Analysis of Income and Consumption Effects of the Reform of Pension Integration System in Zhejiang Province

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Abstract:

A high-quality social security system is an institutional guarantee for achieving common prosperity. The reform of pensions in government agencies and institutions is an important reform measure to achieve common prosperity in the field of social security. This paper uses the "Decision on the Reform of the Pension Insurance System for Staff in Institutions and Institutions" as a quasi-natural experimental scenario to construct a double difference model to investigate the impact of Zhejiang's pension insurance reform on income redistribution. The research finding shows that the dual-track "combination" reform adopts "incremental reform" and has achieved certain results, but it has not solved the original system dilemma, the gap in pension benefits is not significantly narrowed, and the income redistribution effect is not obvious.

Keywords: Pension integration, Income redistribution, Common prosperity, Quasi-natural experimental.

I. INTRODUCTION

Recently Chinese government has clearly stated that in the process of building a well-off society and establishing a modern socialist country, it is necessary to "put Common prosperity on a more important position.", then "continuously enhance the people's sense of gain, happiness, and security, and promote the overall development of people and the overall progress of society." And social security, as a basic system guarantee that protects people's livelihood, improves people's livelihood, regulates social distribution, and promotes social equity. It is also an important institutional arrangement for solidly promoting common prosperity. A high-quality social security system is conducive to promoting the economy, increasing well-being, and maintaining social justice and harmony. It is the only way which must be passed to guide people toward common prosperity.

At present, the whole country is systematically advancing deep reforms in all aspects with firm determination and unprecedented strength. In this context, reforms in important areas and key links have achieved remarkable results, laying a solid foundation for the solid advancement of common prosperity. On January 14, 2015, the Relevant departments issued the "Decision on the Reform of the Pension Insurance System for Staff in Public Institutions" (hereinafter referred to as the "Decision"), which is an important foundation for the establishment of a high-quality social security system. System reform practice. The "Decision" announced that since October 1, 2014, the pension insurance system for employees of government agencies and institutions will be reformed, and the "dual-track pension system" that has existed for nearly 20 years has been broken. The decision further clarified the reform direction and content of government agencies and institutions, with the aim of narrowing the gap between the basic pension insurance benefits of employees in government agencies, institutions and enterprises, with a view to promoting common prosperity and further safeguarding social equity.

The pension integration in public functionary of my country must move from formal fairness to substantive fairness. The reform of the system is a key step. However, after the implementation of these policies, it is to be verified. That "how effective is the redistribution of pension income and whether it achieves the expected effect , Whether the old-age insurance system after the merger is more in line with the principle of fairness and justice remains". As a demonstration zone for high-quality development and construction of common prosperity, Zhejiang province must actively evaluate the policy effects of this pension reform, explore the factors that hinder common prosperity, and construct a high-quality social security system. Based on the policy background of the 2014 "Decision", this paper uses double difference (DID) to eliminate unobservant factors, correct the sample selection problem, and use net income growth rate and Gini coefficient in urban as indicators to measure regional income gap, which qualitatively evaluate the impact of the "Decision" on the staff of government agencies and institutions. It provides opinions and decision-making references for further deepening the pension insurance reform of government agencies and institutions.

II. LITERATURE REVIEW

Common prosperity is the essential requirement of socialism and the common expectation of the people. Keeping the income gap of residents within a reasonable range is the proper meaning of achieving common prosperity [1]. Therefore, controlling and narrowing the gap in basic pension benefits between groups, improving the overall income redistribution effect of the social security system, and actively promoting the construction of a high-quality social security system, is the key to achieve common prosperity of the whole society [2]. In a sense, the Pension

integration reform is an important reform measure to achieve common prosperity in the field of social security. To a certain extent, it has realized the "combination" of basic pension security systems of government agencies and enterprises [3]. However, judging from the existing literature, the Pension integration reform did not solve the problem of income disparity that existed before the merger. The implementation of some specific policies in the reform may lead to the emergence of new problems, thereby increase the inequality in income and treatment among different groups, and thus trigger the consequences of reverse adjustment of income redistribution. After the integration of pensions in pilot areas in 2008, the income of residents in the reformed areas has increased significantly, and household consumption expenditures have decreased [4]. According to relevant data, pension income continues to increase with the perfecter pension system, but the gap between the two is gradually widening [5]. The mechanism of linking pension index to wage growth and the establishment of occupational annuities in the reform of "Pension Unification", may cause the actual gap between Public-Private Sector further expand [6]. The personnel of government agencies and institutions still obtain a wide range of benefits in the distribution of welfare, relying on their ownership status and political status. It is analysis that the public finances provide more subsidies to urban employees and less subsidies to rural residents in the post-dual-track era, which lacks the principle of fairness to favor the weak. In this case, the public finance fail to redistribute, but further widened the gap between the two [7]. Pension integration reform has brought about the issue of value fairness. After the merger, the pensions of government agencies and institutions are still higher than those of enterprises [8]. At the same time, there are also certain differences in pensions between urban and rural areas. Finally, the supplementary pension insurance based on occupational contributions, and the gap of occupational annuities among different occupations is a bit larger.

2.1 Data sources and research models

This paper takes 11 prefecture-level cities in Zhejiang Province from 2010 to 2019 as the research object, takes the salary remuneration of government agencies and institutions and the salary remuneration of enterprises as the processing group and the control group, and adopts the double difference method to detect.

2.2 Data source and sample selection

The data of income and remuneration of government agencies, state-controlled enterprises, and operating enterprise in 2010-2019 in this article, are mainly from the statistical yearbooks of 11 cities in Zhejiang. Some of the missing supplementary data are from Wind data and the average of each unit using 2010-2019. The growth rate is speculated. In addition, the relevant data on gross national product, Gini coefficient of various regions, and financial expenditures of

various regions, mainly come from Wind database and social statistical yearbooks of prefecture-level cities. The relevant indexes of Zhejiang residents consumption level, total consumption level index and urban residents consumption level index data are obtained from the 2020 Zhejiang Provincial Statistical Yearbook and the questionnaire survey of the human resources and social security departments of prefecture-level cities. This article takes the Gini coefficient and the change in wages of each unit in Zhejiang Province from 2010 to 2019 as the research object. The initial sample is a total of 12 regional cities/annual observations. Based on existing research, the sample is analyzed according to the following standards Screening: (1) Eliminate abnormal samples with actual obtained coefficients less than 0 and greater than 1, (2) Eliminate samples with income less than or equal to 0; (3) Eliminate missing observations of key variables. Finally, the annual observation values of 220 prefecture-level cities are obtained. The initial sample totals 12 prefecture-level cities:

Table I. Descriptive statistics table of sample variables

variable	Variable definitions	Mean	Standard deviation	Min	Max
Y-government affiliated	Labor remuneration of institutions (Unit: Yuan/year)	94060.19	29529.41	47653	184737.7
Y-Institutions	Labor remuneration of government agencies (Unit: Yuan/year)	105484.7	38895.94	53667	256217.2
Y-Statecontrolled	State-controlled enterprise labor compensation (Unit: Yuan/year)	79371.82	17006.16	45475	134495
Y-enterprise	Private enterprise labor compensation (Unit: Yuan/year)	10.116	15847.42	29115	107611
X-GDP	Gross National Product by Region (Unit: 100 million yuan)	3810.442	2840.912	644.32	14348.92

X-expenditure	Financial expenditure by region (Unit: 100 million yuan)	506.8	391.98	-0.905	1.605
X-CZGini	Town Gini Coefficient	0.488	0.037	0.401	0.564
X-NCGini	Rural Gini Coefficient	0.489	0.422	0.402	0.615
X-IofConsumption	Residents' total consumption level	28793.1	7120.73	18274	41121
X-Resident	Residents' consumption level index	1024.79	157.91	781.2	1300.8
X-UbanResident	Urban residents' consumption level index	2460.31	457.02	1755	320
S-Ylnincome	Business logarithmic income	11.41	0.305	10.77	12.13
JGlnincome	Agency logarithmic income	11.51	0.339	10.89	12.45
GKlnincome	National Control Logarithmic Income	11.26	0.21	10.72	11.81
SQlnincome	Private logarithmic income	10.91	0.28	10.28	11.59

Table II. Comparison of labor compensation and Gini coefficient of various regional agencies, institutions and private enterprises

variable	Labor remuneration of institutions (Unit: Yuan/year)		Labor remuneration of government agencies (Unit: Yuan/year)		Private enterprise labor compensation (Unit: Yuan/year)		Town Gini Coefficient	
Year	2013	2014	2013	2014	2013	2014	2013	2014
Hangzhou	6933.417	7520.58	7995.167	8480.75	5000.833	5445.17	0.47	0.527
Ningbo	7438.583	8303.58	8086.167	8948.82	4599.667	5137.08	0.475	0.5
Wenzhou	6686.167	7312.58	6610.5	6906.3	3902.417	4162.42	0.422	0.441
Jiaxing	6076.917	6743.58	7968.75	8428.92	4028	4471.5	0.563	0.511
Huzhou	5887.167	6650.92	6728.833	7072.58	3703.75	4080.5	0.453	0.488
Shaoxing	6715.833	7090.33	7765	8413.75	3755.917	4101.67	0.455	0.482
Jinhua	5667.583	6098.58	5564	6015.5	3986.417	4257.5	0.526	0.535
Quzhou	5296.083	5877.08	5784	6189.83	4135.75	4566.17	0.46	0.493
Zhoushan	5970.917	6317.8	6088.5	6702.42	4837.25	5264.08	0.455	0.495
Taizhou	6355.167	6589.17	6359.333	6564.83	3756.917	3954.25	0.467	0.509
Lishui	5239.333	5683.17	5574.75	5914.5	4650.5	5191.42	0.474	0.496

Note: Table II lists the 2013 and 2014 data for an overview. The reasons are as follows: First, the data sample period involves the income remuneration of each unit from 2010 to 2019, and the sample size is relatively large. Second, although the policy shock is in 2015, the policy base period is October 1, 2014, and in order to reduce the resistance to policy promotion, the compensation income adjustment date has been greatly advanced in all regions of Zhejiang. Therefore, the study sample regards 2014 as the mutation point.

2.3 Research methods and model construction

The benchmark empirical model of this article is set as the method of difference (DID) under the framework of multiple regression. In order to examine the impact of the implementation of the "Decision" on different groups of samples, we regard the samples of public institutions as treatment group 1, the samples of government agencies as treatment group 2, and the samples of private enterprise work as treatment group 2. Because this policy has benefited government agencies and institutions, but has not popularized enterprise units, define the following dummy variables Di1 and Di2:

$$D_{i1} = \begin{cases} 1, Institutions \\ 0, Private\ enterprise \end{cases} \tag{1}$$

$$D_{i2} = \begin{cases} 1, government\ agencies \\ 0, Private\ enterprise \end{cases} \tag{2}$$

When the sample is a public institution group, Di1 takes the value 1, otherwise it is 0; when the sample is a private enterprise group, Di2 takes the value 1, otherwise it is 0. At the same time, the time dummy variable year is constructed, set year=0 and year=1 means the period before and after the implementation of the "Decision". In this article, year=0 means before 2013, and year=1 means after 2014. Therefore, the impact of the implementation of the "Decision" on the income level of government agencies and institutions can be expressed by equations (1) and (2):

$$Ygovernmentaffiliated_{it}$$
$$= \beta_0 + \beta_1 Treat_{14} * Post_{14} + \beta Controls_{it} + \delta_i + \gamma_t + P \times \gamma_t + \varepsilon_{it} \tag{3}$$

$$Y - Institutions_{ct} = \beta_0 + \beta_1 Treat_{14} * Post_{14} + \beta Controls_{ct} + \delta_c + \gamma_t + P \times \gamma_t + \varepsilon_{ct} \tag{4}$$

$$X - CZGini_{bt} = \beta_0 + \beta_1 Treat_{14} * Post_{14} + \beta Controls_{bt} + \delta_b + \gamma_t + P \times \gamma_t + \varepsilon_{bt} \tag{5}$$

$$IofConsumption_{et} = \beta_0 + \beta_1 Treat_{14} * Post_{14} + \beta Controls_{et} + \delta_e + \gamma_t + P \times \gamma_t + \varepsilon_{et} \tag{6}$$

Among them, Y-governmentaffiliatedit, Y-Institutionsct, X-IofConsumption and X-CZGinibt are the indexes of income change of people's life i in year t, the total consumption level of residents and the degree of change of urban residents' Gini coefficien. The coefficient β1, which is the interaction terms of policy variables and time variables, is the focus of this article. It represents the average effect of the merger policy in Zhejiang province. Δicb is the fixed effect of the i-th unit, γt represents the time effect, and P is the regional fixed effect. Controls are control variables that change over time, including regional gross national product (GDP14), regional fiscal expenditure (expenditure14), urban Gini coefficient (CZGini14), total household consumption level (Resident14), and total household consumption level index (IofConsumption14) and the urban residents' consumption level index (Uban Resident14). Due to the large variance of the above data, in order to ensure the feasibility of the regression results, the labor remuneration and the district's total national production have been logarithmically transformed. Before and after the policy, the urban Gini coefficient, the rural Gini coefficient and the standard deviation of logarithmic income, measure the effect of income redistribution among various regions in Zhejiang Province.

III. EMPIRICAL RESULTS AND ANALYSIS

3.1 Basic return

Table III performs regression estimation on the model without adding any covariates. The regression estimation results are shown in Table I. Since the double difference model requires a counterfactual framework, which is the so-called control group variable. This article will take Salaries of personnel and private enterprise personne as control group variables, which is not under the control of the policy. The above table shows that the estimated labor remuneration of public institutions and government agencies after the pension reform for 5 years is 1,655.314 yuan/month and 2,176 yuan/month respectively. It is found that the Gini coefficient of cities and towns in Zhejiang Province has risen by 0.08% in the past five years. The main reason is that in the pension integration reform in government agencies and institutions, the government financed the reform subjects' salary compensation for the reduction in their employment income due to pension contributions, which reduces the resistance to reforms. At the same time, those in the transitional period also received transitional pension compensation correspondingly. As a result, the income increase of employees in government agencies and institutions, was greater than that of employees in private enterprises, leading to a widening of the income gap.

Table III. Changes in income and Gini coefficient before and after the implementation of the reform (yuan/month)

	Year	Non-pilot scope	Pilot scope
Labor remuneration of institutions	2013	3561.441	5672.227
	2014	5516.33	9282.431
Amount of change		2110.786	3766.1
Net impact of reforms		1655.314***	
Labor remuneration of government agencies	2013	268.503	3018.505
	2014	-638.7	4287.97
Amount of change		2750.002	4926.688
Net impact of		2176.69***	

reforms			
Gini Coefficient of Urban Residents	2013	0.518	0.512
	2014	0.471	0.473
Amount of change		-0.006	0.002
Net impact of reforms		0.008*	

Note: The value in brackets is the standard deviation. ***, **, * represent the significance level of 1%, 5% and 10%, respectively. The table below is the same

Table IV shows the OLS regression results of the impact of the "Decision" on the income level of government agencies and institutions. The explained variables are the labor compensation of government agencies and institutions. Each column controls the research object, including regional characteristic variables and time hypothesis. Variables and dummy variables for the interaction of region and time. The explanatory variable in column (1) of Table IV is the labor remuneration of government agencies and institutions. The estimated coefficient of the interaction term Treat14*Post14 measures the true impact of the "Decision" on the wages of these two groups of people. The coefficient values are all significantly positive at the 1% level. The estimated coefficient value of Treat14*Post14 shows that on average. The implementation of the "Decision" has increased the wages of government agencies and institutions by 1655.3 yuan/month and 2176.7 yuan/month respectively. After that, this paper uses the regression of the Gini coefficient after three years of reform in 2014. Although the result is significant, it is found that the Gini coefficient in Zhejiang's cities and towns has risen by 0.08%. The estimated results of all control variables are basically consistent with the actual results: GDP and policy shocks in each region have no significant impact; fiscal expenditures and policy shocks in various regions have no significant impact; the total consumption level of residents is related to the wages of government agencies and institutions. It is concluded that when income increases, the total consumption level of residents rises.

Table IV. OLS regression results of the impact of the implementation of the "Decision" on the income and treatment of government agencies and institutions

variable	Y-governmentaffiliated	Y-Institutions	X-CZGini
	-1	-2	-3
Treat14*Post14	1655.3***	2176.7***	-24.07
	-12.81	-9.56	-0.29

GDP14	0.263	0.52	0.36***
	-13.9	-1.35	-4.61
Expenditure14	-0.343	-1.362	-0.988
	(-0.27)	(-0.58)	(-1.69)
CZGini14	1112.1	2362.3	-1010.9
	-0.78	-0.94	(-1.18)
IofConsumption14	21.96*	47.53*	-0.262
	-2	-2.45	(-0.04)
Resident14	-0.429	-1.319	0.289

Note: The value in brackets is the standard deviation. ***, **, * represent the significance level of 1%, 5% and 10%, respectively. The table below is the same

3.2 Net income research

In order to deeply study whether the pension reform has indeed expanded the internal gap between urban residents and the external gap between urban residents and rural areas, the Zhejiang region is first divided into developed regions, moderately developed regions and underdeveloped regions. The classification is based on the GDP values of 11 cities in Zhejiang Province in 2019 in the Provincial Statistical Yearbook. The classification is as follows: Hangzhou, Ningbo, Wenzhou, and Shaoxing are developed regions; Taizhou, Jiaxing, Jinhua, and Huzhou are moderately developed regions; Quzhou, Lishui, and Zhoushan are underdeveloped regions. Then, the logarithmic changes of income, consumption and Gini coefficient were used for double differential regression. Under the impact of different regional policies, the difference between income and consumption is used to estimate the net income. Finally the internal gap between urban residents (urban residents Gini coefficient) and the external gap between urban residents and rural areas (rural Gini coefficient), is used to judge whether the income gap has changed.

Table V shows the regression results using models (1) and (2). After controlling for other control variables, time dummy variables, and regional dummy variables, the coefficients of the interaction term Treat14*Post14 are all significantly positive. It indicates that since the reform, public institutions in developed regions have increased by 48.6%, government agencies have increased by 69.8%. Public institutions in moderately developed regions has an increase of 50%, and 71.2% in government agencies. Although there has an increase in underdeveloped regions, the rate is relatively small compared to other regions, at 37.9% and 46.3% respectively. There are

three specific conclusions as follows: First, after the pension reform, the salaries of government agencies and public institutions have indeed risen. The "Notice of the Three Implementation Plans for Fees" is related to the document. Second, for public institutions in developed and medium-developed regions, wages have risen within one to three years under the policy impact, but public institutions in underdeveloped regions have experienced wage cuts. Because after the reform, the personnel of government agencies and institutions will need to pay 8% of the endowment insurance for personal accounts, so the benefits will be reduced. In order to reduce the resistance to reforms, less developed regions provide less subsidies to personnel within the scope of reforms. Third, since there is no policy impact between state-controlled units and private units, market regulation is the main focus, and wages have increased. However, since 2014, the coefficients are all positive, which may also cause the gap between the rich and the poor to widen.

Table V. The impact of the percentage of labor service remuneration of government agencies and institutions in different regions after the policy shock

variable	Institutions	Agency	Institutions	Agency	Institutions	Agency
	(-1)	(-2)	(-3)	(-4)	(-5)	(-6)
	Developed		Medium		Under developed	
Treat14*Post14	0.483***	0.698***	0.500***	0.712***	0.379***	0.463***
	-25.22	-16.43	-20.06	-11.25	-11.92	-10.51
Other control variables	control	control	control	control	control	control
intercept	10.96***	10.21***	9.972***	10.95***	10.93***	10.21***
Annual fixed effect	control	control	control	control	control	control
Regional fixed effect	control	control	control	control	control	control
R2	0.495	0.513	0.457	0.436	0.371	0.416

Note: The value in brackets is the standard deviation. ***, **, * represent the significance level of 1%, 5% and 10%, respectively. The table below is the same

In this part, first change the explanatory variable average consumption of residents by logarithm. When the average consumption level of residents is greater than the sample average, IofConsumption14 is set to 1, otherwise it is set to 0. The reasons are as follows: First, due to the diversity of working places, Therefore, the average consumption of residents was selected as the

object of investigation, so the consumption expenditure of residents was selected as the reference object. Second, with the salary compensation, the treatment of employees in government agencies and institutions will increase, and consumption expenditure will also increase, but because the policy has been implemented for 6 years, Wage subsidies are closely related to local finances, and there will be differences between regions. In some regions, income subsidies will decrease due to insufficient financial support, which will lead to a decline in consumer spending. On the contrary, consumer spending will rise. By judging the comparison between individual samples and the average size, to determine whether it is due to the impact of consumer spending caused by the increase in benefits after the policy shock. Finally, we use the explained variable to multiply the average consumption of residents (IofConsumption14) and Treat*Post to investigate whether the increase in average consumption of urban residents is significant when the policy is reformed. The above table regresses the classified areas. The results show that after the policy impact of developed regions, the average consumption of personnel in public institutions increased by 7.13%, and the average consumption of government agencies and institutions increased by 8.05%. In the medium-developed regions, the average consumption of personnel in public institutions rose by 6.1%, and the average consumption of government agencies and institutions rose by 6.88%. In the underdeveloped areas, the average consumption of personnel in public institutions rose by 5.8%, and the average consumption of government agencies and institutions rose by 6.64%. In summary, it can be concluded that the increase in overall income of government agencies and institutions in this reform has a stimulus effect on local consumption, especially in developed areas.

Table VI. The impact of the percentage of the consumption level of government agencies and institutions in different regions after the policy shock

variable	Institutions	Agency	Institutions	Agency	Institutions	Agency
	(1)	(2)	(3)	(4)	(5)	(6)
	Developed		Medium		Under developed	
Treat14*Post* IofConsumption14	0.0713***	0.0805***	0.0610***	0.0688***	0.0580***	0.0664***
	(15.50)	(13.68)	(13.13)	(11.57)	(11.92)	(10.51)
Treat14*Post14	0.201***		0.213***		0.194***	
	(5.21)		(5.13)		(4.52)	
IofConsumption14	0.423***	0.353***	0.524***	0.433***	0.597***	0.517***
	(16.75)	(13.29)	(21.34)	(15.36)	(20.15)	(16.91)
Other control variables	control	control	control	control	control	control

intercept	10.96***	10.21***	10.95***	10.93***	10.93***	10.21***
Annual fixed effect	control	control	control	control	control	control
Regional fixed effect	control	control	control	control	control	control
R2	0.495	0.513	0.457	0.436	0.371	0.416

Note: The value in brackets is the standard deviation. ***, **, * represent the significance level of 1%, 5% and 10%, respectively. The table below is the same

Table VII shows the difference between the estimated values in Table V and Table VI, and the net income increase rate is derived. The net income growth rate of all government agencies exceeded 60%, and public institutions were all above 40%. Although the net income growth rate of underdeveloped regions was lower than that of other regions, the overall increase was more than 30%. To sum up, after the merger reform, the net income growth rate of government agencies has a greater relationship with the division of regions, and the income growth rate of public institutions has less fluctuations and less correlation.

Table VII. Changes in net income of people in the scope of reform

variable	Institutions	Agency	Institutions	Agency	Institutions	Agency
	(1)	(2)	(3)	(4)	(5)	(6)
	Developed		Medium		Under developed	
Net income growth rate	41.17%	61.8%	43.9%	64.3%	32.1%	39.7%

Based on the above conclusions, in the case of different policy effects after the reform of various cities in Zhejiang Province, this paper evaluates the policy through the Gini coefficient. This part uses the horizontal comparison between regions as a reference basis. The comparison group of the model is the rural Gini coefficient. The reasons are as follows: First, the rural area is not a reformed area. Second, the revitalization of rural areas has been a key issue in my country in recent year. Third, the variance of the rural Gini coefficient has been relatively stable. Based on the above summary, in this paper, when the coefficient of urban residents is greater than the average value of the sample, CZGini is set to 1, otherwise it is set to 0. Table VIII reports the regression results of Treat14*Post*CZGini. After the reform in developed and moderately developed regions, the contribution rate to the urban Gini coefficient is relatively large, with public institutions being 1.482% and 1.223%, and government agencies being 1.677% and 1.377%

respectively. For underdeveloped regions, the impact is small, and both are at 1. Significant at the% level. The result obtained in column (2) is the same as expected. This result shows that after the implementation of the policy, as the net income increase rate of public institutions and government agencies is different, it will have an impact on the expansion of the income gap between urban residents. This also provides an empirical basis for increasing labor benefits for public institutions and government agencies in the future.

Table VIII. The impact of rising income after the policy shock on the Gini coefficient in different regions

variable	Instituti ons	Agency	Instituti ons	Agency	Instituti ons	Agency
	(1)	(2)	(3)	(4)	(5)	(6)
	Developed		Medium		Under developed	
Treat14*Post*CZGi ni	1.482***	1.677***	1.223***	1.377***	1.181***	1.345***
	(14.11)	(13.04)	(12.87)	(11.11)	(11.77)	(10.18)
Treat14*Post14	0.739***	0.834***	0.632***	0.712***	0.601***	0.687***
	(14.89)	(13.22)	(12.64)	(11.25)	(11.43)	(10.12)
CZGini	0.131*	-0.106*	0.041***	0.035***	0.039***	0.0303*
	(2.52)	(-2.34)	(4.59)	(4.47)	(3.76)	(3.05)
Other control variables	control	control	control	control	control	control
intercept	0.328***	0.362***	10.95***	10.93***	10.93***	10.92***
Annual fixed effect	control	control	control	control	control	control
Regional fixed effect	control	control	control	control	control	control
R2	0.422	0.351	0.457	0.436	0.62	0.55

Note: The value in brackets is the standard deviation. ***, **, * represent the significance level of 1%, 5% and 10%, respectively. The table below is the same

3.3 Robustness test

In order to further confirm the reliability of the estimated value of the model, we chose the parallel trend test. The hypothesis is as follows: When pension reform does not happen, whether the time trends of the treatment group and the control group are consistent, if they are consistent, the model is reliable and vice versa. The setting model is as follows:

$$\mathbf{Ygovernmentaffiliated i}_{st} = \boldsymbol{\alpha}_1 + \boldsymbol{\alpha}_2 \times \boldsymbol{D}_{st-8} + \boldsymbol{\alpha}_3 \times \boldsymbol{D}_{st-7} \ldots + \boldsymbol{\alpha}_{10} \times \boldsymbol{D}_{st-2} + \boldsymbol{\delta} \times \mathbf{X}_{ist} + \boldsymbol{\eta}_i + \boldsymbol{\varphi}_s + \boldsymbol{\lambda}_t + \boldsymbol{\varepsilon}_{ist} \tag{5}$$

$$\mathbf{Y - Institutions}_{ct} = \boldsymbol{\alpha}_1 + \boldsymbol{\alpha}_2 \times \boldsymbol{D}_{st-8} + \boldsymbol{\alpha}_3 \times \boldsymbol{D}_{st-7} \ldots + \boldsymbol{\alpha}_{10} \times \boldsymbol{D}_{st-2} + \boldsymbol{\delta} \times \mathbf{X}_{ist} + \boldsymbol{\eta}_c + \boldsymbol{\varphi}_s + \boldsymbol{\lambda}_t + \boldsymbol{\varepsilon}_{ist} \tag{6}$$

$$\mathbf{Y - Statecontrolled}_{bt} = \boldsymbol{\alpha}_1 + \boldsymbol{\alpha}_2 \times \boldsymbol{D}_{st-8} + \boldsymbol{\alpha}_3 \times \boldsymbol{D}_{st-7} \ldots + \boldsymbol{\alpha}_{10} \times \boldsymbol{D}_{st-2} + \boldsymbol{\delta} \times \mathbf{X}_{ist} + \boldsymbol{\eta}_b + \boldsymbol{\varphi}_s + \boldsymbol{\lambda}_t + \boldsymbol{\varepsilon}_{ist} \tag{7}$$

Among them, Ygovernmentaffiliatedist refers to the treatment of government personnel, and Y-Institutionsct refers to the treatment of public institution personnel.Y-Statecontrolled is the treatment of enterprise personnel, and D±jst exists as a control variable in the formula. Before and after the policy shock, the positive and negative coefficients of J before and after the policy shock are expressed respectively, the negative sign is before the policy shock, and the positive sign is after the policy shock. The value is 1; otherwise, the value of D±jst is 0. This model takes the year of the merger as the reference group, that is, D±jst=D. After regression, compare the coefficients of D±jst in different periods. If, in the J year before and after the merger, the Gini coefficients of the policy shock group and the reference group appear the difference. It means that the regression result is significant. Fig 1 shows the trend of D±jst. The horizontal axis represents the years before and after the pilot, and the vertical axis is the size of the estimated value.

It can be seen that when j = -1, 0, the coefficient of D shows an upward trend, that is to say, before the trial of pension union, the labor compensation trends of the treatment group and the control group both show a decline, and there is a significant difference. Therefore, this article adds a flat trend test chart for state-controlled enterprises and private enterprises. It is found that before 2014, regardless of any unit's labor compensation, there was a downward trend, but after the reform, the trend of state-controlled enterprises and agencies and institutions has changed in the opposite direction. Because state-controlled enterprises are not within the scope of this reform. Therefore, it shows that the reform has a policy effect on the salary adjustment of the personnel of government agencies and institutions, and it has become a positive adjustment. Therefore, the possibility that the hypothesis of parallel trends holds cannot be rejected. In the six years after the merger, the coefficient of influence of D+jst on the Gini coefficient has been increasing significantly since the first year, which means that the implementation of pension merger in Zhejiang has a reverse regulatory effect on municipal agencies and institutions, which still continues to this day. This point has been verified from the

above figure in 2015-2019. The estimated value of the 2015-2019 Gini co-efficient will increase.

In order to ensure that the treatment effect of the model is more reliable, this article considers a placebo experiment. The details are as follows: because the personnel of state-controlled enterprises are not within the scope of the "Decision", they will be used as a placebo, and then a pseudo time point will be set before the implementation year. The personnel of the state-controlled unit shall take the place of processing. If no significant change in income treatment is observed, it proves that the regression results are robust.
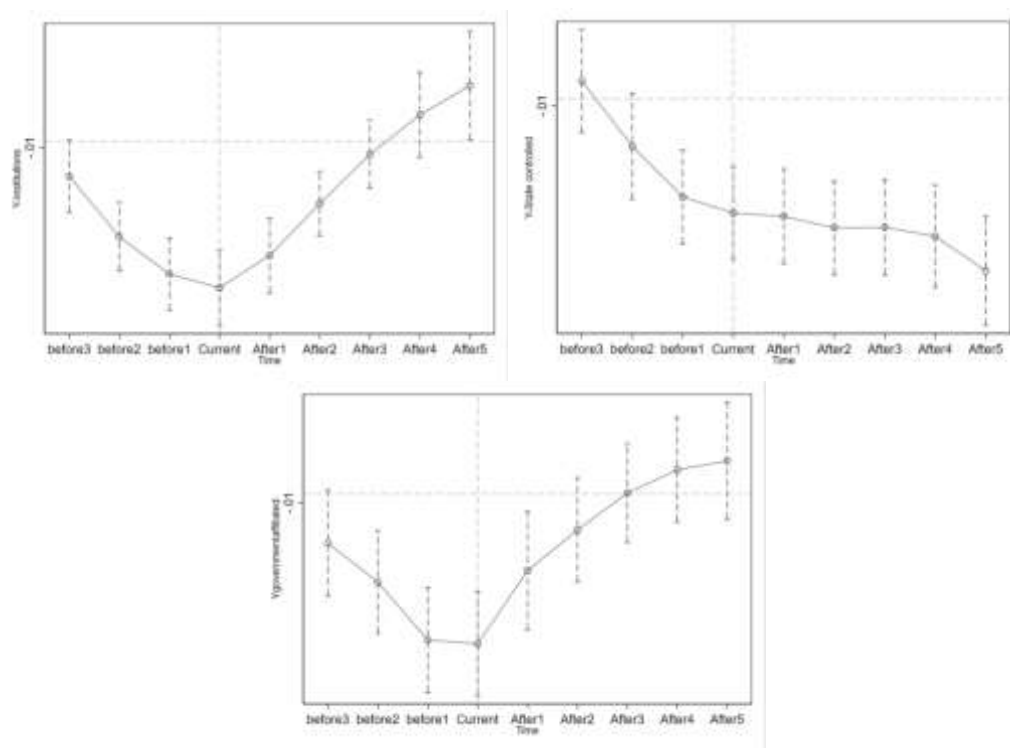
Fig 1: parallel trend test graph

IV. CONCLUSIONS AND COUNTERMEASURES

This article uses the quasi-natural experimental scenario implemented in the "Decision on the Reform of the Pension Insurance System for Staff in Government Institutions and Institutions" to investigate the reforms influence on labor treatment of state functionary in government agencies and institutions. The empirical results show that the "Decision" does provide salary compensation to the in-service personnel of the reform targets, and generally improves the labor treatment of the personnel of government agencies and institutions. Further analysis found that, first, in the process of establishing a real "de-identification" between

government institutions and corporate pension systems, the dual-track reform adopted "incremental reform", which did not solve the dilemma of the original system. Second, due to the difference in the degree of regional development, the proportion of internal wage compensation in government agencies and institutions is different. Third, after the reform, the net income rate of government agencies and institutions has risen sharply, but the rate of increase in consumption is close to the rate of increase in corporate personnel, so government agencies and institutions are more inclined to save. Finally, it is concluded that the policy was implemented in the early stage of the concept of narrowing the income gap, and the implementation is more successful in the underdeveloped regions. For developed and moderately developed regions, it is the result of inverse regulation. Specifically, this article puts forward the following targeted suggestions:

First, improve social security legislation and build a high-quality social security system. Pension insurance is related to the national economy and people's livelihood. It is an important event for my country to comprehensively promote the construction of a well-off society, and it is also an important institutional arrangement for solidly promoting common prosperity. Only by actively promoting the improvement of the social security legal system, introducing corresponding supporting measures in line with the law as soon as possible, and making timely adjustments in light of current social development trends, the basic social contradictions, which is unbalanced and inadequate in the development of the new normal economy, can be resolved to continuously enhance the people's sense of gain, happiness, and security. The "system" and "law" of social security require continuous exploration of new systems under multi-level and broad logical concepts to promote the overall development of people and the overall progress of society, so that the broad masses of the people can share the fruits of reform and development, and ultimately lead to common prosperity.

Second, reasonably define the insured population to ensure full coverage of endowment insurance. Achieving full pension insurance coverage and ensuring that everyone enjoys basic pension insurance fairly, is an important prerequisite for achieving common prosperity. The introduction of old-age insurance information highlights the accuracy, standardization and sharing, and gradually realizes the expansion of old-age insurance from partial to full coverage. Clearly define the scope of employee insurance through artificial intelligence, gradually solve the long-standing phenomenon of debit, over-arrangement, mixed arrangement, mobile allocation, and reserve allocation in government agencies and institutions, reset the scope of employees under unbalanced categories, and improve the matching system of pension insurance. It is recommended to include employees outside the establishment of government agencies and institutions, put into the scope of enterprise employee endowment insurance, so as not to increase the burden of endowment insurance expenditures of institutions

and institutions, but also to ensure that everyone enjoys basic endowment insurance, and the elderly have a sense of security keep.

Third, deepen the reform of pension insurance and accelerate the pace of common prosperity. Break the identity attribute, deepen the reform of pension insurance, eliminate the basic social contradictions of unbalanced and inadequate development, reduce the pension benefit gap between different regions and groups, promote the rational flow of talents among government agencies, institutions and enterprises, and effectively promote the process of common prosperity and social fairness. In view of the rigid characteristics of social welfare, it is not appropriate to reduce the level of pension benefits of government agencies and institutions too much. Instead, the level of urban and rural basic pensions, especially the basic pensions of farmers, should be appropriately improved through transfer payments. In the process of reform, relatively scientific and reasonable policies and measures of "old people, new people and new policies, and middle people's gradual transition" have been formulated. It is not appropriate to over-extend the pension benefits of the three groups and cause "internal unfairness" among the personnel of government agencies and institutions.

Fourth, promote the occupational annuity system and develop commercial endowment insurance. Promote government agencies and institutions to implement the occupational annuity system, and enterprises to implement the enterprise annuity system. Career differences should be appropriately reflected, but not against the basic principles of common prosperity. The gap between the two should not be too large to avoid "internal unfairness" between the personnel of government agencies and institutions, and the "external unfairness" between personnel of government agencies and institutions and enterprises and other groups. Expand the supply of commercial endowment insurance products, give full play to the role of commercial endowment insurance in improving the endowment security system, improve the multi-level endowment security system, and promote the construction of a high-quality social security system.

Fifth, appropriately delay the retirement age and implement a flexible retirement system. As China gradually enters a society with an aging population, it is imperative to follow the example of some Western developed countries in implementing a flexible retirement system. Properly extend the retirement age and pension payment period and other methods, adjust the ratio of the working population to the dependent population, and avoid serious imbalances in the proportion of social security expenditures, especially for civil servants and employees of government agencies and institutions who basically rely on state financial expenditures. Tentatively implement personal pension plans, freely choose the retirement age and the time limit for receiving pensions, and give corresponding incentives to those who

receive pensions later than the legal age, so as to minimize the burden on the state.

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