

Enhance the Innovation Capacity of the Industrial Chain by Effective Technology Investment Based CNN Prediction

Linglan Fu¹, Jinlong Su^{2*}

¹Quanzhou institute of information engineering, Fujian Open University Quanzhou branch, Quanzhou, China ²TSL School of Business, Quanzhou Normal University, Quanzhou, China

*Corresponding author: su_jinlong @hotmail.com

Abstract. This paper analyzes the main problems and difficulties faced by private enterprises in Fijian Province, and discusses the countermeasures to effectively speed up the transformation and upgrading of private enterprises through multiple field investigations inside and outside the province. Through in-depth analysis and research, the research group puts forward corresponding countermeasures, that is, accelerating the supply side structural reform, and strive to provide useful policy suggestions for accelerating the transformation and upgrading of private enterprises in Fujian Province. Moreover, the research group uses the Chaotic Neural Network optimization algorithm, which is actually an improved Hopfield Network (CNN) to analyze and predict the existing economic development data and science and technology investment data, hoping to play a certain guiding role in the government's science and technology investment budget.

Keywords: Industrial Chain, Technology investmen, Chaotic Neural Network

1 Introduction

In recent years, Fujian Provincial Government attaches great importance to the improvement of scientific and technological innovation ability of Fujian Province, takes R&D investment as the core index of scientific and technological innovation, and gradually establishes a diversified scientific and technological investment system. During the "13th Five-Year Plan" period, the average annual growth rate of the whole society's R&D investment in Fujian Province is relatively high, and the growth rate has been maintained at about 18% for many years, which is 6 percentage points higher than the national average level. However, due to the small base, the investment intensity is still lower than the national average level. In 2019, the investment intensity of research and experimental development (R&D) in Fujian Province is 1.78%. It is 2.23% lower than the national average, and still ranks the 15th in the country. The fiscal funds of Fujian Province have a large increase in R&D investment, which are 6.08 billion yuan, 6.85 billion yuan and 8.53 billion yuan respectively in 2017, 2018 and 2019, with an average annual growth of 15.48%. In 2019, enterprises, government-affiliated research institutions and institutions of higher education in Fujian province accounted for 87.0%, 4.5% and 7.5% of R&D investment respectively. There is no doubt that enterprises are the main body of scientific and technological innovation in Fujian province. Fujian province has vigorously promoted the development of science and technology finance, innovated financial products "science and technology loan", promoted science and technology insurance, set up science and technology achievement transformation fund, and supported the development of science and technology small, medium and micro enterprises, and promoted more diversified research and development input of the whole society.^[1]

In order to maintain long-term development in the fierce market competition and build a solid foundation for scientific and technological innovation, Fujian must perfect the multi-scientific and technological investment mechanism, so as to enhance the core competitiveness of Fujian and ensure sustainable development.^[2]

The research is supported by the achievements of some projects, such as the "Research on the block chain technology management innovation of emergency resource supply chain" (FJ2020B045) and which is a Fujian Social Science Planning Project, the "A special study on the system of River and lake chiefs in Yongchun County" (2020H25) which is Quanzhou Social Science Planning Project.

This paper, which lays the burden upon the current situation of Economic development in Fujian, the research group argues that the government's investment in scientific research is insufficient and unevenly distributed. At the same time, the research results of the group on perfecting the multi-S&T investment mechanism in Fujian Province are given. The overall organization of the paper is as follows. After the introduction, in Section II we present the current situation of Economic development in Fujian, and it lists a lot of data and charts. The research team believed that the industrial development of Fujian Province is in urgent need of improving the multi-technology investment mechanism in Fujian Province. In Section IV, the research group suggests that the government take some measures to adjust the mechanism of scientific research investment. It is suggested to improve the sustained and stable growth mechanism of fiscal investment in science and technology. Expand financing channels, guide and encourage all sectors of society to increase investment in science and technology; Vigorously guiding the investment of enterprises, strengthening the main position of investment of enterprises, improving the ability of independent innovation of enterprises and other measures are put forward and elaborated in detail. Finally, Section V concludes the paper.

2 Current Situation of Economic Development in Fujian

According to the "2020 Statistical Communique on National Economic and Social Development of Fujian Province" issued by the Fujian Provincial Bureau of Statistics, the annual GDP of Fujian Province in 2020 reached 4.390389 billion yuan, an increase of 3.3% over the previous year. Of which, the added value of the primary industry was 273.32 billion yuan, up by 3.1%; the added value of the secondary industry is 2,032.88 billion yuan, up 2.5%; The added value of the tertiary industry was 2,084.278 billion

yuan, up by 4.1%. The added value of the three industries accounted for 6.2 percent of the GDP of the primary industry, 46.3 percent of the secondary industry and 47.5 percent of the tertiary industry. The online retail sales of wholesale and retail enterprises above designated size reached 140.592 billion yuan, up 14.2 percent over the previous year. The revenue of key Internet enterprises reached 68.09 billion yuan, an increase of 8.8% over the previous year. The profits of industrial enterprises above designated size reached 347.08 billion yuan, down 9.7% from the previous year. In terms of economic types, state-owned enterprises posted a loss of 110 million yuan from 194 million yuan in the same period last year. The profit of collective enterprises reached 604 million yuan, up 8.8 percent; Joint-stock enterprises 232.00 billion yuan, down 6.3%; Enterprises invested by foreign investors and those from Hong Kong, Macao and Taiwan reached 111.115 billion yuan, down 16.1%; Private enterprises reached 178.604 billion yuan, down 7.6%. The asset-liability ratio of industrial enterprises above designated size was 50.4 percent, down 0.4 percentage points from the previous year. The cost per 100 yuan of main business income was 86.51 yuan, and the profit margin of operating income was 6.26%.

During the "13th Five-Year Plan" period, the province's GDP rose to 3 trillion yuan and 4 trillion yuan successively, with an average annual growth rate of 7.1%. Total revenue in the general public budgets reached 2.425.114 trillion yuan, local government revenue in the general public budgets reached 1.46316 trillion yuan, and expenditure in the general public budgets reached 2.408.478 trillion yuan, 1.4 times, 1.4 times and 1.6 times the figures for the 12th Five-Year Plan period, respectively.

In 2020, the economic volume of Fujian Province will be 4 trillion yuan (4.390389 billion yuan), accounting for about 4.32% of the national economic aggregate of 10,15986 billion yuan in the same period, and 8.35% of the eastern ten provinces and cities' economic aggregate of 5,25733 billion yuan in the same period.

Influenced by COVID-19, Fujian's overall economic growth slowed down, among which the impact of private enterprises was much more serious than that of state-owned enterprises. But Fujian's economy is recovering, and its GDP growth continues to gap with the rest of the country. First of all, for the service industry, whose GDP contribution rate has increased significantly in recent years (after 2015), consumption in some areas of Fujian showed negative growth in the prevention and control measures in the first and second quarters of 2020. The resumption of work and production comes first from industry, because only when industry is in operation can human beings have income and go to various businesses for consumption. Otherwise, the service industry will face the problem of lack of customers. The service sector accounted for nearly 50% of employment, up from 30% in 2003. The resumption of work and production began to focus on exports because the domestic market was damaged by a two-month closure. This approach is advantageous to Fujian. Fujian is already a major exporter of daily necessities. The first thing to revive is the production of daily necessities to ensure daily necessities.



Fig. 1. Total GDP of Fujian province and its growth rate from 2013 to 2020 (The data are from the China Business Industry Research Institute database)

The number of small and medium-sized enterprises in China accounts for more than 99% of the total number of enterprises in the country. They are the fresh force of China's economic development and play an important role in promoting economic growth, relieving employment pressure and maintaining social stability. Fujian province, especially Fujian minnan area, is one of the most active places for the development of private enterprises in China. In the past 40 years since the reform and opening up, the number and scale of private enterprises in Fujian have been growing rapidly year by year. Private enterprises have become one of the main driving forces for the economic development of Fujian, especially in southern Fujian.

However, due to many natural defects of private enterprises in capital strength, development strategy, management and technology upgrading, market expansion, etc., the abnormal death and shortened survival period of private enterprises has become a new normal in the development process of China's private economy.^[3] In recent years, China's economic development and growth mode will have a major change in the macro background, private enterprises in the low industrial quality is a private enterprise in the process of development is more prominent and urgent to solve the problem.^[4]

Private enterprise holds the balance in Fujian economy position. After years of development, private enterprises in Fujian have undergone great changes in their management system and operating mechanism, which have greatly improved their vitality and competitiveness. Under the new normal, there are still many institutional, institutional, structural and historical problems that private enterprises need to further solve and they are becoming increasingly difficult. In the macro environment where the new round of scientific and technological revolution and the transformation and upgrading of China's manufacturing industry form a historic intersection, Fujian, as one of the most active regions for private enterprises in China, must seize the historical opportunity, give full play to its advantages, transform and upgrade in an all-round way, and stride into the ranks of the strong manufacturing provinces in China.^[5-7]

Our research group investigated a large number of private enterprises in Fujian, and found that currently private management methods are generally backward, there is a shortage of truly competent management talents, professional managers and enterprise owners have a low degree of mutual trust, and family management and paternalistic management methods are still common.^[8] Many small and medium-sized private

enterprises complain that a small number of enterprises collude with officials and businessmen to use unfair means of competition to achieve abnormal development. In recent years, private enterprises in Fujian Province, especially small and medium-sized private enterprises, generally suffer from financing difficulties and lack of development momentum. Many small and medium-sized private enterprises are weak in resisting risks and look forward to group development. ^[9,10]



Fig. 2. The proportion of added value of the three industries in GDP of Fujian province from 2013 to 2020 (The data are from the China Business Industry Research Institute database)

3 The deficiency of scientific research investment mechanism in Fujian

First, the research team believes that the current guiding role of financial investment in science and technology is not enough. Government investment in science and technology is the first guarantee for science and technology innovation and the basis for guiding and driving more social capital to invest in research and development. Compared with the national advanced provinces and cities, the fiscal investment in science and technology in Fujian Province is still insufficient, so the guiding role of fiscal investment in science and technology in Fujian Province was 14.73 billion yuan, accounting for only 2.89% of the total fiscal expenditure. The lower proportion of financial investment in science and technology in Fujian will restrict the improvement of independent innovation ability, especially the original innovation ability. The lack of investment in science and technology in Fujian Province.

Second, the research team found that the current source of funding for science and technology is relatively homogeneous. Science and technology investment in Fujian Province has been transformed from single financial allocation to multi-channel investment and financing. However, in recent years, especially since the epidemic, it is difficult to carry out large-scale science and technology investment due to the shortage of financial funds and enterprise funds. At the same time, the financial system reform in Fujian makes the bank loan business, and there are a lot of concerns about the risk of science and technology financing.

Third, the research group believes that at present most enterprises, especially private enterprises, lack of motivation for independent investment. On the whole, enterprises are still the main body of R&D investment in Fujian Province, and the increase of their R&D expenditure will play a very important role in driving the R&D of Fujian Province. But the survey found the sustainable development of industrial enterprises in Fujian province lack of long-term perspective and the forerunner of the advanced consciousness of science and technology, backward still remain in the extensive growth mode, the growth of the pursuit of economic benefits, ignoring the benefits of growth the real driving force of the technology development activities, due to the lack of funds or thought not value or no suitable projects such as a variety of reasons not to carry out science and technology activities, The dominant role of enterprises in technological innovation has not been given full play.

Fourth, the research group believes that the current government investment in science and technology is out of step with market demand. In addition to non-public enterprises, the input of public ownership on behalf of the government and the input of public ownership enterprises in Fujian province obviously show low efficiency, and the input mechanism of science and technology is still with strong planning color. The results show that although the market mechanism type investment is blind, but because it directly faces the market, tightly grasp the market needs to carry out scientific and technological research and development, shows the market mechanism has a strong creativity, vitality and vitality. Although the plan is forward-looking, it is often divorced from reality. The human and financial input is not directly oriented to the market demand, and all the research and development purposes are not closely linked to the market, so the targeted efficiency of research and development is not strong.

Finally, the research team believes that the current government investment in scientific research output benefit evaluation mechanism is missing. The overall ability of scientific and technological innovation in Fujian is still insufficient, and the efficiency of scientific and technological output is not high relative to the capital input. This is mainly because of the poor management of science and technology industry policies, the formulation of science and technology project planning and plan, the establishment and evaluation of science and technology project, the competitive bidding and bidding of science and technology project, and the use and supervision of science and technology project funds in Fujian province, which makes the use of science and technology funds less effective.

4 Suggestions on Establishing and Perfecting the Mechanism

Firstly, the research group suggests a system to ensure the sustained and stable growth of Fujian's fiscal investment in science and technology, and promote the role transformation of fiscal investment in science and technology. Recommended to save the budget management and science and technology management system reform, the government invests to establish advance and stable growth mechanism, continue to ensure that investment in science and technology is growing faster than the growth rate of economic development at the same time, the transformation of the original financial direct investment form of fiscal expenditure on science and technology, clear strategy of fiscal expenditure on science and technology in Fujian province and key.

It is necessary to establish a strategic planning system for scientific and technological foresight of major commonality, critical nature and public welfare. Research Suggestions concerning the economic and social development of science and technology problem to be solved, the financial department under the State Council in conjunction with the relevant departments of the in-depth investigation organization experts, to foresee the science and technology, determine the research direction and support key, after the government in the name of unity, for the community to the whole society to tender, open, fair and transparent competition selection mechanism.

It is necessary to reconstruct the system and mechanism of science and technology investment in Fujian Province. Suggestions in terms of financial input province science and technology research and development, the dispersed in Fujian province government departments long investment focused on science and technology department, the formation of other government departments to coordinate and execute the plan not only master of my own research issues and funds, to form a resultant force focused on technology and breakthrough in Fujian's economic and social development needs, through short-term low profits, high long-term benefit of the key areas, Forming the scientific research foundation of the core industry in the province.

In order to improve the performance of science and technology investment, we should innovate the use mode of financial funds in scientific research investment in Fujian. Suggest to learn from Jiangsu, Shandong and other provinces effective practice, innovation institute of Fujian province as pilot reform, innovation, use of public funds established by gen institute investment development co., LTD., use "dial the appeal to the idea of" flexible, early in the form of grants to support their initial high technology project, after the success of the project incubation, stake and allocated according to the valuation of the market into a timely exit, We will guide and leverage private capital to make precise investment in scientific and technological innovation, and improve the performance of investment in science and technology.

Second, the research group believes that the financing channels of scientific research investment should be broadened as soon as possible, and all sectors of society should be guided and encouraged to increase scientific and technological investment.

The management system of risk fund of science and technology investment should be established with scientific management and reasonable structure. Suggested that regulate the behavior of venture capital market, improve the existing pure composed of government funds risk investment of the company's equity structure, suggested by the innovation research investment development co., LTD., established in Fujian province science and technology innovation fund, set up special funds, selecting the professional management team, supporting to establish initial high technology project financing risk compensation, liability, fault tolerance, such as mechanism, Extensive participation of private capital and venture capital institutions. To promote professional managers, government officials should not interfere in the normal operation of enterprises, and government departments should not directly interfere in the operation of specific projects to regulate property rights transactions.

The policy-making institutions should actively explore the channels for science and technology investment, such as the special bonds issued by the Fujian government. It is suggested that the special bonds of Fujian provincial government should be used to invest in the infrastructure construction of scientific research institutions and the research and development of reimbursable scientific research institutions and colleges and universities, so as to open up new financing channels.

It is suggested that science and technology development reserve system should be established as soon as possible in Fujian Province. It is suggested that a new tax system of science and technology should be set up to encourage enterprises to invest in science and technology and make innovation. The system of "science and technology development reserve" should be implemented to allow related enterprises to draw a certain proportion of science and technology development reserve for technology development, technical training, technological innovation and the introduction of research facilities. By using preferential tax incentives to support scientific research and development activities of enterprises, we can adopt the method of supporting basic research and development enterprises in advance and encouraging applied development enterprises after the fact. By giving tax incentives to the transferors and purchasers of scientific research achievements, encouraging the transformation of scientific research achievements and using tax incentives to encourage high-tech transformation and scientific and technological innovation of enterprises, the research and development funds can be included in the cost.

It is suggested that local banks should be guided to develop scientific research credit business. It is suggested to improve the financial system of investment in science and technology, guide non-policy banks to actively research and develop credit services suitable for the development of small and medium-sized enterprises, and encourage policy banks to support the development of small and medium-sized enterprises with high technology content and good economic benefits in their existing business scope, which are in line with the national industrial policies, have market prospects; Explore the way to establish guarantee and re-guarantee for small and medium-sized enterprises.

Third, the research group believes that the government should vigorously guide the investment of enterprises, strengthen the dominant position of enterprise investment, and improve the independent innovation ability of enterprises.

It is suggested that the government should try to guide the entrepreneurs to improve the enthusiasm of science and technology investment. We should attach great importance to giving full play to the role of entrepreneurs in independent innovation, establish and improve the incentive mechanism for entrepreneurs, stimulate their enthusiasm for independent innovation, and cultivate a group of entrepreneurs with modem management ideas and innovative spirit. For state-owned enterprises or state-owned holding enterprises, one aspect is to improve the overall quality of entrepreneurs.

Fujian province should establish the firm scientific and technological input index. It is suggested that for "foreign-funded" enterprises, strong measures should be taken to stimulate their enthusiasm to introduce advanced technology, make them give full play to their technological and managerial advantages, and reflect their original intention of establishing "foreign-funded" enterprises. Make it play a demonstration and driving role, and realize the digestion, absorption and innovation of technology, and realize the combination of introduced innovation and independent innovation.

The government should formulate policies to improve the internal demand of enterprises for S&T investment. It is suggested to strengthen the construction of technology development capacity of enterprises, encourage qualified enterprises to establish research and development institutions as soon as possible, encourage large and mediumsized enterprises to merge research institutes, guide researchers into enterprises, and urge enterprises to increase investment in technology development. It is necessary to accelerate the pace of adjustment of industrial structure and product structure. While actively developing new and high technology industries, it is necessary to intensify the technological upgrading of traditional industries. It is necessary to regularly issue technical guidelines for transforming traditional industries with new and high technologies and catalogues of obsolete processes and technologies, so as to encourage enterprises to increase investment in science and technology and improve the scientific and technological content of products.

The government should formulate policies to strengthen the support for the technological progress of SMEs. It is suggested to further establish and perfect the system system to provide support for the technological progress of small and medium-sized enterprises, establish and perfect the laws and regulations to promote the technological progress of small and medium-sized enterprises, to provide institutional guarantee for the technological innovation of small and medium-sized enterprises. The government finance can increase the support for the technological progress of SMEs by means of tax preference, financial investment and financing and government procurement. In order to promote the technological progress of small and medium-sized enterprises, the relevant functional departments of the government can also provide support for small and medium-sized enterprises in the aspects of information, technical personnel training and other services.

Fourthly, the research group and Fujian provincial government should seek to establish a more efficient S&T investment mechanism based on market orientation.

It is suggested that the policy should optimize the system structure of market-oriented mechanism and improve the synergistic effect of mechanism. It is suggested that the system of science and technology in different fields should be deeply reformed according to the law of market according to the decisive role of market allocation of resources. It is suggested that the institutional arrangement in the technology market oriented mechanism system can be divided into two levels. The first level does not directly encourage and restrain, but it plays a fundamental supporting role for the whole research and development activities, such as property rights protection system, intellectual property rights protection system, salary system, etc. The second level is specifically designed for a certain transaction or specific research and development behavior, such as industry-university-research cooperation mechanism, technology introduction system, research and development fund input mechanism, etc.

It is suggested that the driving role of government behavior should be gradually strengthened while the substitution role of government behavior should be weakened. Suggested that the government should strengthen the property right system arrangement,

the promoting function of intellectual property rights protection system and other basic system, try to exit from the specific transaction behavior and research and development, make both parties and action main body under the condition of no pressure and interference, makes a fair game, thus effectively promote the evolution of market-oriented mechanism.

Finally, the research group believes that Fujian provincial government should establish a more transparent evaluation mechanism of scientific research input-output benefit. It is recommended that a policy be developed to ensure a high degree of overall transparency of R&D research within the province. Recommends that, in addition to state secrets, every government-funded research should be fully disclosed from the very beginning of the application process, including the application, research focus and breakthrough points; In the research process, the full disclosure of research progress; The results are also made public. In order to facilitate the whole society and the industry direct supervision, and the corresponding formation of the researchers' evaluation and archival records.

It is suggested that a system should be formed to enhance the transparency of the use of government-funded research funds, and the R&D expenditure should be disclosed to the whole society as soon as possible to ensure that the research funds are used for real research. It is suggested that the transparency of research expenditure needs the support of law and research management system, and more importantly, the courage of the whole society. This can avoid the dilemma of low research quality caused by the large amount of research funds used in non-research fields in China's current scientific research system. The research group believes that the proportion of scientific research spending received and used should be increased as soon as possible. It is suggested that the working environment and treatment of scientific and technological personnel should be improved through indirect expenditure. The implementation of performance expenditure should reflect the value of scientific research personnel and give full play to the incentive role.

The research group recommends legalizing investment in science and technology. It is suggested that Fujian Province should introduce relevant policies and regulations to stabilize and ensure reasonable investment in science and technology to make it a dapt to the GDP of each region. The government of Fujian Province should set up special projects to support the capacity building of grass-roots science and technology departments in the areas with lagging economic and technological development in the province, and provide more opportunities for the backward areas in the province in applying for practical technology projects that can bring better economic benefits.

5 Optimization budget algorithm of science and technology based on artificial intelligence prediction

A mathematical model of chaotic neural network optimization algorithm based on annealing strategy was applied to help the Hopfield Network avoiding the local minima, improving the efficiency of the algorithm based on the principle of ensuring the accuracy of operation.^[11-13]

$$y_i(t+1) = ky_i(t) + \mu(\sum_{j=1}^N w_{ij}x_j(t) - T_i) - L_i(t+1)(x_i(t) - T_{0i})$$
(1)

$$x_{i}(t+1) = \frac{1}{1 + exp(-y_{i}(t+1)/\varepsilon_{i}(t))}$$
(2)

In the above expression, $L_i(t+1) = (1+\beta)L_i(t)$, $\varepsilon_i(t+1) = [\varepsilon_i(t)]^{1/2}$ $i, j = 1, 2, \dots, N_i, j = 1, 2, \dots, N$ and $(i = 1, 2, \dots, n) \cdot x_i(t)$ represents the NO. *i* neuron of NN; $y_i(t)$ is the output station of the NO. *i* neuron. w_{ij} represents the weight between neuron NO. *j* and neuron NO. *i*. T_i is the compensation of NO. *i* neuron. μ is an direct proportion parameter. *k* is attenuation factor, and $0 \le k \le 1$. $L_i(t)$ gives self-feedback of weight of neuronal connection, and $L_i(t) \ge 0$. I_0 is a positive constant parameter. $\varepsilon_i(t)$ represents the gradient parameter of output, and $\varepsilon_i \ge 0$. Study of dynamic characteristics of network theory shows that, the third term of the above expressions will step down and vanish finally, while the neurons have time-variation gain improving the dynamics characters of network as well as enhancing the information process ability of NN.

$$E = \frac{a}{2} \sum_{x} \sum_{i} \sum_{j \neq i} v_{xi} v_{yj} + \frac{b}{2} \sum_{i} \sum_{x} \sum_{y \neq x} v_{xi} v_{yj} + \frac{c}{2} (\sum_{x} \sum_{i} v_{xi} - n)^{2} + \frac{a}{2} \sum_{x} \sum_{y \neq x} \sum_{i} d_{xy} v_{xi} (v_{y,i+1} + v_{y,i-1})$$
(3)

The network operation expression is:

$$\begin{cases} \frac{du_{xi}}{dt} = -\frac{u_{xi}}{\tau} - a \sum_{j \neq i} v_{xi} - b \sum_{y \neq x} v_{yi} \\ -c (\sum_{x} \sum_{i} v_{xi} - n) \\ -d \sum_{y} d_{xy} (v_{y,i+1} + v_{y,i-1}) \\ v_{xi} = f(u_{xi}) \end{cases}$$
(4)

In the expression, a > 0, b > 0, c > 0, d > 0 are constant. Through the Variable Structure Control for lyapunov function of Chaotic Neural Network, the network will converge on Hopfield Network gradually, and the strategy enhances the global search efficiency & ability of the algorithm. We are trying to use this algorithm to jointly forecast the science and technology investment and market demand in recent years, hoping to find out the science and technology investment budget method that suits the current situation of China's economic development. However, so far, our algorithm still stays in simulation prediction. Due to various reasons, this paper has not shown the real economic data and science and technology investment prediction. Here, we use a prediction graph based on the dollar index to represent our prediction algorithm.



Fig. 3. Prediction chart of science and technology investment prediction algorithm (Real data cannot be displayed due to confidentiality reasons)

6 Conclusion

In this paper, study on perfecting the mechanism of multiple science and technology investment in Fujian province was presented. Specifically, the current situation of Economic development in Fujian was introduced. In addition, the impact of the new normal of economic development on private enterprises. Fujian civilian battalion enterprise compares major, had formed brand effect, because this Fujian also will become civilian battalion enterprise development an important practice example. In terms of improving the development quality of private enterprises in Fujian and promoting the transformation and upgrading of private enterprises, there is still great room for improvement in government policies, laws, regulations and government management. The adjustment of R & D input of industry chain in Fujian is becoming one of the main problems of economic growth. After in-depth investigation and analysis of the problem, the research team proposed several measures, including: improving the mechanism of sustained and stable growth of fiscal investment in science and technology; Expand financing channels, guide and encourage all sectors of society to increase investment in science and technology; Vigorously guide the investment of enterprises, strengthen the main position of the investment of enterprises, improve the ability of independent innovation and other corresponding solutions.

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