

# On Investment Efficiency in Education and Other Social Fields based on ICOR and DEA Model

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## Abstract

In recent years, China has been increasing the investment in public services in the social sector and improving the investment environment. However, compared with the multi-level and diversified needs of the people, there are still prominent problems such as insufficient supply, low investment efficiency, and uneven development. Therefore, it is of great significance to improve the service level and investment efficiency in the social field. In this paper, we take Anhui Province as an example to study the investment efficiency of social field and put forward feasible suggestions. First, we use incremental capital output ratio (ICOR) to compare the overall investment efficiency of social sector in Anhui with that of the whole country and other provinces and cities in the Yangtze River Delta region. The results show that the overall investment efficiency of social field in Anhui is higher than the national average, while significantly behind that of Jiangsu, Zhejiang and Shanghai. Then, from the perspective of input and output, the data envelopment analysis (DEA) method is used to compare and analyze the investment efficiency of social field in various cities in Anhui. It is found that the overall social sector investment in Anhui is characterized by low investment efficiency and obvious regional differences. Finally, we put forward countermeasures and suggestions to improve the investment efficiency in Anhui social field.

## Keywords

Investment in Social Field; Investment Efficiency; ICOR; DEA.

## 1. Introduction

As the economy gradually enters the "new normal", coupled with the continued fermentation of the "anti-globalization" trend and the increasingly complex and severe world economic situation, the Chinese government has proposed to transform the economy from high-speed growth to high-quality development at a new historical turning point in economic development. In 2020, the Party Central Committee has proposed to "accelerate the construction of a new development pattern with the domestic cycle as the main body and the domestic and international circulations promoting each other", in which investment will play a key role, and further expansion of investment space is an important way to achieve the "dual circulation". Since the outbreak of the new crown pneumonia epidemic, China's economic growth targets have been adjusted, the scale of investment has been controlled, the investment structure has been continuously optimized, and the focus of investment has gradually shifted to the social field. According to the deployment requirements of the State Council, the social field focuses on solving practical problems, focusing on the five major areas of medical care, elderly care, education, culture and sports. Investment in the social sector refers to fixed asset investment projects built by the government, domestic enterprises, self-supporting institutions, social groups and civil organizations with their own funds or through financing [1].

In the context of high-quality development, investment, as one of the important factors driving economic growth, requires the government to pay more attention to its quality and efficiency. The level of investment efficiency reflects regional economic vitality to a certain extent. As the most populous province in central China, Anhui is faced with social problems in education, medical care, pension and other aspects due to its large population, which hinders its further economic and social development. In order to solve these problems, expanding the scale of investment in the social field is a prerequisite, and improving the efficiency of the use of investment funds is even more crucial. In view of this, there is a need to quantitatively analyze the investment efficiency in Anhui social field and identify its restrictive factors, which is important for improving effective investment in Anhui, enhancing investment efficiency, and thus driving the Anhui economy towards high-quality development. In this paper, we firstly use the incremental capital output ratio (ICOR) to compare the overall investment efficiency in Anhui social field with that of the whole country and other provinces and cities in the Yangtze River Delta region. Then, we apply the data envelopment analysis (DEA) method to compare and analyze the investment efficiency of social field in various cities in Anhui. Finally, the problems of investment efficiency in Anhui social field are summarized and corresponding countermeasures are proposed.

## 2. Comparative Analysis of Investment Efficiency in the Social Field in Anhui Province and Nationally

Generally, the capital output rate is used to measure the investment efficiency, that is, the amount of capital required to be invested per unit of output or the amount of output that can be obtained per unit of capital. When the capital output rate is high, it means that investment efficiency is at a low level and that getting a quantitative output requires more investment. The possible reasons for this result are the inefficient use of capital and wastefulness. When the rate is lower, it implies that the investment efficiency has been improved.

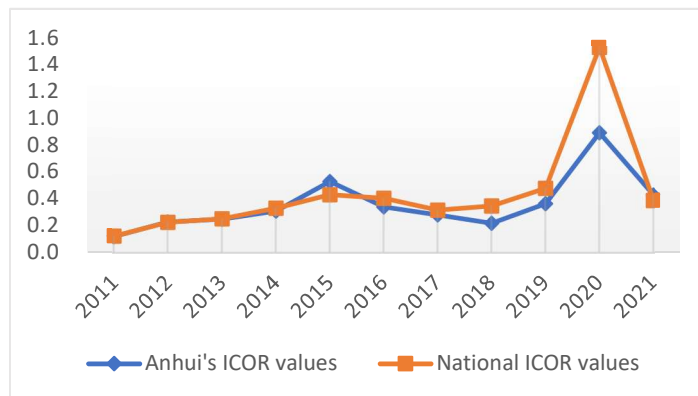
There are two expressions of the capital-output rate, namely, the average capital-output rate and the incremental capital-output rate (the ratio of incremental capital to incremental output). Both expressions usually reflect the same type of problem. However, the former represents the ratio of capital in a stock sense to output in a flow sense, while the latter is more sensitive to changes in the input-output relationship and has its unique advantage of considering the output efficiency of new investment from a marginal perspective. Therefore, in this section, we use the incremental capital output ratio (ICOR) to analyze the changes in the overall investment efficiency of social sector in Anhui and nationally in recent years.

The definition of incremental capital output ratio (ICOR) refers to the capital increment required to increase the total output per unit, which can be expressed by the formula as  $ICOR = \Delta K / \Delta Y$  (K represents the capital stock,  $\Delta K$  represents the capital increment, and Y represents the annual total output,  $\Delta Y$  represents the total output increment). When the object of investigation becomes investment in the social field, since the capital increment is approximately equal to the amount of completed investment in the social sector (I) and the total output can be replaced by the annual gross domestic product (GDP), so the formula can also be written as  $ICOR = I / \Delta GDP$ . Its economic implication is: when the ICOR increases, the increase of the social sector capital required by the increase of the unit GDP increases, which means that the investment efficiency decreases; when the ICOR value decreases, the investment efficiency increases [2]. The incremental capital output ratio (ICOR) of investment in the social field in Anhui and the whole country was calculated by selecting the completion amount of investment in the social sector and the annual GDP from 2011 to 2021, and the results are shown in Table 1 and Figure 1.

**Table 1.** ICOR values of Anhui and the whole country in 2011-2021

ICOR	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Anhui	0.1215	0.2284	0.2513	0.3111	0.5325	0.3423	0.2830	0.2196	0.3662	0.8955	0.4303
Nationwide	0.1238	0.2271	0.2538	0.3336	0.4334	0.4074	0.3172	0.3488	0.4810	1.5333	0.3906

Data source: Websites of The Bureau of Statistics of Anhui Province and the National Bureau of Statistics.



**Figure 1.** Changes in the ICOR values of Anhui and the whole country from 2011 to 2021

As can be seen from Table 1 and Figure 1, the trend in ICOR values for Anhui and the nation from 2011-2021 is generally consistent, showing a fluctuating change process of rising, then falling, then rising and then falling again. With the exception of 2020, Anhui’s ICOR values vary within the range (0.1, 0.55), while national ICOR values vary within the range (0.1, 0.5). It is worthnoting that both Anhui’s and national ICOR values increase significantly in 2020 and fall back to previous years’ levels in 2021. Overall, Anhui’s ICOR values are basically lower than the national ICOR values, which imply that the investment efficiency in the social sector of Anhui has largely been higher than the national average in recent years.

In recent years, as Anhui has promoted structural reform on the supply side, investment in the social field has been guided by the basic principle of "making up for shortcomings and benefiting people's livelihood", and the government has increased investment in major infrastructure projects and social public services. A series of policy documents have been issued to actively carry out reforms in the social field. It can also be seen from the graph that since the start of the supply-side structural reform in 2016, Anhui’s ICOR values have seen a decline for three consecutive years, and the investment efficiency in the social field has continued to improve. However, the sudden outbreak of the new crown epidemic in 2020 hit the Chinese economy severely, increasing the cost of running the economy, declining investment efficiency and significantly lowering the output of various investment indicators. As a result, Anhui and national ICOR values in 2020 reached their highest values ever, and the investment efficiency in the social field declined significantly. In 2021, the domestic epidemic has been largely brought under control and economic development has gradually moved onto the right track. The Party Central Committee and the State Council scientifically coordinated the work of epidemic prevention and control and economic and social development, and focused on expanding effective investment. Anhui actively responded to the national call for investment in the social field to further focus on the areas of benefiting people's livelihood and making up for shortcomings. Under the macro policy regulation, the national ICOR value and Anhui’s ICOR value fell back to a lower level, and the investment efficiency in the social field rebounded effectively.

### 3. Comparative Analysis of Investment Efficiency in the Social Field in the Yangtze River Delta Region

As one of the most economically developed regions in China, the Yangtze River Delta has a typical position in the country's economic development. Its planning area includes the whole of Shanghai, Jiangsu Province, Zhejiang Province and Anhui Province. In 2018, the "Research Report on the Level of High-Quality Integration in the Yangtze River Delta Region" was released. The report concluded that although the level of integration in the Yangtze River Delta has improved, the degree of connectivity at the economic level of the cities within it has been strengthened, and the regional gap is being significantly reduced, there are still some deep-seated problems in the integration process of the region that have not yet been fundamentally resolved. In December 2019, the Central Committee of the Communist Party of China and the State Council issued the "Outline of the Yangtze River Delta Regional Integrated Development Plan", which provides programmatic guidance for the integrated development of the Yangtze River Delta region. In June 2021, the Office of the Leading Group to Promote the Integrated Development of the Yangtze River Delta issued the "14th Five-Year Plan for the Integrated Development of the Yangtze River Delta". It states that by 2025, substantial progress will be made in the integrated development of the Yangtze River Delta, the institutional mechanism for integrated development will be fully established, the integrated development of cross-border regions, cities and villages and other key regional sectors will reach a high level, and the integration of science and innovation industries, synergy and openness, infrastructure, ecological environment and public services will be basically achieved.

The integrated development of the Yangtze River Delta is inseparable from the large amount of investment behind it, and the development of social field investment in the Yangtze River Delta region has an important impact on the quality of economic development in the Yangtze River Delta as well as the future economic development potential. Therefore, it is of great significance to compare and analyze the investment efficiency of social field among the four provinces and cities in the Yangtze River Delta. In this section, we also use the incremental capital output rate (ICOR) to compare and analyze the investment efficiency in the social field in the Yangtze River Delta region, and the calculation method is the same as the previous one. The data related to the four provinces and cities of Jiangsu, Zhejiang, Shanghai and Anhui from 2011 to 2021 are selected for calculation, and the results are shown in Table 2 and Figure 2.

**Table 2.** ICOR values of Jiangsu, Zhejiang, Shanghai and Anhui from 2011 to 2021

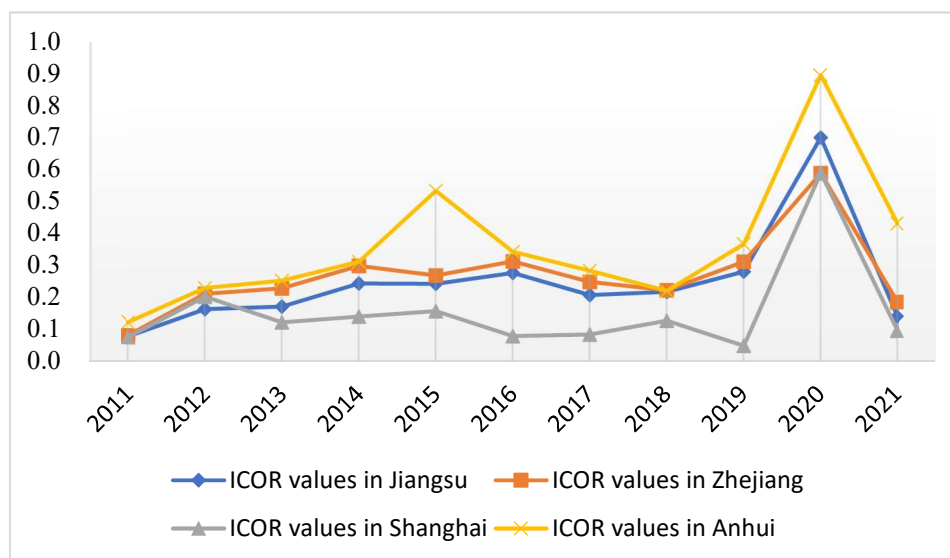
ICOR	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Jiangsu	0.0770	0.1619	0.1703	0.2427	0.2418	0.2754	0.2064	0.2166	0.2795	0.7000	0.1390
Zhejiang	0.0803	0.2108	0.2275	0.2979	0.2675	0.3123	0.2482	0.2219	0.3109	0.5878	0.1849
Shanghai	0.0752	0.2012	0.1214	0.1393	0.1561	0.0782	0.0833	0.1266	0.0477	0.5887	0.0952
Anhui	0.1215	0.2284	0.2513	0.3111	0.5325	0.3423	0.2830	0.2196	0.3662	0.8955	0.4303

Data source: Jiangsu, Zhejiang, Anhui and Shanghai Statistics Bureau websites.

Combined with the analysis in Table 2 and Figure 2, the investment efficiency of the social sector in the Yangtze River Delta region from 2011 to 2021 is in a state of constant fluctuation. With the exception of 2020, when the ICOR value changed significantly, the fluctuations in the other years were relatively small, and the changes in the ICOR values of Jiangsu, Zhejiang, Shanghai and Anhui remained largely consistent. Since the ICOR value here is a reverse indicator of investment efficiency, it is found that Shanghai's investment efficiency has been at the forefront of the Yangtze River Delta in the past 11 years, followed by Jiangsu and Zhejiang. The overall investment efficiency of Anhui is significantly lower than that of Jiangsu, Zhejiang and Shanghai. This indicates that although investment in the social field in Anhui has continued

to develop in recent years, which is generally higher than the national average, there is still a significant gap compared to other provinces and cities in the Yangtze River Delta, especially Jiangsu, and further improvements are needed.

To sum up, cities with more favorable economic resources generally have relatively high investment efficiency. Shanghai, as the economic center of China, is far ahead of Jiangsu, Zhejiang and Zhejiang in terms of economic development and investment efficiency, and it plays a leading role in the development of investment in the Yangtze River Delta region. Jiangsu and Zhejiang are also developing relatively quickly, ahead of Anhui Province. Anhui needs to firmly grasp the important strategic opportunity of the integration of the Yangtze River Delta and take advantage of the advanced development levels of Jiangsu, Zhejiang and Shanghai to promote its own investment. Meanwhile, Anhui needs to accelerate to catch up with the investment levels of other provinces and cities in the Yangtze River Delta to help bring its economic strength to a higher level.



**Figure 2.** Changes in ICOR values for Jiangsu, Zhejiang, Shanghai and Anhui from 2011 to 2021

#### 4. Comparative Analysis of Investment Efficiency in the Social Field of Different Cities in Anhui

We can use data envelopment analysis (DEA) or stochastic frontier approach (SFA) to measure and study the investment efficiency of social field in various cities in Anhui. Both of these two methods obtain the efficiency value by setting the input index and output index and performing relaxation improvement to solve the problem. Compared with SFA, DEA is computationally simpler and does not need to pay too much attention to the functional relationship between inputs and outputs, so the researcher does not need to set the production function and the weights of each indicator in advance, and the evaluation results are more objective [3]. Therefore, in this part of the research, we choose DEA method, which is more commonly used, to study the investment efficiency of the social field in various cities in Anhui.

##### 4.1. Model Selection

DEA is an analytical method for evaluating the effectiveness of the same decision unit with multiple input indicators versus multiple output indicators based on relative efficiency. It quantifies technical efficiency through the ratio of outputs to inputs and focuses on the use of linear programming methods to construct a non-parametric segmented surface (or frontier) of

observed data and calculate efficiency relative to this frontier surface. In addition, DEA method can be used not only to evaluate the relative efficiency of individual decision units of the same type, but also to further analyze the reasons for the relative inefficiency of individual decision units and where improvements can be made.

DEA method includes a variety of efficiency evaluation models, among which the CCR model, the BCC model and the FDH model are more commonly used. Most of the other DEA models are also developed based on these three models. Compared with the CCR model and the FDH model, the BCC model is based on variable returns to scale, and the technical efficiency it obtains is a "pure technical efficiency" that excludes the influence of scale. It decomposes the overall efficiency into the product of pure technical efficiency and scale efficiency, which provides a more accurate evaluation of the decision unit and a more rational basis for policy advice. Therefore, in the analysis of this part, we use the BCC model to measure the investment efficiency in the social field of various cities in Anhui. The specific model is as follows:

$$\begin{aligned}
 & \min \theta \\
 \text{s. t. } & \begin{cases} \sum_{j=1}^n \lambda_j X_j + S^- = \theta X_0 \\ \sum_{j=1}^n \lambda_j Y_j - S^+ = Y_0 \\ \sum_{j=1}^n \lambda_j = 1, j = 1, 2, 3, \dots, n \\ \forall \lambda \geq 0, \forall S^- \geq 0, \forall S^+ \geq 0 \end{cases} \quad (1)
 \end{aligned}$$

The variables in this model are interpreted as follows: assuming that there are  $n$  decision-making units, each with  $p$  input indicators and  $q$  output indicators,  $X_{ij}$  denotes the  $i$ -th input quantity of the  $j$ -th decision unit,  $Y_{mj}$  denotes the  $m$ -th output quantity of the  $j$ -th decision unit, then  $X_j = (X_{1j}, X_{2j}, \dots, X_{pj})$ ,  $j \in [1, n]$ ,  $Y_j = (Y_{1j}, Y_{2j}, \dots, Y_{qj})$ ,  $j \in [1, n]$ ,  $\lambda_j$  is the weight of the decision unit, and  $S^-$ ,  $S^+$  denote the slack variables of the input and output variables respectively.

The input-oriented BCC model was chosen to measure technical efficiency. Assuming a constant level of output, the ratio between the minimum input and the actual input is used to estimate  $\theta$ .  $\theta$  is a radially optimized quantity away from the efficient frontier surface, and its theoretical meaning in the model is the comprehensive technical efficiency value of the  $j$ -th decision unit, which satisfies  $0 \leq \theta \leq 1$ . When  $\theta = 1$ , it means that the  $j$ -th city is the point on the efficiency frontier, and the city's output has reached the integrated efficiency optimum relative to the inputs, and it is in a state of technical efficiency; when  $\theta < 1$ , it means that the city falls outside the efficiency frontier and is in the non-technically efficient state [4].

## 4.2. Indicators and Data Selection

### 4.2.1. Output Indicators

The general fiscal budget revenue, regional GDP and newly added fixed assets of 16 cities in Anhui in 2021 are selected as output indicators to reflect the economic benefits generated by investment activities in the social field in each region.

### 4.2.2. Input Indicators

The amount of investment completed in the social field of 16 cities in Anhui in 2021 is selected as the input indicator. The specific data of output indicators and input indicators are shown in Table 3.

**Table 3.** Investment inputs and outputs of social field in various cities in Anhui, 2021

Unit:100 million yuan

Region	The general fiscal budget revenue	Regional GDP	Newly added fixed assets	Amount of investment in the social sector
Hefei	844.2	11412.8	395.46	422.35
Huaibei	88.8	1223	120.62	57.06
Bozhou	140.3	1980	66.84	100.32
Suzhou	147.9	2167.7	133.57	84.04
Bengbu	167.3	1989	86.52	68.79
Fuyang	189.6	3071.5	286.46	214.16
Huainan	109.6	1457.1	62.94	46.30
Chuzhou	250.9	3362.1	306.27	146.81
Lu'an	147.5	1923.5	182.14	106.80
Ma'anshan	196.5	2439.33	298.01	61.66
Wuhu	361.2	4302.63	357.91	108.43
Xuancheng	182.8	1833.9	122.01	63.16
Tongling	93.5	1165.6	8.88	39.43
Chizhou	74.3	1004.2	67.07	50.61
Anqing	156.1	2656.88	164.63	94.86
Huangshan	88.3	957.4	84.42	63.55

Data source: Anhui Provincial Bureau of Statistics and websites of municipal statistical bureaus.

### 4.3. Efficiency Measurement and Evaluation

**Table 4.** Evaluation results of investment efficiency in social field of municipalities in Anhui, 2021

Region	Comprehensive efficiency	Pure technical efficiency	Scale efficiency	Scale benefit
Hefei	0.681	1.000	0.681	decrease
Huaibei	0.541	0.842	0.643	increment
Bozhou	0.497	0.535	0.930	increment
Suzhou	0.650	0.677	0.960	increment
Bengbu	0.730	0.805	0.907	increment
Fuyang	0.362	0.362	0.999	constant
Huainan	0.793	0.962	0.825	increment
Chuzhou	0.577	0.578	1.000	constant
Lu'an	0.454	0.494	0.920	increment
Ma'anshan	1.000	1.000	1.000	constant
Wuhu	1.000	1.000	1.000	constant
Xuancheng	0.869	0.929	0.935	increment
Tongling	0.745	1.000	0.745	increment
Chizhou	0.500	0.867	0.576	increment
Anqing	0.706	0.708	0.998	increment
Huangshan	0.417	0.712	0.586	increment
Average value	0.658	0.779	0.856	—

In this section, we use DEAP2.1 software to derive the overall efficiency, pure technical efficiency and scale efficiency of social field investment of 16 cities in Anhui in 2021 based on

the output and input indicators selected in the previous section. Where, comprehensive efficiency = pure technical efficiency  $\times$  scale efficiency. The value range of comprehensive efficiency, pure technical efficiency and scale efficiency is 0-1. The closer it is to 1, the higher the efficiency is. When the efficiency is equal to 1, it indicates that the city's investment efficiency in the social field is the most effective. The specific results are shown in Table 4.

Based on the results of DEA, the following analysis of the investment efficiency of social field in various cities in Anhui is carried out from the perspectives of comprehensive efficiency, technical efficiency, scale efficiency and scale benefit respectively.

(1) Comprehensive efficiency analysis by cities. According to the results in Table 4, there are relatively obvious differences in social field investment between cities in Anhui Province. In 2021, only Ma'anshan and Wuhu are cities with effective overall efficiency, while the rest of the cities have ineffective overall efficiency, accounting for 87.5% of the total, with some cities' investment efficiency far below the average level. Regional investment efficiency is roughly divided into three categories according to the size of the comprehensive efficiency measurement: less than 0.5 is a low efficiency region, 0.5-0.9 is a medium efficiency region, and above 0.9 is a high efficiency region. The low efficiency cities include Bozhou, Fuyang, Lu'an and Huangshan; the medium efficiency cities are Hefei, Huaibei, Suzhou, Bengbu, Huainan, Chuzhou, Xuancheng, Tongling, Chizhou and Anqing; the high efficiency cities are Ma'anshan and Wuhu. As a whole, most of the 16 cities in Anhui are in the medium efficiency range, but the persistent low investment efficiency of a small number of cities has prevented the average comprehensive efficiency of Anhui from being effectively improved, which is a key area for future investment adjustment and optimization in the social field.

(2) Technical efficiency analysis by cities. The results of the technical efficiency measurement can reflect the extent to which existing technology levels are fully utilized in the process of investment in the social field of various cities in Anhui. As can be seen from the results in the table, the technically efficient cities include Hefei, Ma'anshan, Wuhu and Tongling, which are mainly cities with strong economic power in Anhui, reflecting the advantages of technical utilization in the process of social field investment in these cities. In addition, although the technical efficiency of Xuancheng and Huainan is not fully effective, it is still at a high level of efficiency, and their ability to fully utilize capital in the social field is also high. When compared with the overall efficiency, it is easy to see that the technical efficiency of most cities in Anhui is significantly higher than the comprehensive efficiency, but there are a few cities with low technical efficiency, such as Fuyang and Lu'an. This situation is due to the lack of technological innovation and scientific investment decision-making methods.

(3) Analysis of scale efficiency and scale benefit of different cities in Anhui. The scale efficiency reflects whether the scale of social field investment in each city is moderate and whether the investment structure is reasonable. From the calculation results in the table, the following characteristics can be found: Firstly, there are only Fuyang, Chuzhou, Maanshan and Wuhu with effective scale. The investment scale of these four cities in the social field has reached a relatively reasonable match with the local economic development, thus obtaining significant scale returns. Secondly, social field investment in most cities is in a non-efficient state of scale, mainly in the range of 0.6-0.95. The scale efficiency of Chizhou and Huangshan is below 0.6, which is far below the average level, indicating that the problem of unreasonable scale and structure of their social sector investment is more prominent. Thirdly, social field investment in Anhui cities as a whole shows the technical characteristics of increasing scale efficiency. Except for Hefei, which is in the stage of decreasing scale benefit, and Fuyang, Chuzhou, Ma'anshan and Wuhu, which are in the stage of constant scale benefit, all other cities are in the stage of increasing scale benefit.

In general, the overall investment efficiency of social field in Anhui Province is low and there are obvious regional differences. The low pure technical efficiency of social field investment is



the main factor leading to the low overall efficiency. Meanwhile, the scale efficiency of social field investment in most cities in Anhui is still in a state of ineffective scale. This also shows that social sector investment is not better with faster and larger investment scale, but should focus on the improvement of investment structure, investment quality and technology utilization level. Therefore, Anhui should pay attention to the positive effects of technological progress in the process of social field investment, and further improve the government decision-making mechanism and investment management methods for social field investment. It is also important to allocate investment resources reasonably to the actual situation of different regions and optimize the scale and structure of investment, so that the scale and speed of social sector investment development can be coordinated with the economic and social development of the region, leading to the improvement of the efficiency of social field investment in each city in Anhui. More importantly, this will facilitate social sector investment to play a more powerful and positive role in driving Anhui's high-quality economic development.

## 5. Conclusions and Recommendations

Through the above research, it is found that from 2011 to 2021, the investment efficiency in the Anhui social field is generally higher than the national average level, but significantly lags behind Jiangsu, Zhejiang and Shanghai. This implies that although the investment of Anhui social field has been developed continuously in recent years and surpassed the national average, there is still a considerable gap compared to other provinces and cities in the Yangtze River Delta, especially Jiangsu, which needs to be further improved. Based on the analysis of the investment efficiency of cities in the province, only Ma'anshan and Wuhu have reached effective overall efficiency in Anhui. The cities of Hefei, Huaibei, Huainan and Chizhou have significantly higher technical efficiency than scale efficiency, and their loss of comprehensive efficiency in social field investment mainly stems from low levels of scale efficiency. The pure technical efficiency of Bozhou, Suzhou, Fuyang, Chuzhou, Lu'an and Anqing are all significantly lower than scale efficiency. Their main reason for the loss of comprehensive efficiency is that technical efficiency has not been effectively improved. There is a significant lag in the level of utilization of existing technical conditions in these cities. Investment in the social field of Anhui Province as a whole shows the characteristics of low investment efficiency and obvious regional disparities. To this end, Anhui must adopt more practical and effective policy measures to improve the efficiency of investment in the social field.

(1) Determine a reasonable scale of investment in the social field and optimize the investment structure. Investment efficiency is closely related to investment scale and investment structure. In order to promote the development of investment in the social field in Anhui, it is necessary to determine a scientific and reasonable investment scale and investment structure. Firstly, the government needs to determine a reasonable investment scale, taking into account short-term investment returns and long-term benefits. Investment in the social field has an important impact on the economic development of Anhui. In the context of high-quality development, it is not only necessary to continue to increase investment, but also to determine a reasonable scale of investment. The government should not only plan a number of projects with low investment, short construction period and quick returns, but also a number of key and supportive construction projects that have strong pulling power, long term benefits and added strength to investment. The lack of projects with significant driving effect is one of the important reasons for the low total amount of investment in the social field in Anhui. The expansion of effective investment in the social sector and the improvement of investment efficiency can play a supporting role for the high-quality development of Anhui economy. Secondly, the government should optimize the structure of investment in the social field and clarify the key investment directions. The focus and direction of investment should be placed on expanding effective

demand, making up short boards and improving people's livelihood. The relative prosperity of the education industry in the current social field investment can be used to drive the common development of other industries. At the same time, local investments should be supported by differentiated policies with reference to the actual investment effects in different regions, in an effort to address the problems of insufficient and excessive investment between regions. Local governments should also make reasonable arrangements for the scale and structure of government investment in accordance with the actual situation in their own regions. Meanwhile, social capital should be guided to actively participate in investment projects in the social sector. It is only by breaking away from the traditional investment mindset, finding investment power points that match local characteristics and enhancing systematic layout that we can inject new momentum into Anhui's economic growth [5].

(2) Deepen the supply-side reform in the social field and stimulate the development potential of regional investment. In order to improve the investment efficiency in the social field of Anhui and change the current situation of uncoordinated regional investment development, in the long run, it is necessary to fundamentally optimize the investment structure in the social field, release the potential of effective investment demand, promote regional economic development, and actively cultivate momentum to support investment development. First, further deepen the supply-side structural reform and optimize the allocation of resources for investment in the social field. In order to promote high-quality economic development, investment in the social field should change its investment orientation, abandon the traditional investment concept of blindly pursuing total investment and growth rate, adhere to the basic principle of "quality first, efficiency first", and pay more attention to investment efficiency and investment quality. In the process of promoting the supply-side reform in the social field, it is necessary to resolutely eliminate repetitive and low-level investment, and promote the high-quality development of Anhui's economy with high-quality investment. Second, vigorously develop the regional economy, and the focus is to enhance its attractiveness in the capital market. In reality, the flow of capital is from economically underdeveloped regions to developed regions. For regions with better economic development, their investment projects are naturally easy to be favored by the capital market and have strong project financing capacity, and thus the efficiency of capital utilization is naturally high. The uneven distribution of investment efficiency in Anhui Province is inseparable from the disparity in regional economic development. According to their own characteristics, each city should focus on cultivating local characteristic industries and advantageous industries, develop and strengthen leading enterprises, enhance the competitiveness of enterprises in the capital market, and widely absorb various social funds to invest in the construction of social projects [6]. In the next stage, Anhui should focus on solving the problem of uncoordinated development among cities, adapt to the actual situation of investment efficiency in each city, implement differentiated policy support and build a more reasonable city investment system. It is also necessary to further play the guiding role of Hefei as a central city and drive the coordinated development of surrounding cities. At the same time, more regional central cities should be cultivated and the coordinated development of the regional economy could be led through central cities. Continuously promoting the revitalization of northern Anhui, guiding the comprehensive and rapid development of northern Anhui, thus further narrowing the development gap between the north and south of Anhui and achieving coordinated development of investment in the social field across the province.

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