

Transformation of Perceived Social Equity Among Chinese Residents: An Empirical Analysis Based on the Age-Period-Cohort Model

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Abstract

This study employs the Age-Period-Cohort (APC) model to explore the mechanisms and trends of perceived social equity among Chinese residents. The analysis draws on data from the China General Social Survey (CGSS) conducted in 2010, 2013, 2015, 2018, and 2021, focusing on issues related to perceived social equity. The study reveals an upward trend in perceived social equity among Chinese residents over the past decade, with economic development serving as a significant driving force. However, examination of the cohort effect indicates two peaks (in the 1940s and mid-1980s) and a trough (in the 1950s-1970s). Furthermore, the urban-rural disparity, influenced by the household registration system, emerged in the mid-1960s and gradually widened. However, in the early 21st century, accelerated urbanization and increased efforts in rural revitalization led to a sudden narrowing of the cohort gap between urban and rural areas. The study also finds that individuals with higher education tend to have a relatively higher sense of social equity. However, since the 1980s cohort, expansion of higher education enrollment has reduced this difference.

Keywords: perceived social equity, age-period-cohort model

1. Introduction

Since the founding of the People's Republic of China, Chinese society has undergone tremendous changes, leading to continuous improvements in the living standards of its people. However, since the country's reform and opening-up in 1978, the issue of social wealth distribution has become increasingly significant. Despite efforts by the government to reduce income disparities through redistribution measures such as the continuous improvement of the tax system and targeted poverty alleviation policies, income inequality, and social inequity have become more serious. According to the latest report from the National Bureau of Statistics, China's Gini coefficient reached 0.474 in 2022, far exceeding the international warning line of 0.4. This highlights the need for continued efforts to address income inequality and promote social equity in China.

Equity serves as an enduring pursuit within the realm of human social development, functioning as a cornerstone for the thriving progress of societies — an ideal consistently championed by the Communist Party of China and the government. The 18th National Congress of the Communist Party of China first included equity and equality in the core socialist values (Hu Jintao, 2012), and the 19th National Congress of the Communist Party of China repeatedly emphasized the importance of equity, stating that “we must continuously promote social equity and justice, form effective social governance, and establish a good social order, so that people can have a stronger sense of fulfillment, happiness, and security, which is more substantial, guaranteed, and sustainable” (Xi Jinping, 2017). General Secretary Xi Jinping has further stressed the need to transcend the efficacy of capitalism, effectively upholding social equity, and attaining a harmonious integration of efficiency and equity. Consequently, addressing income distribution disparities and actively promoting social equity and justice stand forth as pressing priorities. The pursuit of equity not only encompasses rectifying income gaps through distribution and redistribution mechanisms but also encompasses the public's subjective assessment of social

equity. The profound influence of the perception of social equity on social governance and development is indicative of the transformative trajectory encapsulated within the process of societal advancement.

Perceived equity pertains to individuals' perception of fairness within the social environment (Gao Wenjun, 2020), and variations in perceived equity exist among different demographic groups (Kreidl, 2000). Academic research on perceived equity predominantly examines the concept from three perspectives: social structure theory, reference group theory, and cultural values theory (Xu Qi, He Guangye & Hu Jie, 2020). Social structure theory emphasizes the objective impact of societal factors on perceived equity, encompassing considerations such as gender, education, urban-rural divide, socioeconomic status, and other related factors (Xu Yanhui & Kong Yizhou, 2023). Empirical studies have demonstrated that individuals' levels of education, income, occupational status, and social standing significantly influence perceived equity (Xu Qi, He Guangye & Hu Jie, 2020; Li Jun & Wu Xiaogang, 2012; Meng Tianguang, 2012; Ma Lei & Liu Xin, 2010). Reference group theory highlights the role of social comparisons in shaping perceived equity. Individuals gauge their sense of equity based on comparisons with a reference group. If individuals feel they receive greater rewards or equivalent rewards compared to the reference group, they perceive equity. Conversely, if they perceive that they receive fewer rewards, they experience a sense of relative deprivation and perceive inequity. Research conducted by Huang Yongliang (2022) indicates that the perceived equity of China's middle-income group is impacted by relative deprivation. Sun Weiwei et al. (2018) argue that perceived relative resources play a more significant role than absolute resources in determining equity. Cultural values theory posits that there exists a prevailing value system at the societal level that influences perceived equity and is influenced by social systems and cultural traditions across different countries. Furthermore, the prevailing values at the national or societal level shape individuals' awareness and influence their perception of social equity. Additionally, some researchers have started examining the temporal dimension of perceived equity, particularly intergenerational issues. However, studies using different data have arrived at varying conclusions (Ma Baobin & Jia Ru, 2017; Li Jun & Wu Xiaogang, 2012). However, these studies have overlooked the interaction effects of age, period, and cohort, which can influence the observed trends. Thus, it is important to investigate the effects of period and cohort trends to gain a comprehensive understanding of the temporal dimension and analyze the shifting trends of social equity among Chinese residents.

There is usually a close connection between age and beliefs (Kohlberg, 1969), and age effects encompass the changes in physiological, psychological, and social attributes due to biological aging. According to the life course theory, as individuals age, their social roles and status evolve, consequently influencing their beliefs. In this study, the transformations in physiological, psychological, and social attributes influenced by age have an impact on individuals' perception of social equity. Period effects denote shifts in perceived equity under distinct historical contexts, reflecting reactions or influences stemming from external forces such as significant historical events, technological advancements, and socio-economic structural changes. Cohort effects demonstrate the performance of groups born in the same period under the influence of both internal forces (age) and external forces (period). Given the complete collinearity between age, period, and cohort, conventional linear analysis fails to produce a singular solution. Therefore, this study employs Yang Yang et al.'s stratified APC effect model to analyze the trends and influencing factors of social equity among Chinese residents from 2010 to 2021, with a specific emphasis on the cohort trends of residents' perception of social equity. The aim is to explore how the macro-level processes of social development in China over recent decades have contributed to these differences and further investigate the impact of period and cohort trends on social structure.

2. Research Design

2.1 Data Source

This study utilizes data from the China General Social Survey (CGSS) spanning the years 2010 to 2021, featuring pertinent inquiries on "perceived equity." Following the exclusion of missing variables, a total of 49,203 valid samples were acquired, encompassing individuals aged 17 to 118 years and representing birth cohorts from 1900 to 2003.

2.2 Variables

The dependent variable in this study is based on the question regarding residents' perceived social equity in the CGSS questionnaire. Despite variations in survey years, the query on residents' perceived social equity remains consistently framed as, "Overall, do you think today's society is equal or unequal?" The response options range from 1 to 5, corresponding to "completely unequal," "somewhat unequal," "neither equal nor unequal," "somewhat equal," and "completely equal," respectively.

The temporal dimension variables considered in this study comprise age, observation period, and birth cohort. To adhere to the analysis methodology requirements, birth cohorts are categorized. Individuals born before 1922 are consolidated into a single cohort. Following the three-year generational gap principle, birth years after 1992 are

grouped into cohorts based on the nearest three-year span, ultimately resulting in a total of 28 cohorts.

The selection of other independent variables is based on existing research and can be categorized into three groups. The first group comprises demographic variables, including gender and household registration type. The second group pertains to “social structure theory” and comprises variables such as party membership, employment status, education level, the logarithm of personal annual income, subjective social status, property ownership and quantity, and car ownership. The third group relates to “reference group theory” and includes the individual’s comparison with their previous social status. Additionally, given the potential influence of economic development on residents’ perception of social equity in China, this study also incorporates per capita GDP growth as a variable at the period level to explore the issue. Table 1 presents the measurement and descriptive statistics of all relevant variables.

Table 1. Descriptive Statistics of Variables

Variable	Code	Mean	Standard Deviation	Minimum	Maximum
Dependent Variable					
Perceived equity	1-5, higher values indicate greater perception of social equity	3.16	1.04	1	5
First-level Independent Variables					
Age	Respondent’s current age	50.22	16.47	17	118
Gender	Male=1 Female=0	0.48	0.5	0	1
Household registration	Rural=1 Urban=0	0.55	0.5	0	1
Political affiliation	Party member=1 Non-party member=0	0.12	0.32	0	1
Employment status	Employed=1 Unemployed=0	0.59	0.49	0	1
Education level	1-3, representing primary and below middle school, and university level	1.81	0.7	1	3
Personal annual income	Logarithm of personal annual income	3296.58	20011.93	0	999999.6
Subjective social status	1-3, representing low, middle, and high social class	1.76	0.57	1	3
Comparison of status change	1-3, representing status decline, no change, and status improvement	2.41	0.7	1	3
Property					
No Property	No Property =1 Owns Property = 0	0.07	0.25	0	1
One property	Owns one property=1 Others=0	0.78	0.42	0	1
Multiple properties	Owns multiple properties=1 Others=0	0.15	0.36	0	1
Car	Owns a car=1 No car=0	0.78	0.41	0	1
Second-level Independent Variables					
Cohort	One cohort every three years except 1922 and before	-	-	1900	2003
Period	Survey year	-	-	2010	2021
Per capita	Logarithm of per capita	509.39	207.12	301	954.2

GDP increment

GDP increment

Data source: Survey data from CGSS 2010, 2013, 2015, 2018, and 2021.

2.3 Method

The APC model inherently entails collinearity among age, period, and cohort, which has been effectively addressed through the utilization of the Hierarchical APC-Cross-Classified Random Effects Models (HAPC-CCREM) proposed by Yang Yang et al. This approach introduces a two-level framework, with age, period, and cohort allocated to separate levels. In the first level, age is treated as a fixed effect, while in the second level, period and cohort are treated as random effects that influence the individual-level regression coefficients and intercepts. The specific formulation of the model is defined as follows:

First-level equation:

$$Y_{ijk} = \beta_{0jk} + \beta_1 \text{Age} + \beta_2 \text{Age}^2 + \beta_3 \text{Sex} + \beta_4 \text{Hukou} + \beta_5 \text{Party} + \beta_6 \text{Job} + \beta_7 \text{Education} / \text{HEducation} + \beta_8 \text{Income} + \beta_9 \text{Class} + \beta_{10} \text{Change} + \beta_{11} \text{House} + \beta_{12} \text{MHouse} + \beta_{13} \text{Car} + \varepsilon_{ijk}, \varepsilon_{ijk} \sim N(0, \sigma^2) \quad (1)$$

Y_{ijk} represents the perceived social equity of individual i in period k and cohort j . β_{0jk} represents the intercept, which is the mean welfare attitude of all individuals in period k and cohort j . $\beta_1 - \beta_{13}$ represent the regression coefficients. $\varepsilon_{ijk} \sim N(0, \sigma^2)$ denotes the individual-level random error with a mean of 0 and variance of σ^2 .

Second-level equation:

$$\beta_{0jk} = y_0 + y_1 \text{Gdp} + \mu_{0j} + v_{0k}, \mu_{0j} \sim N(0, \mu^T), v_{0k} \sim N(0, v^T) \quad (2)$$

y_0 represents the intercept, y_1 is the fixed effect coefficient of per capita GDP increment at the period level, μ_{0j} is the random effect of cohort j on the intercept β_{0jk} , with a mean of 0 and variance of μ^T , following a normal distribution. v_{0k} is the random effect of period k on the intercept β_{0jk} , with a mean of 0 and variance of v^T , also following a normal distribution.

By substituting the second-level equation into the first-level equation, the complete model is obtained:

$$Y_{ijk} = y_0 + y_1 \text{Gdp} + \mu_{0j} + v_{0k} + \beta_1 \text{Age} + \beta_2 \text{Age}^2 + \beta_3 \text{Sex} + \beta_4 \text{Hukou} + \beta_5 \text{Party} + \beta_6 \text{Job} + \beta_7 \text{Education} / \text{HEducation} + \beta_8 \text{Income} + \beta_9 \text{Class} + \beta_{10} \text{Change} + \beta_{11} \text{House} + \beta_{12} \text{MHouse} + \beta_{13} \text{Car} + \varepsilon_{ijk} \quad (3)$$

$i = 1, 2, \dots, n_{jk}$ represents individuals in j cohorts and k periods; $j = 1, \dots, n_e$ represents cohort groups; $k = 1, \dots, n_p$ represents period groups. In the second-level model, only random effects on the intercept were considered. Since there are other variables in the model, it is possible to further examine the random effects of cohort and period on the slopes of those variables. Considering the potential influence of household registration and higher education on residents' perception of social equity, additional terms were included in the second-level equation.

$$\beta_{4jk} = y_4 + \mu_{4j} + v_{4k} \quad (4)$$

$$\beta_{7jk} = y_7 + \mu_{7j} + v_{7k} \quad (5)$$

Here, y_4 and y_7 represent the fixed coefficients for gender, household registration, and higher education. μ_{4j} and μ_{7j} correspond to the period effects of the variables, while v_{4k} and v_{7k} correspond to the cohort effects of the variables.

3. Research Results

3.1 Basic Trends

Table 2 presents the main estimation results of residents' perception of social equity based on the Hierarchical APC-Cross-Classified Random Effects Models (HAPC-CCREM). Models 1-3 represent the basic trends of the APC model. Model 1 only controls basic demographic variables, Model 2 includes all individual-level control variables, and Model 3 further incorporates per capita GDP increment to explore the effects at the period level.

In Models 1-3, age exhibits a stable trend as a fixed effect at the individual level, showing a "U" shape. This indicates that individuals' perception of social equity initially decreases and then increases with age. Beyond personal income and car ownership, numerous other individual and period characteristics notably impact individuals' perception of social equity. Specifically, individuals with elevated subjective social status increased relative status compared to before, and greater property ownership tend to exhibit a heightened perception of social equity. On a macro level, a higher per capita GDP increment is linked to an enhanced perception of social equity among residents. Furthermore, possessing a rural household registration, being male, being a party member, and being employed yield significant positive effects on social equity perception. Conversely, education level displays a negative correlation with residents' perception of social equity, indicating that residents with higher education levels tend to have a lower perception of social equity.

Table 2. Estimation Results of Residents' Perception of Social Equity based on Hierarchical APC Effects Models

Variable	Model 1		Model 2		Model 3		Model 4	
	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
Individual Level								
Intercept	2.993	<0.001	2.286	<0.001	-0.235	0.864	3.072	<0.001
Age	-0.004	0.187	-0.005	0.114	-0.005	0.11	-0.005	0.145
Age squared	0.0001	<0.001	0.0001	<0.001	0.000117	<0.001	0.0001	<0.001
Gender	0.031	0.001	0.026	0.007	0.026	0.007	0.029	0.002
Household registration	0.129	<0.001	0.13	<0.001	0.13	<0.001	0.125	<0.001
Political identity			0.083	<0.001	0.083	<0.001		
Employment status			0.058	<0.001	0.058	<0.001		
Education level			-0.039	<0.001	-0.039	<0.001		
Higher education								
Logarithm of income			0.001	0.37	0.001	0.373		
Subjective social status			0.235	<0.001	0.235	<0.001		
Comparison of status with before			0.101	<0.001	0.101	<0.001		
Property								
1 property			0.092	<0.001	0.092	<0.001		
Multiple properties			0.099	<0.001	0.099	<0.001		
Car			0.004	0.747	0.004	0.736		
Period Level								
Variables								
Logarithm of per capita GDP increment					0.297	0.049		
Random Effects								
Variance								
Cohort								
Intercept	0.003	0.034	0.004	0.031	0.004	0.031	0.005	0.049
Household registration							0.013	0.002
Gender								
Higher education								
Period								

Intercept	0.03	0.08	0.031	0.08	0.018	0.112	0.032	0.08
Fit BIC	141676.8		140299.8		140298.6		141570.3	

Variable	Model 5		Model 6		Model 7		Model 8	
	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
Individual Level								
Intercept	2.338	<0.001	-0.136	0.924	2.8948	<0.001	-0.3457	0.796
Age	-0.009	0.001	-0.011	<0.001	-0.0021	0.4693	-0.0026	0.3995
Age squared	0.0001	<0.001	0.0002	<0.001	0.0001	<0.001	0.0001	<0.001
Gender	0.029	0.002	0.024	0.013	0.0297	0.0013	0.0238	0.013
Household registration	0.160	<0.001	0.144	<0.001	0.1530	<0.001	0.1570	<0.001
Political identity			0.093	<0.001			0.0682	<0.001
Employment status			0.026	0.028			0.0505	<0.001
Education level			-0.044	<0.001				
Higher education					0.0480	0.0997	-0.0107	0.696
Logarithm of income	0.006	<0.001	0.005	0.001			0.0010	0.502
Subjective social status	0.236	<0.001	0.237	<0.001			0.2324	<0.001
Comparison of status with before	0.100	<0.001	0.099	<0.001			0.1011	<0.001
Property								
1 property	0.093	<0.001	0.090	<0.001			0.0945	<0.001
Multiple properties	0.096	<0.001	0.094	<0.001			0.0977	<0.001
Car	0.012	0.324	0.010	0.415			0.0153	0.214
Period Level								
Variables								
Logarithm of per capita GDP increment			0.309	0.048			0.2886	0.049
Random Effects								
Variance								
Cohort								
Intercept	0.002	0.149	0.002	0.176	0.003	0.036	0.004	0.03
Household registration	0.013	0.002	0.013	0.002				
Gender								
Higher education					0.013	0.020	0.011	0.027

Period								
Intercept	0.032	0.080	0.019	0.112	0.028	0.080	0.017	0.112
Fit BIC	140235.100		140200.700		141626		140300.1	

Combining Table 2 and Figure 1, the period effect shows a marginally significant trend ($p = 0.08$). From Figure 1(a), it can be observed that the perception of social equity has been increasing over the past decade (2010-2021), indicating an improvement in residents' perception of social equity. In Model 3, after controlling for all individual-level variables, period-level variables (logarithm of per capita GDP increment for each year) are included to investigate the influence of economic development on residents' perception of social equity. In this model, the significance of the period effect variance is notably diminished ($p = 0.112$). As depicted in Figure 1(b), the overall trend of the period effect is upward, but the trend line exhibits significant fluctuations, indicating that the growth rate of GDP serves as the primary driver of social equity perception. These findings align with previous results, suggesting that economic growth functions as an exogenous force propelling the improvement of social equity perception.

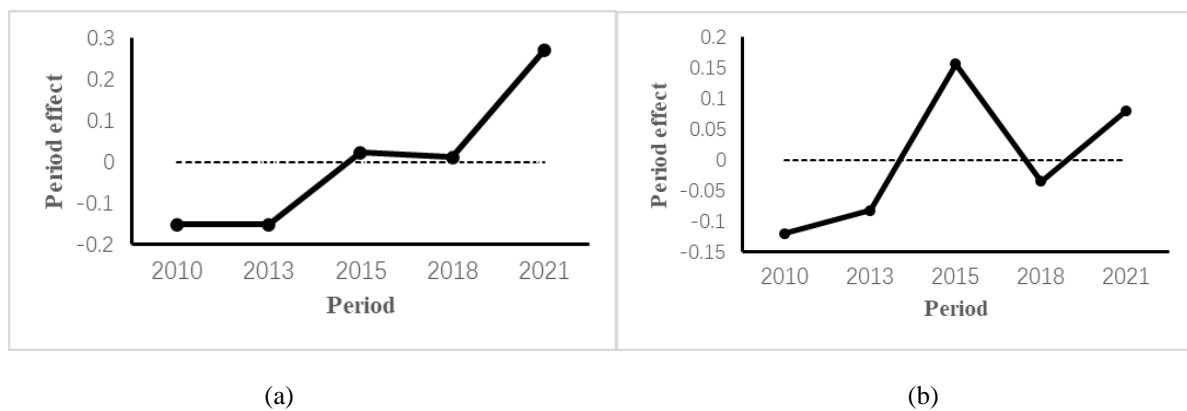
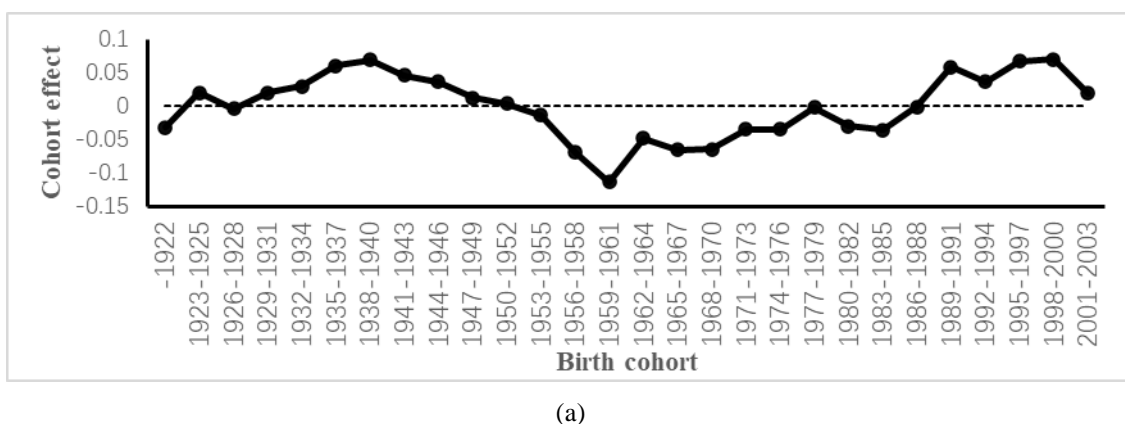
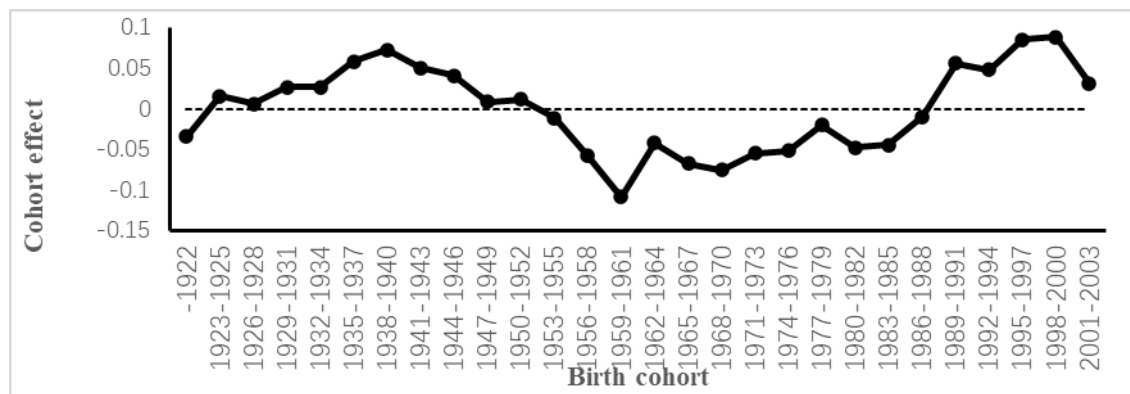


Figure 1. Trends in period effects of APC basic effects

Compared to the trend of the period effect, the cohort effect exhibits a more substantial variation in residents' perception of social equity ($p = 0.034$). Figure 2(a) demonstrates this pattern in Model 1, which solely adjusts for basic demographic variables. Two distinct peaks can be observed, representing the birth cohorts of the 1930s-1940s and the 1990s-2000s. After the cohort of the 1940s, perceived social equity began to decline and reached its lowest point with the 1959-1961 cohort, followed by a gradual increase.





(b)

Figure 2. Trends in cohort effects for APC basic effects

From Model 3, after adding control variables and per capita GDP increment, the cohort effect remains largely unchanged ($p = 0.031$). As shown in Figure 2(b), the shape of the trend line remains similar, still exhibiting two peaks. After the 1940s, the cohort effect gradually declines to a low point and rebounds after the 1959-1961 cohort. However, one of the two peaks shifts from the 1981-1991 cohort to the 1995-1997 cohort, and changes in the cohort effect occur in individual cohorts.

3.2 Cohort Differences Between Urban and Rural Areas

Given the national conditions in China, it becomes imperative to investigate the differentiated patterns between urban and rural areas. This study addresses the incorporation of random effects analysis, focusing on the influence of period and cohort dynamics on household registration variables. The findings highlight that solely the cohort effect of household registration emerges as statistically significant ($p = 0.02$). This finding underscores a significant divergence in perceived social equity between urban and rural residents, predominantly in relation to cohort trends, while no discernible disparity is observed in terms of period trends.

From Figure 3(a), when controlling only for demographic variables, the differences in Perceived social equity between urban and rural residents can be observed across cohorts. There is no difference in perceived social equity between urban and rural residents in the earlier birth cohorts. However, after the 1932-1934 cohort, significant differences in perceived social equity between urban and rural residents start to emerge. The perceived social equity of rural residents gradually increases, while that of urban residents gradually decreases. After the 1971-1973 cohort, the perceived social equity of urban residents surpasses that of rural residents and continues to rise, while the perceived social equity of rural residents significantly declines until the 2001-2003 cohort. The cohort trend of urban residents shows a significant decline, while that of rural residents shows a significant increase, and the cohort effects between the two are equal.

After incorporating individual-level control variables in Model 5, the cohort effects lose significance in the intercept ($p=0.149$), indicating that social-economic status, as proposed by the “social structure theory,” exerts a decisive influence on urban residents’ perceived social equity. However, the differences between urban and rural residents across cohorts remain significant ($p=0.002$). In Model 6, when per capita GDP growth is further included, the significance of cohort intercept effects decreases even more ($p=0.176$), while the significance between urban and rural residents remains unchanged ($p=0.002$). As shown in Figure 3(b), before the 1959-1961 cohort, there was a significant difference in the perceived social equity between urban and rural residents, with rural residents exhibiting a much higher perception. However, after that period, the perceived social equity among urban residents continued to rise, particularly after 1995, experiencing a significant increase followed by a rapid decline. On the other hand, the perceived social equity among rural residents continuously declined until a significant rebound after the 1998-2000 cohort. This is because in 1950, China established the household registration system for urban and rural areas, and the resulting welfare disparities continued to accumulate, leading to an increasing gap in the perceived social equity between urban and rural residents. In the 1998-2003 cohort, the sharp decline in the perceived social equity among urban residents may be attributed to the rising cost of urban living, such as soaring housing and commodity prices, and the widening wealth gap within cities, which led to a decrease in the perceived social equity among urban residents. On the other hand, the increase in the perceived social equity among rural residents can be attributed to the poverty alleviation and rural revitalization policies and measures implemented by the government, which have significantly addressed rural poverty issues and improved the living standards of farmers.

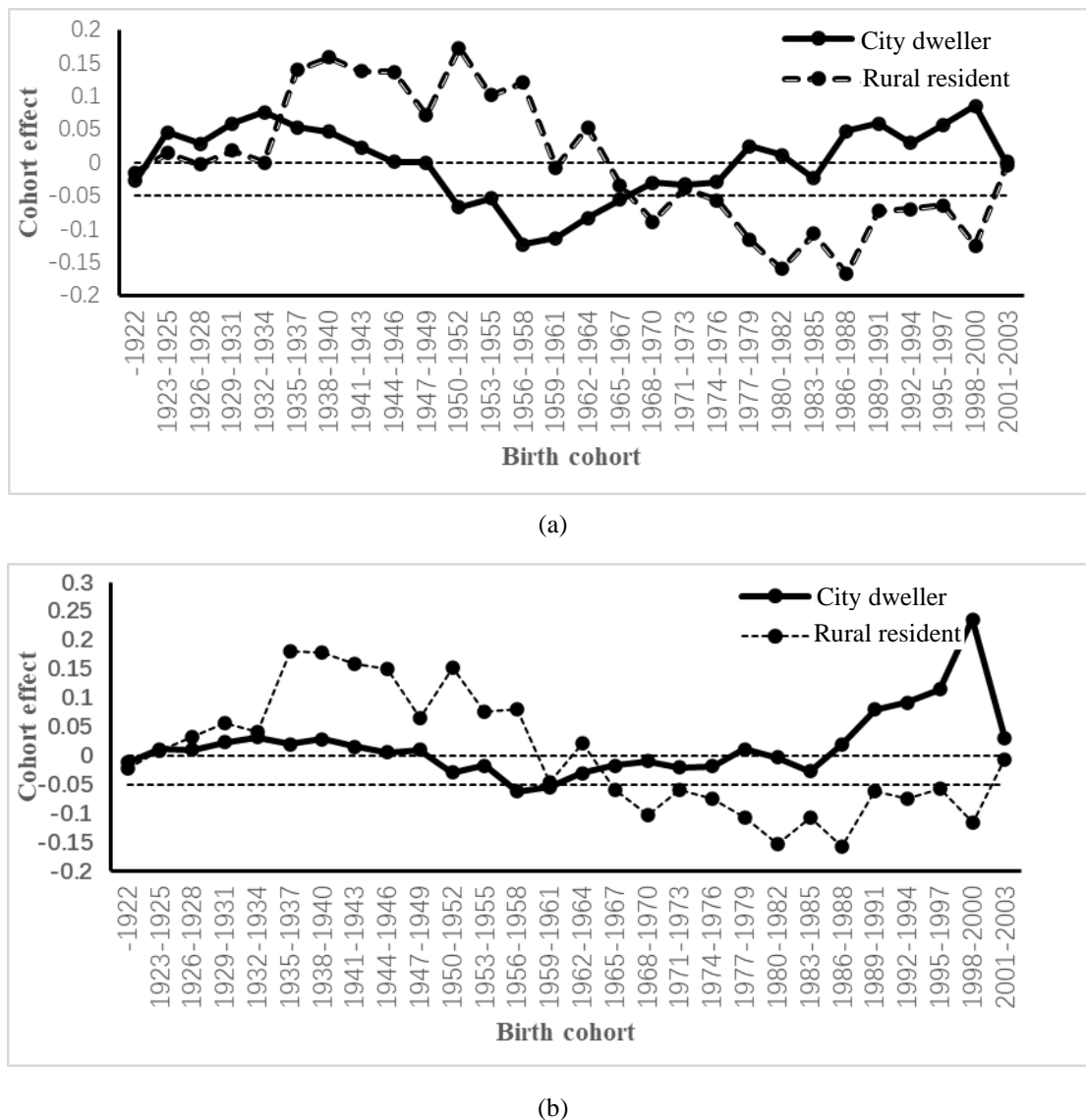


Figure 3. Trends in urban-rural cohort effects in the APC model

3.3 Cohort Differences Among Different Education Groups

The influence of education on residents' perceived social equity is unequivocal, with individuals holding higher levels of education tending to exhibit higher perceived social equity. In Models 7-8 presented in Table 2, the variable indicating whether individuals have received higher education (1=yes) was incorporated, while accounting for the effects of period and cohort as covariates. The findings reveal that the impact of higher education is statistically significant solely in the context of cohort trends.

In model 7, while controlling for basic variables, the intercept effect of the cohort is found to be significant ($p=0.036$), indicating a notable cohort trend among residents without higher education. Furthermore, the cohort effect between education groups is also significant ($p=0.020$). As illustrated in Figure 4, when solely considering demographic variables, individuals with higher education consistently exhibit a higher perceived social equity starting from the 1962-1964 cohort. However, following the 1980-1982 cohort, this disparity gradually diminishes, and the group of individuals without higher education demonstrates an increasing perception of social equity.

In Model 8, the inclusion of the socioeconomic status variable reveals a decrease in the significance of the cohort random effect for the group with higher education ($p=0.027$). This suggests that changes in socioeconomic status play a crucial role in the decline of their perceived social equity starting from the 1980-1982 cohort and subsequent cohorts. This could be attributed to the fact that the "post-80s" generation coincided with the expansion of higher education enrollment, leading to a rapid increase in the number of college graduates. However, they encountered increasing challenges in securing suitable employment, resulting in a relative decline in their income. Consequently, the returns on higher education diminished, contributing to a decline in the

perceived social equity among individuals with higher education.

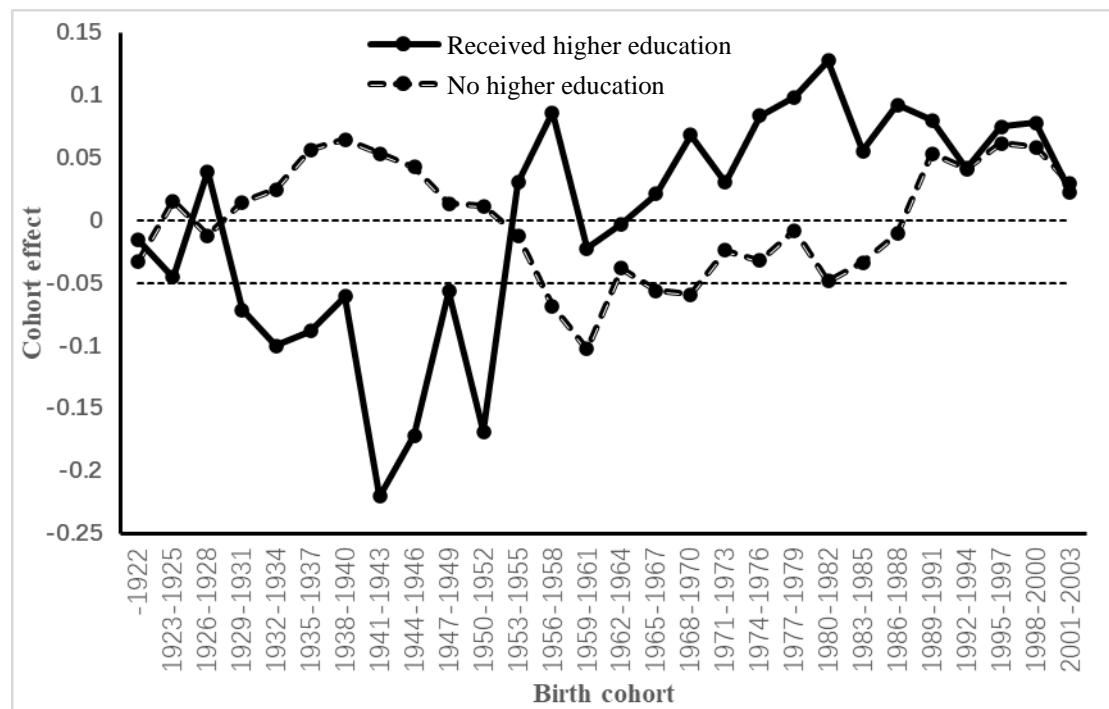


Figure 4. Trends in APC model cohorts with different levels of education

4. Discussion and Conclusion

This study utilized a stratified APC random effects model to explore the age, period, and cohort effects on residents' perceived social equity in China, decomposing the trends of change and discussing the influencing factors and existing stratified differences. Furthermore, the study extended its investigation to discern the trends of social equity among distinct household registration and education groups over a 10-year span.

Previous studies have given relatively little consideration to the cohort trends in perceptions of fairness, whereas this study extensively delved into the cohort trends of residents' perceived social equity in China. Due to the limited observation period for period data, the discussions on changes in residents' perceived social equity and their influencing mechanisms were conducted within a specific time frame. However, from a cohort perspective, we are able to observe trend changes in residents' perceived social equity over a broader period. Furthermore, these trend changes are influenced by the historical context of the respective periods, enabling us to explore how macro-level factors shape individual perceptions of social equity and gain a deeper understanding of the process of social change.

The empirical findings of this study illustrate that cohort trends exert a more substantial influence on perceived social equity when compared to period trends, displaying two notable peaks. The initial peak emerges among individuals born in the 1930s to 1940s cohort, who lived through the formative years of New China and enjoyed a period of prosperity characterized by stable employment and harmonious familial relations. The second peak occurs within the early 1990s cohort, potentially attributable to the subsequent phase of reform and opening-up, particularly following the influential "Southern Tour Speech." This era witnessed remarkable economic growth, fostering a more inclusive and diverse society. Conversely, a trough is observed among the 1950s cohort, where a decreased perception of fairness is evident. This decline may be attributed to the profound impact of historical events such as the Great Leap Forward, the People's Commune Movement, and the Cultural Revolution. Individuals in this particular cohort faced limited educational opportunities due to political circumstances and encountered delays in career advancement and family formation due to policies like "Up to the Mountains and Down to the Countryside." The cohort spanning the mid-1960s to the mid-1980s experienced a trough period, likely influenced by their coming of age during the planned economy era with strong egalitarian values. As the market economy took hold during the reform and opening-up era, this generation had to adapt, resulting in a lower cohort effect on their perceived social equity. Significant disparities in perceived social equity are evident not only across different cohorts but also in terms of urban-rural divides and education levels. Analyzing the cohort effect trend lines between urban and rural residents reveals a persistent divergence, driven by the

influence of the household registration system, until the 2001-2003 cohort. During this period, urban residents faced a sharp decline in social equity due to increased urban life pressures and growing income inequality. Conversely, rural areas have seen notable improvements in infrastructure, housing, and safety and hygiene, contributing to a significant increase in perceived social equity. When examining the trend lines of cohort effects based on education levels, it becomes evident that in the late 1980s, there was a convergence between those with higher education and those without. This was largely due to the rapid expansion of universities, which outpaced the slow growth of labor market demand. As a result, market differentiation was exacerbated, leading to a devaluation of the returns on education. It is important to note that this study has limitations, as it solely focuses on the impact of the APC model from a methodological standpoint and lacks theoretical tools to differentiate the effect of the same historical events on different cohorts. Therefore, certain theoretical assumptions are necessary to obtain more accurate age, period, and cohort ranges to enhance the explanatory power of the model and the credibility of the conclusions.

References

- Gao Wenjun, (2020). Research on the current situation and influencing factors of social justice. *Journal of Guangxi Normal University* (Philosophy and Social Sciences Edition), (05), 28-44. doi:10.16088/j.issn.1001-6597.2020.05.003.
- Hu Jintao, (2012). Unswervingly advance along the road of socialism with Chinese characteristics and strive to build a moderately prosperous society in an all-round way - Report at the 18th National Congress of the Communist Party of China. *Qiushi*, (22), 3-25.
- Huang Yongliang, (2022). The sense of social justice of middle-income groups in the context of common prosperity-based on CSS2021 Empirical analysis of data. *Xuehai*, (06), 150-157. doi:10.16091/j.cnki.cn32-1308/c.2022.06.007.
- Kreidl, Martin, (2000). "Perceptions of Poverty and Wealth in Western and Post-Communist Countries." *Social Justice Research*, 13(2).
- Lawrence, Kohlberg, (1969). "Stage and Sequence: The Cognitive-Developmental Approach to Socialization," in David Goslin(ed.), *Handbook of Socialization Theory and Research*, Chicago, Rand McNally.
- Li Jun & Wu Xiaogang, (2012). Income inequality and fair distribution: an empirical analysis of the fairness concept of Chinese urban residents during the transition period. *Chinese Social Sciences*, (03), 114-128+207.
- Ma Baobin & Jia Ru, (2017). Intergenerational differences and influencing factors in the sense of social justice in contemporary China. *Public Administration Review*, (04), 95-114+194-195.
- Ma Lei & Liu Xin, (2010). Research on the perception of distribution fairness among Chinese urban residents. *Sociological Research*, (05), 31-49+243. doi:10.19934/j.cnki.shxyj.2010.05.002.
- Meng Tianguang, (2012). The Chinese public's sense of distributive fairness during the transition period: fairness of results and fairness of opportunities. *Society*, (06), 108-134. doi:10.15992/j.cnki.31-1123/c.2012.06.005.
- Sun Weiwei & Zhu Xiaoyu, (2018). Status, relative deprivation and attribution: the influence mechanism of years of education on the perception of distributive fairness. *Sociological Review*, (03), 65-75.
- Xi Jinping, (2017). Win a decisive victory in building a moderately prosperous society in all respects and strive for the great victory of socialism with Chinese characteristics in the new era - Report at the 19th National Congress of the Communist Party of China. *Party Building*, (11), 15-34
- Xu Qi, He Guangye & Hu Jie, (2020). Marketization and the changes in Chinese people's sense of social fairness: 2005-2015. *Society*, (03), 88-116. doi:10.15992/j.cnki.31-1123/c. 2020.03.004.
- Xu Qi, Wang Jinshui & Wu Yuxiao, (2022). Theory-driven or method-driven? — The latest progress in age-period-generation analysis. *Sociological Research*, (06), 36-58+227.
- Xu Yanhui & Kong Yizhou, (2023). The changing process of China's sense of social justice during the transition period and its explanatory factors. *Society*, (03), 213-242. doi:10.15992/j.cnki.31-1123/c.2023.03.004.

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