve setting the poverty standard when the poverty issue, absolute poverty and relative poverty of both developed countries and developing countries are discussed after glancing over a flood of literature.

The poverty line of \$1.9 for each person every day set by the World Bank on the basis of the purchasing power parity in 2011 serves as a more common standard across the world. For example, Sumner and Edward (2013) evaluated the poverty status of Indonesia by virtue of the proportion of poverty population, poverty severity and the proportion of the cities and the countryside by virtue of the international poverty line. In addition, the common standard can be revamped in order to make it more applicable, for example, Kakwani and Son (2016) put forward a new method to measure and calculate the equivalent poverty line of each country. By virtue of this method, the author measured and calculated the poverty incidence of 22 countries, which were more accurate than that based on the poverty line newly made by the World Bank. Because more and more scholars emphasize there are differences in terms of the nature and characteristic of poverty issue between different countries, the poverty line should be based on practical situations. In order to measure the poverty status in different regions in an accurate manner, Klasen (2016) attempted to figure out a poverty line with higher pertinence. In view of the limitations of the poverty line as \$1 and the unique economic status in Asia, Klasen pointed out making the Multidimensional Poverty Index for Asia was of significance to some extent and the relative poverty should be taken into consideration in the process of assessing the poverty line.

In terms of the poverty issue, there are significant differences between development countries and developing countries even from setting the poverty line. Bearing a large number of absolutely poverty-stricken population, the government of developing countries pays more attention to the problem of food and clothing. As a result, the poverty is set on the basis of the minimum charge of necessities and services that members of society subsist on. For example, Hossein (2016) assessed the poverty line in the urban area of East

Azerbaijan by virtue of the Dynamic Linear Expenditure System method and measured the poverty incidence, poverty depth index, poverty severity index. In addition, Zhang (2014) indicated the residents' income level of developed countries was relatively high and there was no stable functional relation between income and nutrition expenditure. As a result, the government of developed countries should pay much attention to the labor-skill training, employment opportunities and more opportunities of equal development and take the relativity of poverty into more consideration in the process of setting the poverty line.

Hagenaars (1985) analyzed the absoluteness and relativity of poverty in term of the relative poverty, who thought that the economic growth could reduce the absolute poverty, while only when the income inequality was relieved can the relative poverty be reduced. Moreover, in the process of measuring the absolute poverty and the relative poverty, different poverty lines should be adopted. Callan and Nolan (2010) mentioned that the line of absolute poverty should be set in accordance with the minimum level of food or housing conditions, while the line of relative poverty should be set in line with the specific proportion of income distribution or a certain proportion of the mean level. The income proportion method is a method that is commonly used to measure the status of relative poverty in certain territories or countries, which takes the average revenue of members of society or the income of the middle-income group in society calculated according to a certain proportion as the poverty line. Moreover, this method has been widely used, because it can accurately reflect the poverty status with the economic growth. Chen (2013) mentioned that the countries of OCED set the line of relative poverty according to their over national conditions and OCED sets the poverty line as 50% of the average revenue or the middle income of members of society; both Canada and America set 40% of the average revenue or the middle income of members of society as the line of relative poverty. According to the World Bank, the developing countries should take 30% of the average revenue of members of society as the poverty line, which is also the foundation of the poverty line chosen to study the poverty status of cities and towns of Guizhou in this article.

Domestic scholars tend to pay more attention to the poverty status in the rural area based on the above mentioned three aspects. In terms of the study of the urban-rural poverty, Gao (2014) figured out the poverty index of the cities and the countryside of Shanxi Province respectively according to the China's official poverty line, the World Bank's international poverty line, the poverty line of income proportion and the poverty line calculated by the Expansibility Linear Expenditure method and further had an understanding of the poverty status of the

cities and the countryside of Shanxi Province. Luo (2006) measured the poverty line of the cities and the countryside in China by virtue of the ELSE method, which was compared with the China's official poverty line, the World Bank's international poverty line in 1990, the poverty line of income proportion defined by OCED. The poverty issue in the rural area of Guizhou Province has been discussed in a lot of literature, while only very few articles refer to the poverty issue in the urban area.

The poverty is monitored and the poverty line is made separately in the cities and the countryside of China, wherefore the measurement standard of urban-rural poverty is with separability and incommensurability (Wang, 2015) and it is difficult to reveal the authentic differences of poverty status between the cities and the countryside (Wang, 2006). For historical reasons, the poverty status is not obvious in the cities of China compared to the countryside of China (Wang, 2015). Because the economic development level in the urban area is apparently higher than that in the rural area, the poverty problem faced by the cities is no longer the problem of food and clothing, but the education, medical service and development opportunity of poverty stricken people. Although the standard of urban minimum living guarantee is set and revamped by different methods in different regions, the implementation effect of the subsistence security system and the guarantee level of the basic livelihood of people living on minimum subsistence allowances are not totally effective, due to lack of necessary argument and scientific measurement or failing to adjust in time in accordance with the social economic development level and the financial capacity. In conclusion, the poverty line standard of the cities and towns of Guizhou during 1997-2015 was set, various indexes of the poverty status in the cities and towns was measured and the change of poverty status in that province was discussed further according to the results showed by these indexes in this article by using the commonly used experience and methods of the international community that measured the relative poverty status for reference and adopting the income proportion method.

2. DATA SOURCES, STATISTICAL TOOLS AND PRINCIPLES OF STATISTICS

The FGT indices are a family of poverty metrics that were commonly used in the international community and put forward by Foster, Greer and Thorbeeke (1984), which can be used to show the poverty status of a territory or country in terms of the coverage, depth and severity of poverty. The continuous form of FGT indices is as follows:

$$P_{\alpha} = \int_0^z \left[\frac{z-x}{z} \right]^{\alpha} f(x) dx \quad \alpha > 0. \quad (1)$$

In which x denotes the individual income and z denotes the poverty line.

FGT indices consist of H, PG and FGT2. In the $\alpha=0$ version, P_0 (also known as H) denotes the poverty incidence, namely the proportion of poverty population in the total population, which can represent the poverty degree roughly, and the poverty breadth will remain the same as long as the poverty population living below the poverty line and the gross population remain the same, which means the poverty incidence remain the same, so long as the average revenue of poverty-stricken people is below the poverty line, despite the fact that their average revenue has already been increased; in the $\alpha=1$ version, P_1 (also known as PG) denotes the gap between the average revenue of poverty-stricken people and poverty line, also known as the poverty depth index, which is mainly used to measure the poverty degree; in the $\alpha=2$ version, P_2 (also known as FGT2) denotes the poverty severity index, which is commonly used to represent the situation of income distribution among the poverty population through weighting the relative poverty population and to weigh income inequality along with poverty. In addition, when both H and PG remain the same, FGT2 enlarges, which shows that the income gap between the poverty stricken people has been widening and the poverty severity increases. As the important indices to weigh poverty, FGT indices can be figured out by Lorenz curve, when the average revenue of gross population and poverty line remain unchanged. The Lorenz curve was developed by Max O. Lorenz in 1907 for representing inequality of the wealth distribution.

The curvilinear equation of Lorenz curve:

$$L=L(p,\pi). \quad (2)$$

In which, p denotes the cumulative percentage of population in ascending order of income, L denotes the corresponding cumulative percentage of income and π denotes the solve-for parameter vector.

The GQ model and the Beta model are the two models that are more commonly used to simulate the Lorenz curve, whose six parameters can be measured and calculated respectively through the least square method and each estimated parameter can be verified.

The formula of GQ model:

$$L(p)=p-\theta p^{\gamma} (1-p)^{\delta}. \quad (3)$$

The formula of Beta model:

$$L(1-L)=a(p^2-L)+bL(p-1)+c(p-L). \quad (4)$$

In which a, b, c, θ, γ and δ denote the solve-for coefficients.

Developed by Shaohua Chen, Gaurav Datt and Martin Ravallion, POVCAL is a relative simple and reliable tool that is mainly used to assess the poverty status and income distribution of subjects.

There are eight data types can be processed by POVCAL and the grouped data of the household income level of the permanent residents in cities and towns of Guizhou Province used in this article belonged to the

fifth type (the percentage of population with given class interval of income and the average revenue with given class interval of population). As a result, the grouped data can be calculated by POVCAL without being converted to the accumulative proportional data. POVCAL would put the data input into the GQ model and the Beta model respectively. Because the grouped data of each year belonged to different models, the Lorenz curve model shall be the model with better imitative effect, if both the two models were available to figure out the theoretically correct parameters. In addition, Gini coefficient and FGT indices (H, PG and FGT2) can be calculated (Datt, 1998). The data used in this article was mainly derived from the grouped data of the disposable income and the household income of the permanent residents in cities and towns in the *Statistical Yearbook of Guizhou* (1998-2016) and the standard of urban minimum living guarantee published by the Department of Civil Affairs of Guizhou Province.

3. ANALYSIS OF MEASURING RESULT OF POVERTY IN THE CITIES AND TOWNS

After research, Asian Development Bank (ADB) and Development Research Center of the State Council

reckoned that the poverty incidence in the urban area of China had already exceeded 6% and the Chinese government should make more efforts to carry out the anti-poverty work in the urban area on the existing basis (Wang, 2006). By taking the per capita disposable income in 2015 as an example, the income gap between 20% of the highest-income groups and 20% of the lowest-income groups had reached to 5.2 times, which showed that the income gap in the urban area had been widening and the urban poverty issue was worthy of study.

Guizhou introduced corresponding measures and the urban subsistence allowances system in order to guarantee the basic livelihood of low income groups in the cities and towns. The standard of the lowest income security was often viewed as the urban poverty standard (Hong & Liu, 2002). The standard of urban minimum living guarantee in Guizhou Province has increased at a rate of 10% and it has been divided into different levels in different areas. However, the current standard is still relatively low from the view of relative poverty, even if 30% of per capita income of urban residents has been taken as the standard of poverty line in the urban area. The comparison between the per capita disposable income*30% and the standard of urban minimum living guarantee of Guizhou Province is as shown in Table 1.

Table 1
The Comparison Between the Per Capita Disposable Income*30% and the Standard of Urban Minimum Living Guarantee of Guizhou Province (Unit: yuan)

Year	The per capita disposable income*30%	The standard of urban minimum living guarantee	D-value
2000	1,536	443	1,093
2001	1,636	642	994
2003	1,971	1,248	723
2004	2,197	1,452	745
2008	3,528	1,625	1,903
2009	3,859	1,893	1,966
2012	5,610	3,732	1,878
2013	6,200	4,224	1,976
2015	7,374	5,568	1,806

Data sources: Guizhou Statistical Yearbook and the Department of Civil Affairs of Guizhou Province

Most studies adopted 50% or 40% of the median income or the average revenue as the line of relative poverty. In addition, the World Bank suggested the developing country is suitable to take 30% of the per capita income as the urban poverty line. As a result, the poverty standard in the urban area of Guizhou was set by relative proportion method in this article, in which 50%, 40% and 30% of the average revenue of urban residents were taken as the urban poverty line in order to approach the manifestation of relative poverty in the urban area

under different poverty lines.

By inputting the three poverty lines into POVCAL, the Gini coefficient and H, PG and FGT2 under different poverty lines of these years were calculated. By taking the grouped data of the household income level of the permanent residents in cities and towns of Guizhou in 2015 as an example (the poverty line was set as 40% of the average revenue of urban residents), the computational results of POVCAL is as shown in Table 2.

Table 2
Computational Results of POVCAL for the Grouped Data of the Household Income Level of the Permanent Residents in Cities and Towns of Guizhou in 2015

GQ SPECIFICATION IS A VALID LORENZ CURVE, BUT BETA IS NOT.
 BETA FITS THE DATA BETTER.

INPUT POVERTY LINE Z WHICH IS WITHIN THE RANGE: (3987, 58291)
 INPUT DATA ON MEAN (MU) AND POVERTY LINE (Z):
 MU=24579.64 Z=9831.86

THE IMPLIED PARAMETERS OF THE GENERAL QUADRATIC LORENZ CURVE ARE:
 A=1.309312 B=-1.546335 C=1.449870×10⁻¹

Poverty measure	Estimated value	Elasticity with respect to	
		Mean consumption	Gini index
Head-count index (H) (%)	12.2190	-1.97528	2.96292
Poverty gap index (PG) (%)	3.4452	-2.54665	6.31997
Foster-Greer-Thorbecke (FGT2) (%)	1.3354	-3.16001	9.74001
Gini index (%)	30.08934		

THE OVERALL SUM OF SQUARED ERROR OF FITTED LORENZ CURVE IS: SSE--Q=7.848103×10⁻⁷

THE SUM OF SQUARED ERROR OF FITTED LORENZ CURVE UP TO THE HEADCOUNT INDEX OF POVERTY IS: SSEZ-Q=1.395116×10⁻⁷

Data sources: The computational results of POVCAL.

According to the computational results of POVCAL, the GQ model was adopted for it is the only valid model of the two, despite the fact that the Beta model was with better imitative effect, in terms of the grouped data of the per capita disposable income of the urban residents in Guizhou in 2015. In addition, the results showed that the poverty incidence, poverty depth index, poverty severity index was 12.22%, 3.45% and 1.34% respectively and the Gini coefficient was 30.01%, when the poverty line was set as 9831.86 yuan (the average revenue of urban residents*40%).

3.1 Gini Coefficient and Poverty Incidence

The change of the Gini coefficient during 1997-2015 calculated by POVCAL in accordance with the grouped data of urban income in Guizhou Province is as shown in Figure 1. In general, 0.4 is regraded as the security line of the gap of income distribution. During 1997-

2001, the Gini coefficient of the cities and towns of Guizhou remained steady at about 0.25, because the income of urban residents in Guizhou increased in an unobtrusive manner and the income gap was relatively small in that province. In 2002, the Gini coefficient was 0.35 and even reached its peak value of the past 20 years, because the absolute growth value of the per capita income of urban residents after 2001 increased year by year with a relatively stable growth rate and finally the income gap had been widening. During 2002-2004, the Gini coefficient dropped to about 0.3 from 0.35. Until 2015, the Gini coefficient had remained stable at about 0.3. Since 2001, the Chinese government has promoted regional development and carried out a series of regional standards and aid-the-poor plans. In addition, in terms of the changing tendency of the Gini coefficient of cities and towns in Guizhou, it can be perceived that these measures are conducive to relieve income inequality.

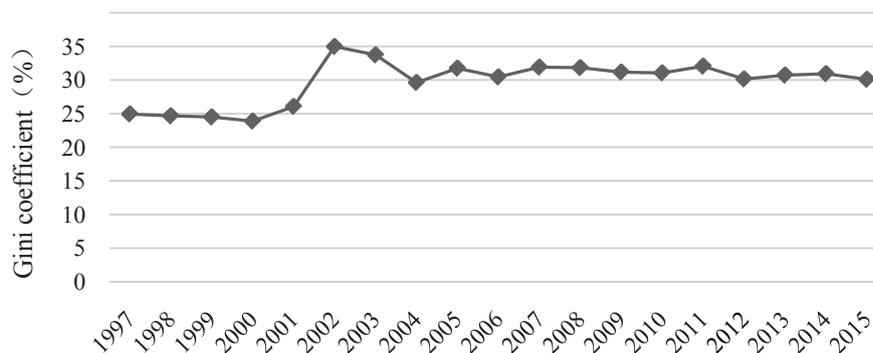


Figure 1
Change of the Gini Coefficient of Urban Residents of Guizhou Province During 1997-2015

Gini coefficient represents the gap of income distribution of local residents; while poverty incidence (H) is usually used to weigh the basic index of the poverty

status of a certain area. According to the computational results, the poverty incidence of the cities and towns of Guizhou Province during 1997-2015 under the three

different poverty lines is as shown in Figure 2, in which A denotes the proportion of population when the per capita income was below 30% of the average revenue, B denotes the proportion of population when the per capita income was between 30%-40% of the average revenue and C denotes the proportion of population when the per capita income was between 40%-50% of the average revenue. According to the computational results and the area in Figure 2, $C > B > A$, it can be seen from this, the higher the poverty line is, the larger the increasing amplitude of the covered proportion of poverty population becomes. For example, if 40% of the average revenue is taken as the poverty standard, the population denoted by C is the people who are close to the poverty status and they, with high proportion in the gross population, poor anti-risk capability and significant vulnerability of poverty, are more likely to live under the poverty line under the exogenic action, such as disease and disaster, or part of them, who have just been separated from poverty, are at risk of re-poverty. In addition, in terms of the change of the three

poverty standards, the change of proportion of the poverty population is of periodical characteristics. Specifically, the gap of the proportion of low income population under different levels denoted by A, B and C between each other was relatively big during 1997-2001, when the overall income level of urban residents of Guizhou Province was not high. Although the proportion of population made a difference, the income inequality caused by the income gap between the low income groups was not serious because of the low level of average revenue and small population base. The amplitude of fluctuation of poverty incidence was relatively large during 2002-2008 showed that the income gap had been widening and the poverty incidence increased. The gap between the poverty incidence under the three poverty lines remained relatively fixed since 2008, which indicated that the low-income groups showed a steadily increasing trend in their population size and income balance under different poverty lines and the income gap at this time was obviously greater than that during 1997-2002.

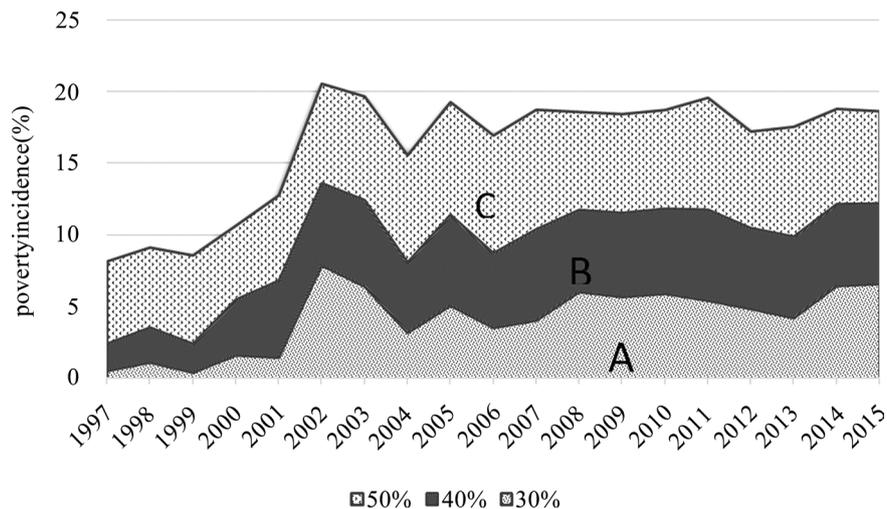
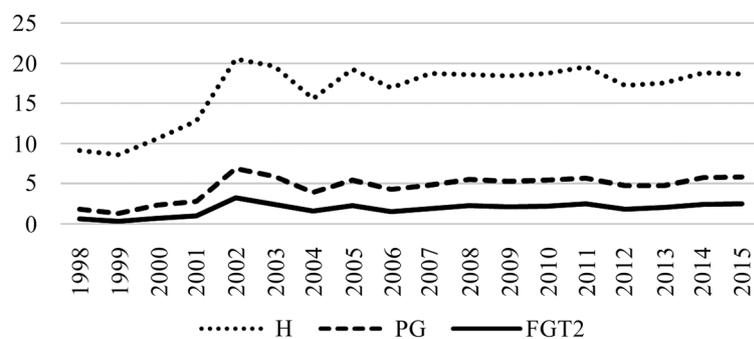


Figure 2
Relative Poverty Incidence of the Cities and Towns of Guizhou Province During 1997-2015 Under Different Poverty Lines (%)

3.2 Measurement of FGT Indices

Through sorting out and summarizing the computational data of POVCAL and making comparison between the computational results (Figure 3) under different poverty

standards, it can be perceived that the lower the poverty standard was, the greater the change of poverty incidence (H) became, and the poverty depth (PG) and poverty severity (FGT2) had increased with the rise of poverty standards during 1997-2015.



(a) FGT indices under 50% of the per capita disposable income of urban residents

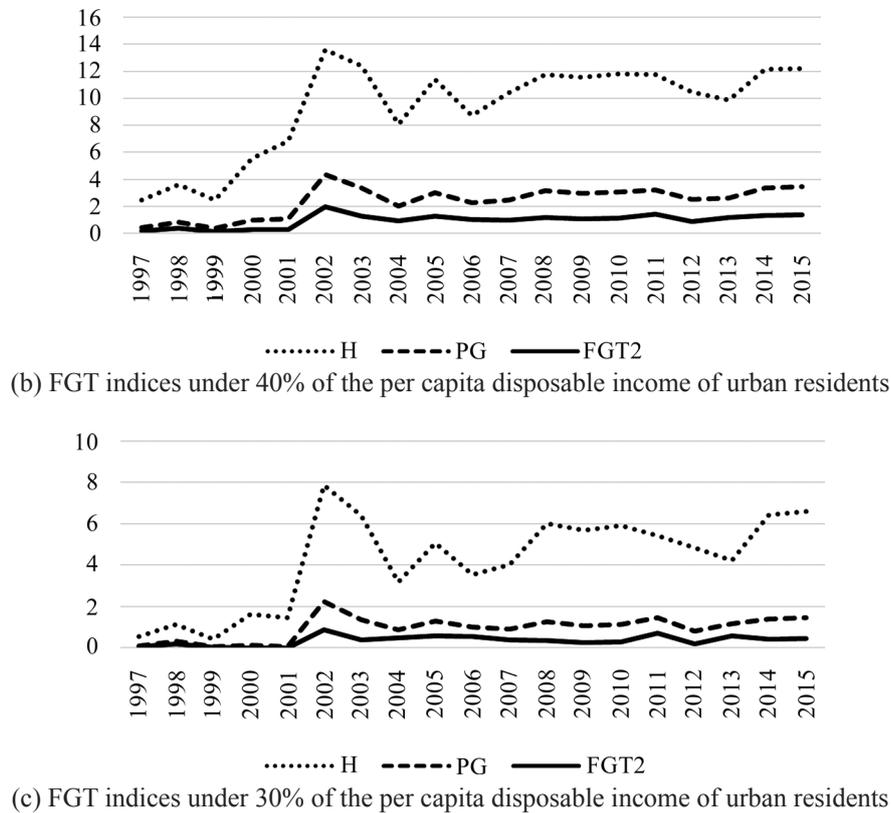


Figure 3
FGT Indices Under 50%, 40% and 30% of the Per Capita Disposable Income of Urban Residents

According to the results, the poverty incidence remained steady at about 6% since 2008, even if the minimum standard of relative poverty was adopted; an increase of 10% in the standard of relative poverty (that was subject to the average revenue of urban residents) could lead to an increase of 6%-7% in the poverty incidence. Although the government has made great efforts to aid the poor and the population of absolute poverty had decreased sharply, the status of relative poverty in the cities and towns of Guizhou Province still remained unchanged after the fluctuation in a period of time.

According to the World Bank, OCED together with the commonly used method of setting relative poverty lines in current studies and the actual poverty situation of the cities and towns of Guizhou Province, 40% or 30% of the average revenue of urban residents had been taken as the standard poverty line, which could represent the poverty status in the urban area in a relative objective manner.

In accordance with the changing tendency of the above mentioned two poverty lines during 1997-2015, the poverty issue of Guizhou Province in the urban area can be divided into three phases:

(a) During 1997-2001, the poverty incidence, poverty depth index, poverty severity index remained small relatively, which indicated that the poverty issue in the urban area during this period was not prominent. Until 2000, disposable income of urban residents of Guizhou

Province had reached to 5,000 yuan and upwards. Although the growth rate of average revenue of urban residents remained steady at about 6% in the past 20 years, the income of urban residents was relatively low because of the relatively small absolute value and the great change of growth rate. The Gini coefficient remained at about 0.25 with small gap of income distribution and relatively low level of poverty depth and poverty severity during 1997-2001, when it was the absolute poverty at a shallow level and the maximum value of poverty incidence in the urban area under the poverty line of 40% or 30% was 6.84% and 1.45% respectively.

(b) During 2001-2008, the FGT indices changed dramatically.

During 2001-2002, the poverty incidence, poverty depth index, poverty severity index increased sharply, Gini coefficient increased to 0.35 from 0.26 suddenly and the poverty incidence in 2012 reached to the maximum value in past twenty years under the above mentioned two poverty lines, which were 13.63% and 7.87%. In the process of carrying out the reform and opening-up policy, the inland region, such as Guizhou Province, followed the pattern of opening to the outside world through introducing foreign capital and export expansion. As a result, the local economy had been developed greatly and the industrial structural transformation had been carried out in the inner city. In this process, due to the transformation of industrial structure and restructuring

of the economic system, lack of market competitiveness in the labor concentrated industry and being flooded with foreign capital, both the state-owned business and the collective enterprise got into trouble, which led to unemployment and laid-off unemployment within a short time (He & Guan, 2002). As a result, the rise of laid-off workers aggravated the poverty in the urban area, which highlighted the poverty alleviation issue in that area. In the wake of the market-oriented economy restructure and the economic growth in a high speed, the social wealth had been accumulated rapidly, together with carrying out the principle of distribution on the basis of labor, the gap of the income level between different labor groups had been widening and the relative poverty issue still existed and even worsened (He, 2002). The expansion of the gap of income distribution aggravated the income inequality between non-poverty population and the poverty population and between the poverty populations, wherefore the poverty depth index and the poverty severity index increased sharply during this period.

During 2002-2008, the poverty incidence decreased sharply at first and then fluctuated considerably, for people's income increased generally due to the economic growth, more and more urban residents had gotten the benefit from restructuring of the economic system and the poverty reduction policy carried out by the government was in the favor of urban poverty-stricken people. Moreover, the poverty incidence in the urban area showed a fluctuant trend because the social security system that matched the reform and opening-up policy still remained immature, the blanking period appeared in the process of the transition from the old system to the new. At the same time, the poverty depth index and the poverty severity index had remained steady relatively since 2002.

(c) The Gini coefficient, poverty incidence, poverty depth index, poverty severity index remained steady during 2008-2015, when the poverty incidence was between 9.9%-12.22% under the poverty line of 40%. In addition, the size of poverty population had been controlled to some extent during this period, because the industrial structural transformation had been carried out in a relatively mature manner in Guizhou Province, the GDP growth rate of Guizhou Province was above 10%, the per capita income had been increasing rapidly, the government had made more efforts to alleviate poverty and the urban subsistence allowances system had relieved the inequality of income distribution in an effective manner. However, the relative poverty issue, poverty degree and income distribution between the poverty populations were not promising, wherefore Guizhou Province is faced with a new-type poverty issue in the urban area.

CONCLUSION

The conclusions are as follows on the empirical study of the changing situation of the poverty status in the

urban area together with the current urban subsistence allowances system of Guizhou Province, based on the Gini coefficient and FGT indices of the urban residents during 1997-2015 measures and calculated by POVCAL in this article.

(a) Although the urban subsistence allowances system of Guizhou Province is set in different levels at different regions after adjustment, the standard is relatively low from the point of relative poverty and the poverty issue in the urban area of that province has been underestimated.

(b) The Gini coefficient of urban residents of Guizhou Province during 1997-2015, which showed that the income distribution gap of the urban residents was within the reasonable range. In addition, the Gini coefficient has gone up and down around the level of 0.3 on a small scale since 2004, so that the income distribution of urban residents should regulated in a continuous manner in the process of carrying out the future policies in order to avoid the expansion of poverty population.

(c) In terms of the results, the lower the poverty line in the urban area, the larger the fluctuation range of poverty incidence becomes; since 1997, the poverty status in the urban area of Guizhou Province has roughly experienced a process of "low-level absolute poverty-the expansion of relative poverty population size-the stable size of relative poverty population." Moreover, the relative poverty issue in the urban area of Guizhou Province will exist for a long time.

(d) In term of the changing tendency of poverty population size in the urban area, the urban subsistence allowances system carried out by Guizhou Province can effectively reduce the absolute poverty of urban residents. However, the serviceability of anti-poverty policy should be taken into consideration and the poverty alleviation measures should be adjusted according to the change of local poverty issue on the basis of setting the poverty standard in a specific manner.

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