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## THE RESEARCH ON THE RISK MANAGEMENT MECHANISM OF NATIONAL DEFENSE ECONOMY

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**ABSTRACT:** Since entering the new century, the world's political, economic and military environment has undergone profound changes. Particularly since 2008, the global financial crisis spread, affecting and threatening the security of China's national defense economy. Therefore, strengthening the national defense economic risk management (risk management), constructing the risk management mechanism of the national defense economy, and enhancing a strong "firewall" for defending against the threat, is becoming a profound implications from historical experiences as well, and a timely measures for promoting the national defense economic development faster and better and for ensuring the national security. With the rapid development of economic globalization and promotion of the new military revolution, national defense economy is increasingly affected from the impact of the political, economic and military situations domestic and abroad.

**KEYWORDS:** national defense economy, risk management, mechanism

### INTRODUCTION

With the rapid development of economic globalization and promotion of the new military revolution, national defense economy is increasingly affected from the impact of the political, economic and military situations domestic and abroad.

The sources of risk to the economy diverse to a higher degree, the speed that risk turns into a crisis becomes faster, and the impact of the crisis on national defense economy changes more violent. As President Hu Jintao pointed out, this is a time full of huge potential and dynamic development, also with all kinds of difficulties and risks; and this is a time of both rare opportunities and severe challenges.

We must take advantage of this period of important strategic opportunities, strengthening the national defense and economic construction, establishing and enhancing the national defense economic risk management mechanism, and improving the defense economic ability to cope with the risk.

### THE MAIN PROBLEMS OF CHINA'S NATIONAL DEFENSE ECONOMIC RISK MANAGEMENT

In response to the international financial crisis, a series of measures of the national defense economy risk management are fruitful. But we must notice that the consciousness of the risk management in the individual departments or micro-economic organizations is relatively weak.

Moreover, the economic risk management mechanism has not to be established for the national defense yet, either the methods and means of crisis management is not perfect.

Specifically speaking:

- The awareness of importance of the national defense economic risk management is not clear enough.

Currently, concerning the awareness on the issues of national security, someone still remains only in the military fields. However, in other areas such like political, economic, cultural, science and technology, and information fields, this kind of security awareness is limited either. With less sense of the risk, their theoretical study lags. As far as this financial crisis, this situation manifests in the following aspects:

First of all, we are lack of any awareness about the normality of the national defense economic risk and the inevitability of the financial crisis. It turns out that, through hundreds of years, expansion and contraction always alternatively occur in a circle during the market economy running course. However, from April 1991 to March 2001, the United States economy continued to grow for 120 months, so that some economists believe that the economic cycle has been flattened.

Consequently, during 2000 to 2002, when the United States appeared the capital expense cycle and real estate cycle again; and in 2007 when China's macroeconomic appeared the phenomenon that the assets expansion and inflation coexist which is rare during 10 years; and in 2008 when the fourth quarter of GDP growth had been below the potential growth more than 3 percentage points, many people still held to a blind optimistic hope on that economic situation, thinking the economic development momentum is good, but the outbreak of crisis is on a small probability.

However, the final result proved that the outbreak of the financial crisis became a solid evidence of the theoretical research on the economic cycle once again.

Next, we are short of cognition concerning the severity and destructiveness of the financial crisis on the economic crisis and the national defense. Some people believe that the national defense economy is dominated by plans. As long as a proper regulation, the risk can be reduced to the lowest point, and probably will not have much effect. But in fact, at present, under the circumstances that the economic globalization is advancing, China's market economy system is developing, and the civil-military parties are tending to integrate, the national defense is facing more risk resources. Further, the risk is more likely turning into a crisis, and then its development would be faster. Although the defense economy has followed relatively strict regulations, plans and policies, it was not able to completely avoid the venture and protect itself.

Thirdly, for the economic endogenous risk of the national defense, there is not much awareness. The outbreak of the financial crisis this time, has given us a profound revelation that is there exist several structural inconsistencies such like low investment structure of the national defense, outward and internal imbalance of the national defense industry, high proportion of the maintaining expenditure in the total defense spending, etc. These potential threats are normally difficult to detect. Yet once triggered by the financial crisis or other external incentives, it can lead to serious consequences. Especially in current, in China, for the science and technology of national defense industry is under adverse circumstances with weak independent innovation ability, inadequate key technology, and deficient strategic resources reserves; we should pay closer attention to the deeper conflict within the national defense economy and do a further analysis on it.

□ **The preparation for responding to the financial crisis is inadequate.**

Due to the lack of risk management awareness, some relevant departments often deny the normal risk management, which causes a lack of preparation for the despondence to the crisis. So when the crisis broke out, it leads to a series of passiveness.

First of all, the ability to accurately identify and capture the warning signs is not capable enough. Before the crisis occurred the "warning signs" would appear repeatedly. If these signs are recognized, given attention to and effectively addressed, so that many crises would be prevented before they occur. This is the best way to resolve the crisis. For example, during 2000-2006, before the outbreak of this financial crisis, the United States real estate market rose to more than 90%. If we can catch these signs, and put a certain prevention measures, it is quite possible to significantly reduce our losses from financial crisis.

Moreover, the national defense departments are lack of targeted response plans to the economic crisis.

Data shows that an effective contingency plans system can reduce the loss to 6% of the result from a

non-emergency system. In October 2008, in order to avoid and reduce the United States financial crisis' impact on China, the Central Bank and the relevant regulatory bodies have developed the plans; the Regulators have strengthened the prudential supervision of financial institutions and services improving the ability to resist crisis. While in the area of national defense economy, it has not yet constructed an appropriate planning system, so that when the international financial crisis had a negative impact on China's national defense economy, with a rush we were unable to grasp the very opportunity to response to it very well. At the same time, as spreading the financial crisis caused a more complex international circumstance, which further exposed the disorder and shortage of the emergency planning system of every national defense department.

Thirdly, the emergency reserves in response to the financial crisis are short. On one hand, on the financial reserves respect, the State has not set up a special fund for the military national defense production enterprises and the small and medium complete enterprises, yet the local financial support was relatively limited either, resulting in some big and tough financial trouble for these enterprises. On the other hand, on the material reserves aspect, such as minerals, food, and other strategic materials, some are repeatedly stored, yet some are missing or insufficient; even the quality of those reserves is difficult to meet the standards. When an emergency or crisis occurs, the country is not able to control the number and distribution of the demanding materials as a whole.

□ **The system to deal with the crisis and implement the national defense economic risk management is not perfect enough.**

At present, China's national defense and economic risk management system are fairly far behind the requirements of normalizing risk management.

At first, the subject of the national defense economy risk management is a blank. While the State has established a special temporary risk management agency in response to the financial crisis, but this agency is on a temporary and uncertain side; and its running mechanism is difficult to maintain for a long time. To normalize the national defense economic risk management, there must be clear responsibilities respectively taken by each unit, department and individual. Some issues must be distinctly researched and reasoned like which work requires dedicated, standing agencies to engage in the national defense economic risk management, and what kind of task needed specific person in charge of.

Secondly, there is a lack of an auxiliary decision-making body for doing national defense economic risk research. Currently, there are not a large number of the experienced and decision-making "brains" in the national defense economic risk management. Then, just relying on the experience, knowledge and wisdom of the minority to make decision, there will inevitably be errors. Particularly, during more than 20 years after implementing market economy in our country, we often fail to recognize the present economic situation domestic and abroad due to the

short of experience in the field of the macroeconomic management, including economic management of national defense. Even the worse, at that time, it may cause failure on development policy making by just taking reference from the developed countries and acting like them.

Thirdly, we are lack of the personnel with professional skills on the risk management. In response to the crisis and handle the risk, it requires that the policy makers and managers must be fully competent with relatively good comprehensive quality. National Defense economy refers to the risk management of military and civil, two essential areas. It needs a number of trained professional risk managers. But the truth is that, many managers are not accepted the knowledge of special and systematic risk management and emergency response during their training. They know much less about the awareness of crisis, meanwhile their capabilities to manage the national defense economic risk need to be strengthened.

□ **The national defense economic risk management mechanism is yet perfect.**

Owing to the complex and diverse national defense economic risk, there are several crisis-affected sectors. And as the national defense economy has a strong connection with the national economy, we should take used of a more systematic and scientific running mechanism to response to the crisis. Currently, in terms of the establishment of the mechanism, there exist following two issues:

- On one hand, there is a lack of a whole process of the risk management mechanism including identification, analysis, early warning, control and handling. At present, in the economic management of national defense, there are still some problems remaining unresolved as who collects the information about the risk, what information can be collected, how can collect accurate information, and to whom to submit these collected information; In the risk analysis process, it mainly uses qualitative analysis, yet quantitative, scientific and accurate analysis is relatively insufficient; In the disposal process, it is still remaining in a less normative state in auxiliary decision-making, resource management, command and coordination, and rehabilitation.
- On the other hand, there is a lack of linkage and coordination mechanism of risk management. At present, in China's defense economic risk management, even though the vertical emergency disposal mechanism of all emergency management sectors is more than perfect, the duties division in horizontal level is not clear enough. The overlapping duties and the discrepancy of management coexist without a unified coordination.

The division, collaboration, and communication mechanism as well as the running program of nation, army, and local authorities haven't yet institutionalized. The information from all parties is isolated with a less sharing which leads in a difficult unification on action and resources. Also there are certain difficulties in coordination in the interests.

## THE PRELIMINARY DESIGN OF RISK MANAGEMENT MECHANISM OF CHINA'S NATIONAL DEFENSE ECONOMY

In the new stage of the new century, we must be based on the state of society, nation and the military intelligence, focusing our eyes on the long run risk management mechanism of the national defense economy, drawing on the international experience and lessons of financial crisis, to establish and strengthen the risk management mechanism of the national defense economy.

□ **To develop a monitoring index system of risk management mechanism.**

From the perspective of the development of financial crisis and transmitting methods towards the national defense economy as well as the risk of the defense economy itself, the following factors can be considered in the development of risk monitoring index system.

First, it's necessary to strengthen monitoring the structure index of defense industry. The following factors should be taken into consideration in judging the risk of defense industry:

- 1.) The structure of energy consumption. It refers to the dependence of defense industry on resources and energy, namely the issues as to how many industries are established on the basis of energy intensive consumption and how many industries would give rise to the shortage of national recourses and even to the deterioration of environment.
- 2.) The structure of industrial benefits. It refers to the issues as to how many related industries suffer losses, operational difficulties and profits decline.
- 3.) Regional structure. It refers to the issues as to whether the defense industry resources excessively concentrate on a certain area.
- 4.) The structure of industry. It refers to the issues as to whether the state or regional industrial structures are similar, causing excessive competition on small size and at low level, and further leading to a serious imbalance of resource allocation and loss of resources.
- 5.) The structure of technology. It refers to the technological capability, the quality of personnel, technological innovations and the proportion of defense industries in traditional industrialization.

Second, it's necessary to strengthen monitoring the index of national defense economic strength:

- 1.) Per capita level of national defense economy. Per capita GDP is an important symbol to measure the national and regional economic development. Similarly, per capita level of defense economy represents the development of defense economy. The risk revealed by a low level of per capita is much more dangerous than the low level of total amount. Besides the per capita national defense expenditure, and the per capita stock of defense assets, much attention should be given to the per capita index of other important strategic resources such as food, fuel, steel.

- 2.) *Economic growth rate.* The economic growth is a critical foundation of defense economic development, which shows the diffusion index for the national defense.
- 3.) *The contribution rate of science and technology.* This rate reveals the security of national defense, which also occupies an important place in the economic development. The more powerful the economic strength of a national defense is, the higher the contribution rate of science and technology will be, and the higher the contribution rate of science and technology of the national defense becomes.
- 4.) *The ratio of the resource and labor-intensive industries to the knowledge and technology-intensive industries.* This index reflects the modernization level of defense industry as a whole.
- 5.) *The benefits of national defense economic.* As far as the defense economy, it mainly refers to the benefits level of defense science and technology industry, the benefits level of defense expenditures. The low economic benefits show that the defense economy itself is under a serious risk and crisis.

Third, it is necessary to strengthen the capacity of national fiscal and financial monitoring. National fiscal and financial capacity is the most important support of national defense economy:

- 1.) *The stability of exchange rate,* as the Yuan's exchange rate to the dollar's, or to the Euro's. The exchange rate fluctuations do not fully reflect the actual change in the value of the RMB. But with the development of economic globalization, the status of the exchange rate is gradually improving compared with the rate of inflation, which is a sign of a financial crisis.
- 2.) *The capital adequacy ratio of financial institutions.* The strength of the financial institution lies on the quantity of its own capital. If the capital adequacy ratio falls below 8%, there would be a lower anti-risk capability and thus to cause a financial crisis.
- 3.) *The revenue share of GDP indicates that the national fund raising ability is the essential support of national defense economy.*
- 4.) *The national debt pressures.* When the debt is too heavy, it can cause an unstable macro economy.

Fourth, it is necessary to strengthen the monitoring capacity of national defense economy towards foreign parties, including:

- 1.) *The level of foreign trade on military industry.* It is a representative of defense economic development as a whole. However, the growing competition in international market, and the devaluation of currency and stable currency policy will bring some risks on the defense industries and enterprises.
- 2.) *The resilience to external environment.* It refers to the issues as to whether the competitive mechanism is perfect or not; whether the modern enterprise system is already set up or not; and whether we are capable to adapt to the

changes in the world economic environment or not.

- 3.) *The crisis index of international trade liberalization.* It refers to the issues as to whether the trade liberalization would cause a loss for the national strategic reserve resources or not, leading to an excessive consumption of the natural and environmental resources.

By tracking and monitoring the above indicators, coupled with modeling analysis, we will be able to judge the defense economic index, fluctuation degree, security status as well as the main risk, and to raise an alarm and thus to adjust the development policies of national defense economy in order to prevent and control the crisis.

□ **To set up a risk management system for national defense economy.**

The defense economic risk, involving several aspects as multiple subjects, multilevel coordination, and broad coordination tasks, needs an urgent action to construct an authoritative, efficient, responsive, and highly integrated monitoring and early-warning systems, in order to ensure that the monitoring and early-warning capacity can be developed on the basis on a reliable organization.

At first, it is necessary to establish a defense economic risk management institution at national level. It can be set as a "National Strategic Early-Warning Leading Group" which consists of the leaders from relevant state ministries and committees and military departments. And it is suggested to build a strategic early warning center, with a subordinate national financial risk early-warning center.

The defense economic risk management office is regarded as one of the branches of the center. This office is a civil-military integrated institution running in a unified way. It is composed of the staff from some functional sections in the military and government agencies. Moreover, it is responsible for the some aspects of principles and policies, regulations and laws related to the defense economic security, the defense budget and the risk monitoring of major construction projects, as well as the integrated coordination of the risk management and disposal. Further, it is also in charge of publishing financial risk early-warning for national defense.

Secondly, it is necessary to establish risk monitoring institutions in all departments. These institutions will be responsible for reporting the information and research results concerning the defense economic security to the national defense economic risk management office which is especially set up for the monitoring and early warning of the defense economic security.

After an initial comprehensive analysis of all the information and research results about defense economic security, the office will submit the outcome to the leading agency. Each professional risk monitoring institution can publish the economic risk warning within its own field. At the same time, as for the information about significant and unexpected economic risks of national defense, the office can directly submit them to the national defense

economic and security crises management lead agency.

Thirdly, in accordance with the designed risk monitoring index system of defense economy, personnel are assigned to risk information acquisition and analysis at all levels, so that the work of the risk information acquisition and analysis could cover every index, and the risk information can be collected and submitted according to the procedure of this system.

□ **To enhance national defense crisis disposal capacity-building.**

Working on identifying and early warning risk system is to avoid crisis. However, some crisis emerges unexpectedly; therefore enhancing our ability on disposing national defense crisis contributes a vital aspect to strengthen the national defense economic risk management.

First of all, for national economic crisis occurs rather unexpectedly, which rarely left us time to get prepared. Under such circumstance we should perfect the crisis disposal preplan. From the detailed content, and based on the forecast and analysis of the defense economic security situation, we should draw up the crisis emergency preplan considering the aspects of situation judgment, response force, treatment measures, communication and coordination, etc. in order to make the preparation work effectively and targeted. Meanwhile, with full and thorough consideration on international security environment and the national defense strength, we need to work practically to focus on the most complex and difficult situation and formulate a set of effective measures in accordance with the principles of easy to prepare, easy to operate to ensure a calm and rapid response under the emergency situation.

Secondly, it is necessary to improve the emergency mechanism. It can be divided into two types: the first case is the plan that matches the risk disposition. We can find out the matched plan for the current crisis from the plans stock, and then evaluate the very plan to select the best, efficient and reliable one to respond to the crisis. If the alternative plan dissatisfies the requirements, then there would be a decision-making session for modification of the alternative plan, and then re-assess and adjustment, until it finally meets the requirements. The other case is the risk disposal lacking of an arranged plan. As long as the crisis occurs, the security risk management authority of defense economy should work out a rapid processing scheme for experts to evaluate, and then submit it to the National Defense Security Committee for decision-making. Meanwhile, the risk management authorities and departments at all levels should formulate their own disposal plan on the basis of the scheme.

Thirdly, we should enhance the crisis decision-making capacity of the decision-making bodies. To improve the communication and coordination ability of the decision-making bodies is to ensure establishing a rapid information communication, resource allocation and policy issuing mechanism when making decisions; it is necessary to cultivate large numbers

of comprehensive personnel with higher quality of adaptability, authority, and coordination ability for crisis decision-making, to strengthen the importance of the crisis decision-making think tank, and keep them remain their relatively independence, to avert "Follow suit decisions" or "Echo decisions"; and to establish a supporting system of national defense crisis decision, which is capable of quick and reliable simulation analysis for crisis situations, and of improving the efficiency of the decision.

□ **To strengthen the theoretical study on the national defense economic risk.**

In order to better improve the national defense economic risk management, the state and the military should regularly organize regular research activities and make full use of the resourceful economic and strategic research institutions' outcomes both from military and civil parties to compile the Report on the National Defense Economic Risk Assessment and study on the issues of the national defense economic security policy, as well as focusing more attention on the national defense economic security monitoring and early warning. In the meaning time, we should also utilize information from the state and military intelligent agencies as well as the national security monitoring and early warning systems to enhance multiple communication and coordination mechanisms, and further improve the system of joint meetings, regular meetings, and information reporting to form a high-efficiency interaction mechanisms with close connection and flexible coordination to ensure that the national defense economic risk management information proceeds smoothly into the decision-making process.

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