Research on Supporting Independent Innovation of Private Enterprises

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Abstract. This paper focuses on the Government's Help to provide help for independent innovation of private enterprises. The research group believes that at present, many enterprises in FuJian have not formed into the innovation subject, lack of innovation motivation, products remain in the low-end field, and form path dependence. These problems are becoming an obstacle to the current economic development. The research team found that the enterprise management innovation in FuJian is lagging behind at present, there is a shortage of truly competent management talents, and the paternalistic management of family management is still prevalent. After thorough investigation and analysis, the research group put forward several feasible schemes.

1. Introduction

This paper analyzes the main problems and difficulties faced by private enterprises in upgrading and upgrading in our province and explores the countermeasures for effectively accelerating the transformation and upgrading of private enterprises through several field investigations inside and outside the province. Through several provincial surveys and cross-provincial studies, the research group visited several typical private economic regions and their successful enterprises, explored their successful development experience and regional policy advantages, and put forward some countermeasures to accelerate the transformation and upgrading of private enterprises. Through investigation, the research group found that private enterprises in our province are facing problems in the new normal of economic development on private enterprises many impact; Through in-depth analysis and research, the research group puts forward the corresponding countermeasures, that is, accelerate the supply-side structural reform, and strive to provide beneficial policy advice and Suggestions for accelerating the transformation and upgrading of private enterprises in our province.

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.

In this paper, the authors research into the comprehensive curriculum reform of intelligent manufacturing in colleges and universities serving local areas. It is supported by the achievements of some projects, such as the “Introduction to E-Commerce’ Provincial Quality Open Online Course Project” (Project Number: QZTCJWC20180103) which is funded by the education department of Fujian province, the “Overseas Visiting Scholar Program of Fujian Province Academic Leaders Training Program” which is funded by the education department of Fujian province, the “Intelligent Manufacturing Majors in Colleges and Universities Serve Local Education Reform” (Project Number: FBJG20170210) which is provincial educational reform program and funded by the education department of Fujian province, the “Joint Research on Agile
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This paper, which lays emphasis upon the current situation of Economic development in FuJian, and the Research on supporting independent innovation of private enterprises in FuJian. 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 team thinks FuJian private enterprises still have not much innovation, competitiveness is not strong is an urgent need to promote innovation, this part are clarified in section III, mainly reflected in the deficiency of manufacturing innovation and management innovation. In section IV, the research group suggested that the government should take measures to help enterprises promote their innovation ability. The team suggested measures include: guiding FuJian private manufacturing enterprises with the help of high-tech transformation, guide the corporation timing low cost increase manufacturing equipment, guide the state-owned research institutions serving corporation, guide the corporation to custom-made talents in colleges and universities, set up to serve the public product satisfaction research institutions and encourage private enterprises to improve the quality of products, policies to encourage private enterprises to play "spirit" to improve the quality of consumer goods, etc. Finally, Section V concludes the paper.

2. Current Situation of Economic Development in FuJian

In 2018, the GDP of FuJian reached 3,580.404 billion yuan, an increase of 8.3 percent or 0.2 percentage points over the previous year in comparable prices. By sector, the added value of the primary industry was 237,982 billion yuan, up 3.5%; The added value of the secondary industry was 1,723,236 billion yuan, up 8.5%; The added value of the tertiary industry was 1,619,186 billion yuan, up 8.8%. In 2018, the added value of industries above the designated size in the province increased by 9.1 percent or 1.1 percentage points over the previous year. The value added of light industry increased by 8.9 percent and heavy industry by 9.2 percent. By type of registration, the added value of state-owned enterprises increased by 7.8 percent, joint-stock enterprises by 10.3 percent, joint-stock cooperative enterprises by 14.4 percent, and enterprises with foreign investment and investment from Hong Kong, Macao and Taiwan by 6.9 percent. The value added of the mining sector grew by 7.8 percent, the manufacturing sector by 8.9 percent, and the power, heat, gas and water production and supply sectors by 11.9 percent. However, under the background of the us-china trade war, our province is faced with the new normal of intensified market competition, traditional overcapacity, strengthened resource and environmental constraints, and rising cost of factors, the development of our manufacturing industry is also faced with severe challenges, and the transformation and upgrading is urgent.

![Figure1. Total GDP of FuJian province and its growth rate from 2013 to 2018](image1)

![Figure2. The proportion of added value of the three industries in GDP of FuJian province from 2013 to 2018](image2)

(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.

In 2018, the ex-factory price of industrial producers in the province rose 2.8 percent, or 1.3 percentage points less than that of the previous year. December was up 2.4% from a year earlier and down 0.6% from a month earlier. In 2018, the purchase prices of industrial producers rose 2.8 percent year-on-year, or 2.5 percentage points less than the previous year. December was up 1.2% from a year earlier and down 1.0% from a month earlier.

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. 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.

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. 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 our 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.

3. Private Enterprise Innovation is Still Insufficient and International Competitiveness is Not Strong

First of all, many enterprises have not yet formed into the innovation main body, the innovation impetus is insufficient, the product stays in the low-end field, forms the path dependence. At present, private enterprises in FuJian are mostly distributed in traditional industries, with most of them being labor-intensive. Many of them are in the middle and low-end links of the industrial chain and value chain, and the proportion of strategic emerging industries is relatively low. Some industries have low industrial concentration, low efficiency of resource allocation, weak core competitiveness and problems such as repeated construction, vicious competition, waste of resources and environmental pollution. In terms of industrial quality, these problems are reflected in the quality of products, benefits, brands, personnel, management, environmental protection and capital utilization.

At present, private enterprises in FuJian are mostly distributed in traditional industries, with most of them being labor-intensive. Many of them are in the middle and low-end links of the industrial chain and value chain, and the proportion of strategic emerging industries is relatively low. Some industry industry concentration degree is low, the resource allocation efficiency is not high, the core competitiveness is not strong, the repetitive construction and malignant competition, resource waste and environmental pollution problems, in the industry for the quality of product quality and efficiency is reflected on the quality, brand quality, personnel quality, management quality and environmental quality, insufficient use of various funds. Private enterprises should focus on accelerating the transformation of the development mode, improving the quality and efficiency of development, highlighting the deepening of reform, structural adjustment, innovation driven, management improvement and strive for new breakthroughs.
In addition, management innovation lags behind, real competent management talents are scarce, and family management and paternalistic management still prevail. The improvement of intelligent management is the foundation for private enterprises to improve the development quality and benefits. For a long time, the scale growth of private enterprises in China, especially in Fujian, has not brought the synchronous growth of benefits and cash flow, the operation quality is not high, the development mode is extensive, and the tendency of family paternalistic management is serious. Family business has both advantages and disadvantages. With the gradual growth and maturity of the enterprise, its disadvantages are gradually revealed, which is the restriction and fetter for the expansion and sustainable development of the family business. The dilemma of family business management is mainly reflected in the lack of management talents and unscientific management methods. Such extensive and human-governed management may be covered up when the economic situation is good, and exposed when the economic situation is bad, and even affect the survival of the enterprise.

Family businesses also, like other things, the pros and cons begets, has its advantages, also has its disadvantages, these disadvantages are decided by the particularity of the family business, attached to this kind of particularity, and along with the family business growth period and mature gradually revealed gradually, become a family business grow and imprison and fetter of sustainable development, and thus the so-called "theory of three generations of death", namely "generation business, the second generation implementation, the three generations of wu industry". After investigation, it is found that the family-oriented management dilemma of minnan enterprises is mainly reflected in the management talents and the unscientific management style. In terms of management talents, professional managers are mixed, unable to gain the trust of family members, and family enterprises can only appoint relatives to assume important positions, leading to the paternalistic management with unscientific management methods and irrational management decisions.


Firstly, we believe that the government should guide private manufacturing enterprises in Fujian to transform with high-tech. The improvement of intelligent management is the foundation for private enterprises to improve the development quality and benefits. For a long time, the scale growth of private enterprises in China, especially in Fujian, has not brought the synchronous growth of benefits and cash flow, the operation quality is not high, the development mode is extensive, and the tendency of family paternalistic management is serious. This kind of extensive and human-oriented management may be covered up when the economic situation is good, and exposed when the economic situation is bad, and even affect the survival of enterprises.

We believe that to improve the quality and efficiency of the development of private enterprises, we must take advantage of the opportunity of information and intelligent management to promote the improvement of standardized management and ensure effective results. With the help of the construction of cloud computing technology and intelligent manufacturing technology platform, management experience should be solidified, management efficiency should be improved and a long-term mechanism of intelligent management and management innovation should be established.

The research group believes that government departments should promote the application of enterprise intelligent management and decision-making while guiding the upgrading of enterprise intelligent manufacturing. With intelligent manufacturing platforms and cloud computing platform of enterprise internal management platform for intelligent decision and management of the upgrade, to strengthen the construction of operation and mechanism of internal marketization, strengthening budget control and perform analysis evaluation, improve the comprehensive risk management system, optimize the debt scale and structure, implementing lean management, speed up the informatization construction, comprehensive combing to optimize workflow, establish a system of scientific and practical standard and system, realize the management system of institutionalization, streamline, process the information.
Secondly, we suggest that the government should guide private enterprises to seize the opportunity to upgrade manufacturing equipment at a low cost. From the perspective of industrial laws, currently, the intelligent manufacturing model characterized by the deep integration of the new generation of information technology and manufacturing technology is leading to a new round of industrial transformation. From the perspective of production mode, digitalization, virtualization and intelligent technology will run through the whole product life cycle. From the perspective of production mode, flexible, networked and personalized production will become a new trend of manufacturing mode. From the perspective of production organization, globalization, service and platform will become a new way of industrial organization. From the perspective of supply requirements, at present, the overall market demand for products is not prosperous, but the products with high added value, complete functions and high cost performance are in short supply, which indicates that the market surplus is relative, and product quality, performance and brand competitiveness are the key. Besides r&d and design, the quality and performance of products are more dependent on the equipment level of manufacturing products. Besides, whether r&d and design concepts can be reflected depends on the level of equipment. The upgrade of manufacturing equipment is an important starting point of supply-side structural reform. From the perspective of basic power, FuJian's solid private industry foundation provides conditions for the equipment upgrading of enterprises. In FuJian, enterprises have made great progress in terms of scale, strength, production equipment and technical level, and have preliminarily possessed the ability to realize the CNC, intelligent and networked upgrading of equipment. At the same time, the growth of investment has entered a trough period, and the cost of imported advanced equipment is relatively low. This is exactly the favorable time for enterprises to intensify technological transformation and invest in manufacturing equipment. The research group believes that the government should introduce policies to support private enterprises to upgrade their technology and equipment, and guide them to seize the opportunity to improve their manufacturing equipment and production efficiency at a low cost.

Thirdly, the researchers think the government should further guide state-owned research institutes to serve private enterprises. Implementing the strategy of innovation-driven development is an inevitable requirement of the new round of global scientific and technological revolution and industrial revolution, and the most fundamental and crucial force in realizing the strategic goals of national development. As an important economic force in FuJian province, private enterprises play an important role in the implementation of innovation-driven development strategy in our province. At present, private enterprises in FuJian, especially in minnan, still rely on imports for some key technologies, production equipment and core components, and there are few core technologies and well-known brands with independent intellectual property rights. With the expansion of the scale and the promotion of the status of minnan enterprises, it is more difficult to realize the transformation and development relying on imported technology, and independent innovation is urgent. To build enterprise as the main body, market oriented, the combination of technology innovation system, pay attention to give play to the role of local research and development institutions, to speed up the independent innovation, strengthen product innovation, brand innovation, organization innovation, management innovation, business model innovation, give full play to the hercynian independent research and development of private enterprises and the main body of technological innovation. The research group believes that the government should link the research and development funds with the service places, especially with solving the practical problems in the production and manufacturing of private enterprises, and guide the research institutes to serve the production practice with the allocation of research funds. The research team believes that the government should introduce policies to support private enterprises to start up businesses and innovate, engage in "Internet plus", machine replacement, intelligence and develop "sharing economy".

Fourthly, the research group believes that the government should guide private enterprises to recruit talents from universities. It is suggested that the government should take the lead in guiding the enterprise management to change the concept that education and training should be regarded as
an investment method instead of the traditional employee welfare or enterprise cost. Among many factors that affect the quality of enterprise development, the factor of professional talents is one of the most potential. Carrying out quality knowledge popularization education and training is a reliable way to improve the quality awareness and business skills of employees, and also provides a reliable guarantee for the improvement of the quality of products, services and projects of enterprises in China. At present, in addition to insufficient investment in education and training, private enterprises still have serious misconceptions in cognition and operation in personnel education and training. MinNan enterprises are not clear about the purpose of training, training what is popular; Moreover, the internal application environment of the enterprise is not corresponding, and the training of employees is inconsistent with the practical links. The effectiveness of quality education and training is reduced for many reasons such as the high mobility of personnel in private enterprises. In addition, smart, smart, quanzhou in FuJian province in China of building environment, a lot of professional knowledge is not able to completely rely on the original way to implement the enterprise internal employee training, charity or welfare culture has been unable to meet the needs of the private enterprises, modelled on the foreign enterprises tailored training in colleges and universities entrusted cultivation of pre contract of ordering cultivation way is imperative. Enterprises are encouraged to implement customized talent demand programs and sign talent cultivation contract with colleges and universities, and customized courses and training programs are encouraged.

Fifthly, the research group believes that the government should establish a product satisfaction research institute for public service as soon as possible and encourage private enterprises to improve product quality. Some private enterprises have relatively low product user satisfaction and great risk of quality safety. The research group suggests that, on the road of improving product quality, private enterprises should be guided to focus on long-term development, dare to assume social responsibility, guide them to pursue customer satisfaction in the whole process of r&d, design, manufacturing and service, and continuously improve their ability to achieve customer satisfaction in terms of technology and management. The research group suggests that, under the guidance of the government as soon as possible, a product satisfaction research institute should be established for public service. It suggests that, in combination with the Internet of things technology, a network quality feedback platform suitable for mobile terminals should be built, and quality satisfaction index should be used to guide public consumption to improve the quality of products in our province.

Sixth, the research team believes that the government should introduce policies to encourage private enterprises to use the "craftsman spirit" to improve the quality of consumer goods. The research group agreed that artisian spirit not only represents a production concept, but also represents the transformation direction of China's manufacturing industry. The government should actively guide enterprises to put the craftsman spirit into practice, focus on improving product quality, and let the craftsman spirit really help the development of enterprises. On the one hand, government departments can appropriately improve the quality of consumer goods according to the actual situation of our province and the European and American standards, and lead the improvement of consumer goods quality with advanced standards. We will strengthen market regulation, adhere to high standards for consumer goods, and implement the strategy of strengthening quality, so as to promote supply-side structural reform. On the other hand, policies can be introduced to encourage private enterprises to give full play to the "craftsman spirit" to improve the quality of consumer goods, boost domestic brands with high standards, restrain "overseas online shopping" and activate the potential of domestic consumption. In addition, we can give full play to the advantages of public welfare publicity of the government to create an atmosphere of advocating the purchase of domestic products and leave more funds for the manufacturing industry.
5. Conclusion
In this paper, a Research on supporting independent innovation of private enterprises in FuJian 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. The research group believes that at present, many enterprises in FuJian have not formed into the innovation subject, lack of innovation motivation, products remain in the low-end field, and form path dependence. These problems are becoming an obstacle to the current economic development. The research team found that the enterprise management innovation in FuJian is lagging behind at present, there is a shortage of truly competent management talents, and the paternalistic management of family management is still prevalent. The team after in-depth research and analysis on the problem put forward several measures, including: led FuJian private manufacturing enterprises with the help of high-tech transformation, guide the corporation timing low cost increase manufacturing equipment, guide the state-owned research institutions serving corporation, guide the corporation to custom-made talents in colleges and universities, set up to serve the public product satisfaction research institutions and encourage private enterprises to improve the quality of products, policies to encourage private enterprises to play "spirit" to improve the quality of consumer goods, etc. The corresponding solution measures.

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