



## Thirty Years' Financial Support for Chinese Industry Reform of National Defense Science

Zhaozhen Fan

Institute of National Defense Economy and Management

Central University of Finance and Economics

Beijing 100081, China

E-mail: [fanzhaozhen@163.com](mailto:fanzhaozhen@163.com)

### Abstract

The year of 2008 is the 30th anniversary of Chinese reform and opening-up. In thirty years, the defense science industry of China has achieved great accomplishments, and the practice and experience of defense science industry reform deserve retrospection. Financial support is one of necessary conditions for the reform and development of national defense science industry. In this article, we will review 30 years' financial support of defense science industry from three stages including the probe and reform, i.e. the adjustment and transition, and the reform, i.e. the defense science industry in the new century, and the reform and the development, i.e. the road and objective of the advance, and put forward the future development direction of the defense science industry.

**Keywords:** Defense industry, Reform and development, Adjustment and transition, Financial support

Since the Third Plenary Session of the Eleventh Central Committee in 1978, the reform and development of national defense science industry have experienced thirty years' journey. In thirty years, through some difficult roads, the defense science industry has achieved great accomplishments and greatly strengthened the defense strength, science strength, comprehensive national strength and national cohesion of China. Through thirty years' history, every accomplishment acquired in the national defense science industry was related with the exact leads of Party Central Committee and State Council and the supports from various aspects.

### 1. The probe and reform: the adjustment and transition

After the Third Plenary Session of the Eleventh Central Committee in 1978, the international environment of China became loose, and new cognition and judgment for the international environment came into being in the decision layer. So the new strategic directional idea of national defense construction, i.e. from the state of readiness to the construction in the peaceful term was put forward, and it established the base for the national defense science industry to comprehensively implement strategic transformation. To adapt the requirement of the social development, China established the national strategic objective focusing on the central task of economic construction. Obeying and serving for the national strategy, the national defense science industry should implement the development guideline combining army with civilian from single serving for national defense construction to serving for four modernizations. Especially in the transition process from the planned economy system to the socialism market economy system, the Central Military Commission put forward the guideline of "shortening the battle line, emphasizing the focus, stressing the creation of scientific research and accelerating the renewal", and reduced the production ability of the national defense science industry and centralized advantages to do scientific research well.

At the late of 1970s and the beginning of 1980s, according to gradually assuasive international situation, Deng Xiaoping put forward that the domestic works should be retransferred to economic construction, and the development of Chinese national defense science industry also entered into a new stage. In January of 1982, after Deng Xiaoping summarized development experiences of domestic and foreign national defense science industries, he put forward the guideline of "combining army and civilian, combining peace and war, giving priority to military products, letting the civilian support the army". The military industry was required not only to accomplish the stated scientific research and production task of weapon equipment, but also to develop scientific research and production of civilian product in full sail, and new breakthrough occurred in the cognition for the combination of army and civilian. In July of 1986, the adjustment of military industry corporation which combined the former Ministry of Nuclear Industry, Ministry of Aviation Industry of PRC, Ministry of Space Industry of PRC, and Ministry of Ordnance Industry of PRC to the army directly lead by the State Council created good conditions for conquering the abuse of separation between military and civil. What the military industry enterprises faced are not the highly concentrated system and relatively closed circumstance, but an opener system and a daedal exterior world. Since the reform and opening-up, especially the Third Plenary Session of the

Fourteenth Central Committee, the military industry corporation accelerated the course joining with national economy and the socialism market economic system, and made sizable changes about product mix, industrial structure, organization structure and the run mechanism of military products studying and producing. The military industry corporation of China has changed the single structure and made great achievements. The volume of trade for national defense science fruit increased more than 60 percent by degrees annually and created almost one million economic benefit and tremendous social benefit. It not only supported the construction of national economy, but also boosted up the national defense strength and comprehensive national strength of China.

According to the Marx's capital theory about "the first driving force" and "the continual driving force", finance and science are also the first driving force of economic development. The combination of finance and science released gigantic energy. Through the course of the variance of the financing system of China and the economic gain, we can see that each reform of the financing system dredged the channel which social saving turned into social investment, improved the capacity of social capital shaping, and effectively supported the economic growth from capital. In 1979, China has carried out the reform of economic system which taken "laying down right and yielding benefit" as the main line. This reform resulted in the crashing changes of the background of financing system of China and formed banks dominating corporation which fit with the changes. The finances funds style of the corporation financing structure has been replaced by the capital within national budget, bank loan, foreign capital utilizing, self-financing and other multiple styles, such as stocks, bonds, note and so on. The forming channel and mechanism of national defense funds are multiform, it is not limited the channel of the reallocation of national income and the planned mechanism. The primary allocation of national income was also the important channel of the national defense funds forming. The essential of this change is to transfer part rights of national defense investment to enterprises in order to fully exert the function of market mechanism and better enhance the benefit of national defense investment. Many aspects such as the continual development of Chinese economic system reform, the national investment to the military industry, universal strengthening of the viability for the military industry and the strong increase of the macro economy further enhance the reform endurance of the whole industry, and the national defense science industry strengthened the research and production for the weapon and equipment with high technology to further develop the research and production of the weapon equipment and the national defense science, which made the economic situation of the military industry straighten up.

## **2. The reform: the defense science industry in the new century**

In 1997, under the condition that China had actualized the first objective and the socialism market economy system frame had been established primarily, the 15th National Congress of CPC put forward taking Deng Xiaoping Theory as the guidance idea, establishing many important strategies such as invigorating the country through science, technology and education, the sustainable development, and strengthening the army through science and technology, taking the national defense science industry as the national strategic industry to promote the further development in the new century. In this stage, the military industry of China had comprehensively carried through the strategic idea that "national defense construction and economic construction are both important and they are coordinated to develop together", and entered into the new development phase which taken establishing the new system and new mechanism of national defense science industry to adapt the requirement of the socialism market economy system and the demand of equipment modernization construction as the objective. Since 1980s, to strengthen the centralized and uniform management, introduce the competition mechanism and actualize the separation of political power and enterprise, the management system of the military industry had been reformed. Through the adjustments, the industrial organization adjustment made important progress. The relationship of equipment order and organized production and the relationship of demand and supply were established between the military equipment use department managed by the Chief Ministry of Equipment and the research production department managed by the Technology and Industry for National Defense. According to the principle of "labor division, taking advantage, emphasizing particularly on different fields, and orderly competition" confirmed by the country, the Military industry Group adjusted and recomposed various military industry production enterprises to develop the national defense science industry together. According to the total deployment for the science research production ability adjustment of the national military products and the reforms of enterprise and scientific research academies, the military industry enterprises are implemented adjustment and recombination according to three types including "keeping important military enterprises, opening up and enlivening the economy, and closure and bankruptcy", and various research academies begun to implement adjustment and reform with different forms, and some academies entered into the corporate group to become the scientific development center, and some academies were transformed into scientific enterprises, and some academies were transformed into non-profitable institutions. The adjustment to the military industry enterprises would make some enterprises become the backbone enterprises, and make some enterprises implement closure and bankruptcy, and make some enterprises adopt various forms to open up and enliven the economy based on the total number of present enterprise. Accordingly, for the economic structure of national science industry, especially for the ownership structure, except that some backbone enterprises were continually solely funded by the state, other enterprises would realize the diversification of investment main bodies possibly. The military industry corporation should strive for the direction to establishing the modern enterprise institution and accomplish the goal that they could coordinate with national economy and enter into the

virtuous cycle. Science 1920s, with the development of capital market, the financing styles of China's enterprises has been multiform. Many enterprises began to utilize the direct financing to get the fund what they needed, and the direct financing has become one of the principal styles by which the China's enterprises got the long-term fund which they needed. The financing system has changed from bank-dominated to modern market-dominated, and the multiform financing styles has been the main character of the marketable financing, and the rate of the securities financing raised constantly in the permanent assets of social permanent assets.

The securities financing was propitious to the property reform of military enterprises. China's military enterprises adopted the single state-owned property style chronically, which resulted in no distinction between the duties of the governments and that of the enterprises and the administration monopoly extremely. The securities financing could change the property structure of military enterprises, and create the favorable condition to eliminate the no distinction between the duties of the governments and that of the enterprises and the administration monopoly. Up to May of 2005, there has been 43 military enterprises which been listed in Hong Kong, especially up to 2006, every military group and military enterprises taken some measures, such as the joint stock system rebuilding, recombination and coming into the market, to accelerate the development of deep reform obviously. In 2007, there are 18 enterprises which applied for additional stock issue and 10 enterprises which applied for the first public coming into the market and the total of the planned raising fund has exceeded the sum of past years.

The reconstruction and marketing of military industry enterprises in 2007 had several obvious characters. First, the assets involved had large size and excellent quality and the quantity of raising fund was large. For example, the Shipbuilding Industry Corporation utilized the increasing issuance of Hudong Heavy Machinery Co., Ltd, the recombination of Wai Gao Qiao New Shipyard, Chengxi Shipyard and Mamao Shipyard to infuse net assets of about nine billion Yuan, and many IPO items such as China Shipbuilding Industry Corporation and China South Industries Motor respectively achieved seven billion Yuan and five billion Yuan. Second, the marketing assets gradually transformed from the former civilian products to the combination of the army and civilian and paying equal attention to the army and civilian. The raising funds were mainly used to enhance the research and development ability for the dual purpose products such as the dual purpose plane, the dual purpose engine, the dual purpose ship equipment, the dual purpose micro-motor, and the dual purpose socket connector, and when they enhanced the profitable ability of the listed companies, they also promoted the form of the positive interaction between the army and the civilian. Third, the capital was taken as the means to drive the primary formation of the professional recombination through the operation of the marketization. For example, the rocket industry was recombined into seven enterprises, and the spaceflight electric appliance was recombined into four civilian micro-motor enterprises, which changed the former administrative recombination mode of "the shotgun marriage". All above aspects indicated that the cognition that group corporation and military industry enterprises quickened the sharing reconstruction, recombination and marketing had been fully enhanced.

### **3. The reform and development: the road and objective of the advance**

The first aspect is to persist in the scientific development view and push the transformation and update of national defense science industry. The strategic core problem of high technology development for one country is the selection of development emphasis. Exact selection of development emphasize can fully utilize limited resources, manpower and financial force to promote the development in the most important domains. That requires the military industry construction must "strengthen the use and management of the outlay, really make scientific decision and comprehensive arrangement, calculate carefully and budget strictly, and guarantee for major sites" under the national macro-guidance, and establish the guidance idea to exert largest benefits for the construction of military industry. First, the advanced equipment manufacturing technology should been developed more quickly. Second, the high technology should be kept to reconstruct traditional national defense science industry. Third, the proportion of national defense scientific research outlay and the weapon stock outlay should be increased to greatly promote the structure adjustment of scientific research and production ability for military products.

The second aspect is to persist in the system innovation and ensure the transition and update of national defense science industry. At present, the system innovation has become into the essential requirement to deepen the reform. Therefore, first, according to the requirements of "economic adjustment, market supervision, social management and public service", the governmental function should be further transformed. For the development of national economy and society, the governmental functions of the macro-control advantage and the market mechanism should be exerted, and the enter and exit mechanism of national defense science industry should be established and perfected more quickly according to the principle of "extracting and condensing the main body of the military industry". Second, the investment and financing system of the military industry should be reformed. Combining with national investment and financing system reform, taking the diversification of investment body as the breakthrough, we should fully promote the system reform of enterprise property right, optimize the recombination of assets, explore the effective implementation form of public military industry enterprises, establish modern military industry enterprise system, establish the micro-bodies of the military industry, and actualize the transformation from quasi-administration to real economy entity for the military industry enterprises. Third, the stock right financing market with multiple poles should be formed. There

are four approaches to push the sharing reform of the military industry enterprise. The first approach is to take the system innovation as the guidance. We should actively encourage and lead enterprises to finance through the issuance of stock, and gradually break the limits of department, industry, army and civilian, and ownership, and reform and optimize the property right structure of the military industry through the ligament of the capital market. According to the actual situation of China, except for few enterprises about national strategic security and core secret, other military industry enterprises can adjust and optimize the property right structure, implement sharing reform through many approaches such as standardizing market, sharing each other, merger and purchase to make most military industry enterprises finance in the capital market, and the assets of reorganization and marketing for the military industry enterprises are not only limited in civilian products after the separation of main and assistant and the separation and military product and civilian product, but encourage the assets and operation combined army and civilian to enter into the capital market, and encourage the total marketing, and enhance the profitable ability and solve the problem that the military assets are in the system “solitary island” for a long term. We should really actualize that the military industry enterprises become into the market competition main body with clear property right, definite responsibility and scientific management. The second approach is the form of innovation reorganization. According as the influencing degrees of enterprise to national security, the reorganization should be implemented through four types including wholly stated fund, stated absolute controlling share, stated relative controlling share and stated sharing. Except that the wholly stated funded enterprises implement the reorganization of the corporation system, other military industry enterprises should implement sharing reorganization. And through the sharing reorganization, the military industry economy gradually develops to the mixed ownership economy which gives priority to the public ownership and many economic forms develop together, and we should actualize the transformation from quasi-administrative type to the real economic entity for the military industry enterprises. The third approach is to encourage the private economy to participate. We should actively encourage and attract multiple economic components to participate in the national defense construction in order to promote the diversification of investment main body and fully exert the functions of various resources in the whole society, push the quick development of the integration system of army and civilian and establish the big national defense. The fourth approach is to implement effective supervision. Because the reorganization of military industry enterprise is relative to national security and it is different to the reorganization of common enterprises, we require the controlling stoker and actual controller of reorganized enterprises should timely and periodically report important items about military products to the Technology and Industry for National Defense, and the organized enterprises still should establish special articles in the constitution of the company to ensure the accomplishment of national task and the security of national secrete.

The third aspect is to persist in technical innovation and promote the transition and update of national defense science industry.

The fourth aspect is to persist in people-orientation and lead the transition and update of national defense science industry.

#### 4. Conclusions

For the development of future national defense science industry, Hu Jintao definitely put forward “adjusting and reforming the system of national defense science industry and the stock system of weapon equipment, and enhancing the independent innovation ability and quality benefit for the research of weapon equipment” in report of the 17th National Congress. Surrounding the core idea, the national defense science industry must develop and reform as a whole, and more emphasize strengthening the military industry group and push the mechanism innovation of the military industry system, and form a new national defense science industry system adapting the new situation, and push the system and mechanism to actualize the transition. The year of 2007 was the year that important change occurred in Chinese military industry policies, and China issued seven documents early or late, and actively push the step of the marketization reform of the national defense military industry, and three routes such as the sharing reorganization, the introduction of private economy and the development of civilian products are basically confirmed. We believe future several years would be the period that the important reform occurs in Chinese national defense military industry which would meet the big reform time with sharing reorganization and assets securitization.

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