

A Study on the Impact of the Scale and Structure of China's fiscal expenditure on people's Livelihood



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ABSTRACT: As a public finance model with Chinese characteristics, people's livelihood finance is rooted in China's current national conditions and development stage. This concept marks a major shift in China's development strategy, from a single focus on economic construction in the past to a comprehensive development model that attaches equal importance to economic growth and people's well-being. This change not only reflects the country's great attention to people's livelihood issues, but also indicates that China's economy and society are moving towards a new stage that pays more attention to people's livelihood.

However, translating ideas into concrete policies and practices does not happen overnight, and requires time to settle and continuous exploration. Therefore, the key to the construction of people's livelihood finance is to reasonably determine and optimize the scale and structure of financial expenditure in the field of people's livelihood. This paper aims to deeply analyze the current situation of China's fiscal expenditure investment in the field of people's livelihood, explore its development trend through empirical analysis, and reveal the existing problems. Specifically, this paper first makes a quantitative analysis of the scale of China's fiscal livelihood expenditure to reveal its changing trend over time. Then, we will further explore the changes in the expenditure structure, including the proportion and distribution of investment in key livelihood areas such as education, health care and social security. On this basis, this paper will reveal the existing problems of the current financial expenditure on people's livelihood.

In order to deeply analyze the reasons behind these problems, this paper will further explore the main factors that lead to the scale and structure of fiscal expenditure on people's livelihood. These factors may include unclear policy guidance, imperfect fiscal system, and imperfect supervision mechanism. Through the in-depth analysis of these reasons, this paper aims to provide targeted optimization suggestions for the construction of livelihood finance.

KEYWORDS: people's livelihood; fiscal expenditure; scale; structure; optimization; countermeasures

1.1 RESEARCH BACKGROUND

People's livelihood finance is a distinct financial model that has been proposed during China's ongoing development process, showcasing unique Chinese characteristics. It is a unique financial system arrangement created to address the growing issues related to people's well-being and to achieve equitable distribution of the benefits of reform and growth. The core objective of this initiative is to revamp the financial system in order to guarantee the well-being of individuals within the context of public financing. The 2007 report to the 17th National Congress of the Communist Party of China reiterated the significance of livelihood matters. It emphasised the need to fully implement the scientific approach to development and expedite social development efforts, with a particular focus on enhancing people's quality of life. This includes prioritising improvements in education, employment, housing, social security, and healthcare. This indicates that China's policy orientation has progressively transitioned from focusing on economic development to prioritising the improvement of people's well-being. Furthermore, it establishes the precise objectives for the country's future development. Nevertheless, both in theoretical discourse and in the practical implementation of government at all levels, the policy focus on guaranteeing and enhancing the well-being of individuals has undergone significant transformations

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compared to the preceding era when economic development took precedence. Numerous challenges exist across various domains, and the establishment of livelihood finance is still in its nascent phase. Hence, it is imperative to carry out a thorough and methodical examination and investigation of the financial aspects related to the well-being of the population. This will enable us to offer guidance and establish the course for China's future growth by integrating both theoretical and practical considerations.

1.2 Research method

In the in-depth study of the development characteristics of the scale and structure of the people's livelihood expenditure in our country, this paper comprehensively uses statistical methods and measurement methods. First of all, we mainly use statistical methods to sort out and analyze the historical data corresponding to the scale and structure of fiscal expenditure on people's livelihood. Through detailed statistics and induction, we choose charts and other direct forms to clearly show the development trend and significant characteristics of the scale and structure of people's livelihood expenditure in our country.

In order to further analyze the optimal scale of financial expenditure on people's livelihood, the econometric analysis method is further adopted. Specifically, we take AK equation as the basic model, and use EViews software, a powerful statistical and data analysis tool, to carry out systematic econometric analysis of relevant panel data. In this process, we carry out the data stationarity test and cointegration test and other key steps to ensure the accuracy and reliability of the analysis results. This research process of comprehensive application of statistical methods and measurement methods not only provides a comprehensive understanding of the scale and structure of China's fiscal expenditure on people's livelihood, but also provides a scientific basis for optimizing the scale of fiscal expenditure on people's livelihood, which is of great significance for promoting the development of China's people's livelihood.

2. LITERATURE REVIEW

The theory of social welfare can be regarded as the theoretical basis of the study of people's livelihood finance. Hayek (1970) is a representative of neoliberal social welfare thought. He believes that the role of government in social welfare is to provide minimum basic services and act as a promoter of welfare development rather than a comprehensive provider. Giddens believes that people's right to obtain basic living security from the state has certain conditions, and they must have the willingness and action to actively improve their own situation, rather than passively waiting for government funding. If this obligation is breached, the person concerned will be subject to social sanctions.

George Steger (1970) pointed out that the middle and upper income groups in Britain were the main beneficiaries of fiscal social expenditure projects. This view is further confirmed by Legland and Winter (1987), who show that the professional and managerial classes make more frequent use of health and education services and are also the main providers of these services. Therefore, policies to increase social spending will be most widely supported by the middle and professional classes. In addition, from the perspective of social and demographic factors, Glennestor (1979) believes that demographic factors and social factors will continuously increase the demand for fiscal social expenditure. He pointed out that the demand for social services in the UK has been growing since the late 1950s, largely due to an increase in different customer groups and a greater understanding of their needs. To sum up, the middle and upper income groups in the UK play an important role in fiscal social spending, and their demand and support will affect the government's policy formulation and resource allocation. In addition, Francis Batall and James Tobin (1958) proposed that the government should devote more resources to social welfare expenditure, especially in education, health care, and reducing the gap between the rich and the poor. Ashford and Kelly conducted relevant research on the development of welfare states and social insurance policies during the period from World War II to 1980.

When discussing the definition of people's livelihood finance, different Chinese scholars have provided multi-dimensional insights from both macro and micro levels. At the macro level, Liu Shangxi (2008) and Li Tana (2010) and other scholars emphasized that the people's livelihood finance not only aims to improve the national consumption level rate, but also aims to prevent the expansion of the consumption gap, promote the equality of basic consumption, increase the total social welfare and improve the social happiness index. These scholars pointed out that the real livelihood finance needs to integrate the concept of people's livelihood into the whole process of policy objectives, financial decision-making, financial reform and financial management. Hao Shuobo and Li Shangjiao (2009) further pointed out that people's livelihood finance is a financial goal set by the government to maximize people's welfare. It ensures the equalization of basic public services by implementing a series of fiscal and tax policies and measures, such

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as promoting employment and increasing financial investment in education, medical care, social security and other fields. From the micro level, scholars such as An Tifu (2008), Zheng Mingcai (2009) and Ji Ming (2011) focus on the structure of fiscal expenditure. They believe that when the expenditure on people's livelihood occupies a large proportion in the fiscal expenditure, or even becomes the dominant one, such finance can be defined as the people's livelihood finance. These expenditures typically cover areas such as education, health care, social security and employment, environmental protection, and public safety. Although scholars have disputes over the proportion and degree of specific financial investment in people's livelihood, the general consensus is that the government must continue to increase investment in people's livelihood to ensure the solution of people's livelihood problems and the improvement of people's well-being.

3. THE CURRENT SITUATION OF THE SCALE OF CHINESE FISCAL LIVELIHOOD EXPENDITURE

Since 2007, multiple government departments have redirected their focus on social and economic development towards enhancing people's livelihood. The objective of social construction has been to ensure that the benefits of reform and development are shared by the people. Various initiatives have been implemented in social security, education, health care, housing, employment, and other essential aspects of people's well-being. There has been a gradual increase in investment in these areas, leading to an expansion in government expenditure. This section provides a comprehensive analysis of the data on fiscal expenditure on people's livelihood from 2010 to 2021. It examines the scale of expenditure at different levels of government and various expenditure items related to people's livelihood. The analysis concludes the following: (1) the overall scale and development trend of national and government expenditure on people's livelihood, and (2) the overall scale and development trend of various expenditures on people's livelihood.

3.1 Total analysis of the scale of fiscal expenditure on people's livelihood

The overall expenditure on people's livelihood in China has been consistently increasing, indicating a significant growth rate. This highlights the prioritisation of people's livelihood as a crucial issue for financial resource allocation in the country. More precisely, the national fiscal expenditure on people's livelihood rose from 4,12119.26 billion yuan in 2010 to 11,4923698 billion yuan in 2021, representing a growth of over two-fold. The average annual growth rate is 12.64%, with the biggest growth rate occurring in 2012 at 33.99%. The general growth trajectory is an ascending curve. While China's financial and people's livelihood expenditure continues to expand overall, there are significant fluctuations in growth rates from year to year. In terms of the proportion of total state fiscal expenditure on people's livelihood to GDP, it mainly showed a steady increase. The overall stability is relatively stable, although it increases year by year, but the growth rate is small, indicating that the proportion of total national fiscal expenditure on people's livelihood in the GDP is stable and slightly increased, especially in the last five years, the growth rate and growth trend are obvious, reflecting the clarity and stability of China's fiscal expenditure on people's livelihood in the emerging stage, and also indicating the steady growth of fiscal investment in people's livelihood.

In terms of the changing characteristics of the proportion of people's livelihood expenditure to fiscal expenditure, there is a trend of slight fluctuation on the whole. Specifically, the proportion of fiscal expenditure on people's livelihood in fiscal expenditure fluctuates with a growth rate gap of 1% or 2% from 2010 to 2021, indicating that the growth rate of fiscal expenditure on people's livelihood is not much different from that of total fiscal expenditure during this period. This characteristic is due to the macroeconomic policy and economic system of our country's social and economic development in the corresponding period. However, from the perspective of the overall allocation of financial resources, people's livelihood construction accounts for 37.82% (2021) of the financial resources used for economic and social development, that is, about one-third of the entire financial resources, which indicates that China's financial system at this stage has not reached the resource allocation structure dominated by people's livelihood expenditure.

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Table of state expenditure on people's livelihood from 2010 to 2021

Year	GDP	Total expenditure on people's livelihood	state Growth rate on expenditure on people's livelihood	Expenditure on people's livelihood as a proportion of GDP	live As a proportion of expenditure fiscal
2010	412119.26	25476.35	9.05	6.18	30.14
2011	487940.18	31483.65	23.58	6.45	31.41
2012	538579.95	42186.25	33.99	7.83	33.94
2013	592963.23	48783.64	15.64	8.23	35.29
2014	643563.10	53575.16	9.82	8.32	35.01
2015	688858.22	60943.94	13.75	8.85	35.54
2016	746395.06	62767.80	2.99	8.41	34.73
2017	832035.95	70406.66	12.17	8.46	36.13
2018	919281.13	76382.51	8.49	8.31	36.40
2019	986515.23	83994.34	9.97	8.51	35.71
2020	1013567.00	89280.52	6.29	8.81	36.02

3.2 Total analysis of individual fiscal expenditure on people's livelihood

According to the "Classification of Government Revenue and Expenditure in 2021", the people's livelihood expenditure is classified by government functional activities and specific purposes of expenditure, namely education, social security and employment, social insurance funds, medical and health, and other four categories. In terms of absolute expenditure scale, the people's livelihood expenditure shows a significant growth trend year by year. Among the four categories of expenditure on people's livelihood, the absolute total expenditure on education is the largest. In 2021, education expenditure reached the maximum of 3822.146 billion yuan in the past year, a threefold increase in 12 years, and exceeded the second largest social security expenditure of 379.421 billion yuan. From the perspective of the overall development trend, the expenditure on education, social security and medical and health care in the past 12 years has shown a straight rise, with an obvious and stable growth trend, indicating that the state has been investing in the main expenditure on people's livelihood for a long time, and the relevant policies to improve people's livelihood have played a certain effect.

According to the data provided, we can observe that the growth rate trends of various livelihood expenditure items show different characteristics. First of all, the growth rate of social security and employment expenditure is relatively stable, with little fluctuation, showing a relatively stable development trend. In contrast, the growth rates of education spending and health care spending show higher trends and are more volatile. In particular, in some years, the growth rate of education spending and health care spending has even exceeded 30%, which may be influenced by policy adjustments, demographic changes and other factors. In addition, the growth rate of housing security expenditure also showed a trend of increasing year by year on the whole, but there was a large negative growth rate in the later period. On the whole, the expenditure on people's livelihood shows different characteristics in the growth rate, reflecting the important changes and policy adjustments in different areas of social and economic development.

Social security and employment spending	Growth rate (%)	Education expenditure	Growth rate (%)	Expenditure on medical care and public health	Growth rate (%)	Housing security expenditure	Growth rate (%)
8346.29	0.19	11856.75	8.31	4439.31	29.97	834.00	24.59
10372.71	24.28	14262.91	20.29	5360.06	20.74	1487.97	78.41
12937.92	24.73	18929.11	32.72	7347.91	37.09	2971.31	99.69
14281.67	10.39	23034.74	21.69	8145.73	10.86	3321.50	11.79
15894.01	11.29	24030.87	4.32	10071.11	23.64	3579.17	7.76
18332.99	15.35	27157.58	13.01	11851.09	17.67	3602.28	0.65
19777.65	7.88	26741.02	-1.53	12362.81	4.32	3886.32	7.89
22521.29	13.87	29413.59	9.99	14044.01	13.60	4427.77	13.93
25990.76	15.41	31437.25	6.88	15291.05	8.88	3663.45	-17.26
29042.42	11.74	34800.38	10.70	16562.18	8.31	3589.36	-2.02
32180.61	10.81	36789.80	5.72	17891.19	8.02	2418.92	-32.61
34427.25	6.98	38221.46	3.89	18658.80	4.29	3290.55	36.03

4.1 Our country's financial livelihood expenditure to economic development measurement analysis

To examine the influence of Chinese fiscal spending on economic growth and ensure the accuracy and rationality of the selection process, we have compiled a comprehensive review of the relevant literature's representative empirical studies. While there is limited literature available on the specific facts on fiscal expenditure on people's livelihood, our focus is mostly on organising and assessing the analytical methodologies used to examine the correlation between the structure of fiscal expenditure and economic growth. The current body of research demonstrates a variety of econometric analysis methodologies used to examine the correlation between the composition of fiscal expenditure and economic growth. Several research have utilised macroeconomic models, such as VAR model and VECM model, to analyse how changes in fiscal expenditure structure affect economic growth.

Three results generally characterise the relationship between the pattern of fiscal spending and economic growth. Uncertainty surrounds the relationship between economic growth and productive fiscal expenditure. Some people believe that there is little actual evidence to support the idea that government spending directly advances economic growth through infrastructure investment. While there is a negative correlation for non-productive fiscal expenditure, one is positive for productive fiscal expenditure. Economic growth and productive fiscal expenditure—which includes investments in technological innovation and infrastructure development—have been favourably connected in several studies. Conversely, unproductive fiscal spending, such welfare and administrative expenses, may impede economic growth. The connection between productive and nonproductive spending is as follows: Scholarly studies have shown that there is a negative association between expenditure that is productive and that is not. This implies that instead of concentrating only on urgent administrative requirements or social welfare concerns, governments should give priority to expenditures in projects that directly promote economic development when deciding how to arrange their fiscal spending.

4.2 Determination of analytical methods and metrological analysis

The fundamental equation utilised in this section is the C-D production function, while the elastic coefficient method is employed for the analysis. Two primary factors contribute to this decision: In order to examine the influence of fiscal expenditure on individuals' means of subsistence on the economy, it is necessary to comprehend the effects of different types of fiscal expenditure on the economy. This is in order to implement targeted structural adjustment, assuming the magnitude of fiscal expenditure on individuals' means of subsistence has been established. Due to China's fundamental national conditions, it is not feasible to expand

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expenditures on all aspects of livelihood without restriction; rather, economic protection and people's livelihoods must be taken into account. Hence, when making modifications to the allocation of funds for individuals' livelihoods, it is critical to prioritise the adjustment of such expenditure items that exert the most significant influence on economic growth. Subsequently, adjustments to other expenditure items should be made in a sequential fashion, in accordance with the degree of impact. In order to provide a foundation for the subsequent structural adjustment, the elastic coefficient method is therefore chosen to conduct an empirical analysis of the effect of various items of fiscal expenditure on the standard of living of the populace and economic expansion.

In summary, based on the above two considerations, this section chooses C-D production function as the basic equation and adopts the elastic coefficient method for analysis, so as to deeply explore the degree of impact of fiscal expenditure on people's livelihood on the economy and provide scientific basis for subsequent structural adjustment.

4.3 Model setting

As an initial equation, we employ the Cobb-Douglas production function: where K denotes capital, L signifies labour, represents a specific fiscal expenditure, and represents the coefficient of output elasticity associated with the corresponding element.

In light of the reliability of China's statistical data, the budget expenditure data will be analysed in this paper. Given that the structure of fiscal expenditure on people's livelihood is the primary focus of this analysis, fiscal expenditure is separated into two categories: livelihood-related fiscal expenditure and livelihood-related fiscal expenditure. Financial expenditure on people's livelihood is additionally subdivided into education expenditure, social security expenditure, and medical and health expenditure, among others, so that the relationship between numerous livelihood expenditures and economic growth can be examined in greater detail.

4.4 Model construction and data selection

According to the Cobb-Douglas production function as the initial equation, the following model is constructed:

$$\ln Y = \alpha + \beta_1 \ln K + \beta_2 \ln L + \beta_3 \ln S + \beta_4 \ln J + \beta_5 \ln H + \mu$$

In the above formula, Y stands for GDP, K stands for total capital, L stands for labor force, S stands for social security and employment expenditure, J stands for education expenditure, H stands for medical and health care expenditure, and are respectively elastic coefficients of each expenditure item, error term, and constant term.

The sample data of the model is from 2003 to 2022. It should be noted that: Y selects the GDP of expenditure method; The fiscal expenditure on people's livelihood mainly includes expenditure on social security and employment, education, medical and health, etc. The above data are all expenditure in the fiscal budget, and are from the "China Statistical Year", "China Fiscal Yearbook" and "China Health Statistical Yearbook" from 2003 to 2022.

4.5 Empirical Analysis

YEAR	LY	LK	LL	LS	LJ	LH
2003	11.8130	11.1114	11.2057	7.8726	8.0401	7.0064
2004	11.9506	11.2294	11.1897	8.0061	8.1573	7.1269
2005	12.1233	11.3911	11.2183	8.1979	8.4009	7.3298
2006	12.2988	11.5604	11.2289	8.3657	8.5356	7.4688
2007	12.4466	11.6838	11.1826	8.5560	8.8241	7.8093
2008	12.6061	11.8113	11.1754	8.7680	9.0488	8.1297
2009	12.8348	12.0319	11.3088	9.0094	9.3257	8.5523
2010	12.8738	12.0589	11.2074	9.0869	9.4050	8.6138
2011	13.0035	12.1628	11.1962	9.2677	9.6631	8.7208
2012	13.1967	12.3814	11.2477	9.4679	9.8485	8.9022
2013	13.2929	12.4836	11.2513	9.5667	10.0448	9.0052
2014	13.3748	12.5505	11.2548	9.6737	10.0871	9.2174
2015	13.4428	12.5775	11.2574	9.8165	10.2094	9.3802
2016	13.5230	12.6448	11.2417	9.8923	10.1940	9.4224
2017	13.6316	12.7608	11.2393	10.0222	10.2892	9.5500

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2018	13.7313	12.8837	11.2356	10.1655	10.3557	9.6350
2019	13.8019	12.9538	11.2312	10.2765	10.4574	9.7149

In order to remove the influence of price factors and ensure that the original data becomes the real data, it is necessary to transform the original data by GDP deflator. This shift is intended to eliminate the impact of inflation on the data, making it more comparable and reliable. The calculation of the GDP deflator usually involves a comparison between base and current prices. By adjusting the raw data in proportion to the base period price and the current price, the real economic growth can be more accurately reflected, so that the data can be better analyzed. LK, LL, LY, LS, LJ, LH are obtained after data processing.

4.5.2 Stationarity test

Stationarity testing is an important step in time series analysis to determine whether data is stationarity. When conducting stationarity test, it is first necessary to test each variable, including LY, LK, LL, LGF, LS, LJ, LH and other variables. According to classical econometrics theory, under the condition of large samples and high single integral order, if unsteady variables are used for regression analysis, false regression may occur regardless of whether the conclusion is true, because there may be correlation between unstable variables. Therefore, in order to ensure the accuracy of regression analysis, the stationarity test of variables should be carried out first. If the variable is found to be unstable, it is necessary to further test whether there is a cointegration relationship. When the co-integration relationship exists, the co-integration regression method can be used for analysis. When there is no cointegration relationship, a difference transformation is needed to transform the non-stationary sequence into a stationary sequence, and then regression analysis is performed. In this paper, EViews10.0 software is used for unit root test of sample data to determine the stationarity of each variable. This step is the basis for ensuring data analysis, helping to accurately understand the relationships between variables and for effective economic analysis and forecasting.

Variable unit root test results

variable	Degree of difference	ADF	5% critical value	1% critical value	p-value	conclusion
LY	1	-3.11	-3.85	-3.04	0.044	I(1)
LK	1	-3.48	-3.85	-3.04	0.023	I(1)
LL	1	-6.86	-3.85	-3.04	0.000	I(1)
LS	1	-3.65	-3.85	-3.04	0.016	I(1)
LJ	0	0.007	-3.83	-3.03	0.001	I(0)
LH	1	-6.99	-3.85	-3.04	0.000	I(1)

The test results indicate that the stability of the original data for all variables in the model is limited to LJ, with the remaining variables exhibiting instability. The explained variables are arranged in a single integral order of 1, and their respective single integral orders are 1, 1, 1, 0 and 1. This observation indicates that the variables in question exhibit varying degrees of non-stationarity, which could result in erroneous regression issues when attempting to analyze them directly. To assure the accuracy of the model, therefore, additional co-integration tests are required. A cointegration test can assist in ascertaining whether variables have a stable, long-term relationship. For the purpose of analysis, a robust regression model can be developed in the presence of cointegration. Non-stationarity between variables must be addressed using alternative methods, such as difference transformations, in the absence of a cointegration relationship. To ensure the dependability of the model, a cointegration test is necessary prior to conducting additional analysis.

4.5.3 Cointegration test

Finding a stable, long-term linear relationship between several variables is made possible in large part by the cointegration test. In order to determine if variables are cointegrated and hence have the ability to form a strong and long-lasting relationship, the method uses statistical tests. In this paper, the cointegration of several variables is investigated by using a vector autoregressive model. The approach has good statistical characteristics and application, which provide a scientific basis for later data analysis and model creation and guarantee the correctness and dependability of the test results.

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Cointegration test results of variables

no null hypothesis of	Characteristic root	Trace statistic	5% significant level	Adjoint probability
no cointegration relationship *	0.9926	188.1809	83.9371	0.0000
at least one cointegration relationship *	0.9049	99.8665	60.0614	0.0000
at least two cointegration relationship *	0.7674	57.5147	40.1749	0.0004
at least three cointegration relationship *	0.6370	31.2612	24.2760	0.0056
at least four cointegration relationship *	0.4950	13.0195	12.3209	0.0381
at least five cointegration relationship	0.0394	0.7230	4.1299	0.4537

no null hypothesis of	Characteristic root	$\lambda - \text{max}$ statistic	5% significant level	Adjoint probability
no cointegration relationship *	0.9926	88.3144	36.6302	0.0000
at least one cointegration relationship *	0.9049	42.3518	30.4396	0.0011
at least two cointegration relationship *	0.7674	26.2535	24.1592	0.0257
at least three cointegration relationship *	0.6370	18.2417	17.7973	0.0428
at least four cointegration relationship *	0.4950	12.2965	11.2248	0.0323
at least five cointegration relationship	0.0394	0.7230	4.1299	0.4537

Test results table shows co-integration relationship between non-stationary variables LY, LK, LL, LGF, LS, LJ, and LH. One can use the ordinary least squares approach to regression analysis directly to use this co-integration connection. This suggests that these variables have a strong and lasting link, which makes it easier to build a regression model that can be a reliable basis for further data analysis and forecasting. Cointegration relationships indicate that these variables evolve together over an extended period of time and keep a steady interdependence. Ordinary least squares regression analysis can therefore be used to assess the degree of the causal relationship and influence between variables. In the fields of finance and economics, this persistent correlation provides a crucial point of reference for decision-making, makes it easier to understand and predict the evolutionary course of economic phenomena, and provides a scientific basis for the creation of relevant policies.

4.5.4 Estimation and results of elasticity coefficient of fiscal expenditure items for people's livelihood

Before the least square regression analysis, normality test, autocorrelation test and heteroscedasticity test were performed on the model. In the process of classical testing, it is found that the model has a first-order autocorrelation. To solve this problem, it is modified to include lag regression model. This modification can effectively solve the problems caused by first-order autocorrelation and improve the model's fit degree and prediction accuracy. Normality test is used to test whether the data conforms to normal distribution, autocorrelation test is used to test whether the error term has autocorrelation, and heteroscedasticity test is used to test whether the error term has heteroscedasticity. The purpose of these tests is to ensure that the model's residuals conform to the statistical assumptions, thus ensuring that the results of the least square regression analysis are statistically significant and reliable. After modifying the model, the least square regression analysis was carried out again, and more accurate and reliable results were obtained as follows:

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$$\ln Y = 3.438 + 0.757 \ln K + 0.124 \ln L + 0.118 \ln S + 0.029 \ln J + 0.124 \ln H + 0.057 \ln Y_{t-1}$$

(1.423) (0.115) (0.124) (0.094) (0.043) (0.045) (0.079)

$R^2 = 0.999$ $D.W = 1.59$ $F = 9475$ $T = 20$ As can be seen from the results of the above regression equation, corresponding to the five respective variables can explain 99.9% of the variation of the dependent variable, $F=9475$, indicating that the mean value of the regression coefficient is 0, and the establishment of the equation is reasonable. K stands for total capital, L stands for labor, S stands for social security and employment expenditures, J stands for education expenditures, and H stands for health care.

The coefficient is calculated to be 0.757, which suggests that a 1% increment in total capital is associated with an average increase of 0.757% in GDP, assuming all other factors remain constant. The coefficient of 0.124 means that a 1% increase in the labour force will, all other things being equal, lead to an average 0.124% rise in GDP. The correlation, 0.118, indicates that, if all other things stay the same, a 1% increase in employment and social security spending is linked to an average GDP rise of 0.118%. The coefficient, computed to be 0.029, indicates that, if all other things stay the same, a 1% increase in education spending corresponds to an average GDP rise of 0.029%. The correlation, 0.124, indicates that, if all other things stay the same, a 1% increase in health care spending is linked to an average GDP rise of 124%.

The spending on capital, labour, education, health care, and social security is in a long-term equilibrium relationship. This shows that these elements have a steady, long-term relationship, which taken together promotes economic expansion and development. Economic growth is substantially influenced by the input of capital, labour, and other relevant factors. In contrast, social security expenditures, education expenditures, and medical and health expenditures serve to safeguard and bolster economic expansion. The aforementioned enduring equilibrium relationship is indicative of the interconnectedness and reciprocal impact of diverse components within the economic system.

The positive correlation observed between economic growth and expenditures on social security, education, medical and health care suggests that investments in the livelihoods of the people can contribute to the advancement of our nation's economy.

Social security, education, and medical and health expenditures have respective elasticity coefficients of 0.118, 0.029, and 0.124 with respect to economic growth. According to this analysis, China's economic growth will increase by 0.118 percentage points, 0.029 percentage points, and 0.124 percentage points, correspondingly, for every additional unit of social security expenditure, education expenditure, and medical and health expenditure, holding all other variables constant. An economic growth-restraining expenditure does not contribute to the expansion of the gross domestic product (GDP) and, in fact, hinders it. This is indicated by a negative elasticity coefficient. An increase in expenditures for people's livelihoods can effectively stimulate economic growth, as indicated by the positive elasticity coefficient. These findings offer a comprehensive comprehension of the mechanism by which livelihood expenditures of individuals affect economic growth, in addition to serving as a crucial reference for the government in formulating fiscal policies. In conclusion, stabilising economic growth and ensuring sustainable development will result from increased investment in health care, education, and social security, in addition to raising living standards and social welfare.

5.1 Lack of management system conducive to people's livelihood input

Expenditure management encompasses the thorough administration of financial expenditures from the pre-decision stage, throughout their utilisation, and culminating in the evaluation of the benefits received. In the expenditure of funds on the livelihoods of the people, however, an ideal management system has yet to be established. First, the government has not defined and regulated the magnitude of fiscal expenditures on the livelihoods of the general public in a comprehensive manner. It is impossible to achieve a balance between supply and demand, as well as the coordination and unification of social and economic development, and to address the issue of inadequate demand in different sectors of people's livelihood through distinct expenditure items on people's livelihood, due to the absence of control over the total expenditure on people's livelihood. Furthermore, by exercising control over the framework of fiscal expenditures on people's livelihood, the government can intentionally modify the fiscal expenditure structure in accordance with the circumstances at the national or local level, thereby influencing the economic framework. Controlling various projects of fiscal expenditure on people's livelihood can promote local comprehensive development, serve as a leverage point, and directly or indirectly address the current requirements of local people's livelihood. However, inadvertent management of the financial expenditure structure on people's livelihoods will result in housing, education, health care, and social welfare failing to meet the needs of the local population and economy. This is not conducive to stable long-term economic development. Thirdly, there is an issue with the administration of the efficiency of people's livelihood expenditures, which is their low efficiency. The

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inattention towards the efficacy of fiscal expenditure on people's livelihoods, against the dual backdrop of fiscal deficit and financial difficulties, is a significant factor in the difficulty of improving such expenditure. These three facets are constituent elements of the system as a whole; any issue in any one facets will have an impact on the condition of public finances and expenditures for subsistence; furthermore, all facets must be mutually reinforcing.

5.2 No mandatory constraint on spending to promote people's livelihood

Law provides the legal foundation and system guarantee for government behavior, and has the characteristics of unity, certainty and force. Because the relevant laws and regulations on ensuring and improving the people's livelihood in our country are still not perfect and perfect, some local governments or departments have not really implemented the investment of financial resources to the people's livelihood in the process of implementing the people's livelihood policies, regardless of the provisions of the people's livelihood policies, resulting in the lack of a long-term and mandatory effect of the construction of the people's livelihood. To this end, it is necessary to improve a more scientific and democratic decision-making mechanism, establish a sound legal basis and legal guarantee for decision-making mechanism, actively promote administration according to law, and strictly exercise authority and responsibilities in accordance with the provisions of the law, so as to form mandatory constraints on administrative power. Similarly, in the field of people's livelihood, at present, there are conflicting mechanisms in China's economic and political system, in addition, the relevant laws and regulations to ensure the construction of people's livelihood are not perfect, the government decision-making mechanism lacks legal constraints and norms, and local governments and departments blindly pursue political achievements and tap new growth points of local economic development, ignoring the construction of people's livelihood. Fiscal expenditure on people's livelihood has not been guaranteed, hindering the further improvement of people's livelihood construction.

6. COUNTERMEASURES AND SUGGESTIONS OF EXISTING PROBLEMS

Through empirical analysis, we can see that the elasticity coefficient of social security expenditure, education expenditure and medical and health expenditure to economic growth is small, indicating that the contribution degree to economic growth is weak. This means that our country should further take measures and policies to improve the contribution of people's livelihood expenditure, in order to optimize and improve the structure of people's livelihood expenditure, and promote the transformation of social security, education and medical expenditure into productivity. Spending on social security, education and health care has a smaller elasticity to economic growth, suggesting that their contribution to economic growth is relatively limited. As a result, governments can take a number of steps to increase their contribution to economic growth. First, the government can increase investment in social security, education and health care, and increase their share in national fiscal expenditure, so as to enhance their driving role in economic growth. Secondly, the government can optimize the structure of people's livelihood expenditure, ensure the reasonable allocation and effective use of resources, and improve the efficiency and contribution of people's livelihood expenditure. In addition, the government can also strengthen the formulation and implementation of relevant policies to promote the achievement of social security, education and health care expenditures into better productivity, and further promote the healthy development of the economy.

6.1 Establish a unified supervision system for financial expenditure on people's livelihood

Currently, the construction of livelihoods for the people is beset by issues such as unclear indicators, assessment standards, and content. This reveals a lack of oversight in the investment in livelihoods for the people in our country; therefore, it is necessary to establish a unified national supervision system for livelihood development, strengthen the budget management and expenditure standards of livelihood construction, and enhance the performance evaluation of personnel. We intend to integrate fiscal expenditures on livelihoods for the people into the budget management system and establish a comprehensive framework of budget organisations for the duration of the livelihood spending process. Initially, during the budget preparation process, the management obligations of functional departments are elucidated, the precise components of expenditures pertaining to individuals' livelihoods are specified in detail, and budgetary administrative entities, including financial revenue, expenditure, and cashier, are tasked with devising yearly budgets through a primary level classification of social security expenditure, education, healthcare, and employment security.

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6.2 Optimizing the expenditure structure

Priority adjustments and reevaluations of fiscal expenditures are required to optimise the structure of such expenditures. Governments ought to prioritise increasing investment in sectors that are conducive to productivity and livelihood, including infrastructure, health care, and education. Such investments not only enhance the quality of life for citizens but also possess the capacity to foster sustained economic expansion. Investment in education can improve the overall skills and knowledge level of citizens and cultivate the necessary talent base for economic development. Medical investment is directly related to national health and labor productivity; The construction and maintenance of infrastructure can not only create short-term jobs, but also ensure the smooth running of other economic activities. It is equally important to reduce the share of unproductive spending. While unproductive spending, such as administrative spending and social welfare spending, may help stabilize society and enhance public well-being in the short term, excessively high unproductive spending may draw away resources that could otherwise be used for productive investment, thereby depressing the economy's long-term growth potential

ACKNOWLEDGEMENT

This paper results from an academic exercise for EPPE6154 funded by EP-2018-001 at the Faculty of Economics and Management, Universiti Kebangsaan Malaysia

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