THEORETICAL BASIS AND POLICY ADVICE ON INVERTED FISCAL MOBILIZATION

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Abstract: *Inverted fiscal mobilization (IFM) is a resources allocation mechanism in emergency, which reallocate military resources by military finance to provide non-traditional safety. In order to improve the army`s ability about managing with multi-threats, and to promote the harmonious development of economic construction and defense construction, we must bring the IFM into effect efficiently. When the malignant trend and incidence of non-traditional threats exceed a certain degree, and when the marginal transaction cost is not less than the difference of marginal administration cost by the military organization and the enterprise organization, IFM should be put into practice. The optimal scale of IFM is the military spending allocation equilibrium between the traditional safety protecting and the non-traditional safety protecting on the premise that the minimum demands of traditional safe and non-traditional safe are satisfied. In order to upgrade the IFM`s ability, the optimal institution should be constructed through optimizing manage system and manage mechanism.*

Keywords: *Military expenditure allocation, Non-traditional threats, Theoretical basis, Policy advice*

1. INTRODUCTION

Military expenditure ensuring on the non-traditional safe in emergency like expense support about participating in 5·12 earthquake rescuing and relief and fiscal mobilization during wartime are both resource allocation mechanism in emergency. But the latter is financial resources gathered from civilian domain to military domain, and the former is form military domain to civilian domain. So the former is called by us Inverted Fiscal Mobilization(IFM).How to carry IFM into execution efficiently is not clear in the policy and institution, which resulted in all kinds of problems about the resources allocation disequilibrium, inefficient functioning, and so on. This is the bug about the defense economics mainstream theory, which is constructed in the view of the traditional security theory. The view of the traditional security theory is about that military security and political security are the main content of the national safe, and studying how to solve the traditional security is challenged by realism.

Even if we can acquire the traditional security, but it doesn't mean that at the same time we have acquired the non-traditional security. So the defense economics mainstream theory cannot give the answer to the IFM's problem. The study in this topic would answer this question, which perhaps not only help working out the IFM's policies and institution and provide national security, but also help enrich the theory about economy mobilization and impel the development of defense finance and economy theory.

2. THE ESSENCE AND MEANING OF IFM

Fiscal mobilization(FM) is an activity that country allocate and reallocate social production in a financial way which satisfies the need of war and concentrate finance to guaranteed the expense of war (said by Wang Chaocai and Liu Shangxi, 2007) IFM but is an activity that military reallocate the fixed guarantee non war military operations.

From the two definitions, it is easy to find that there is no obvious distinguish between FM and IFM indeed, and both of them are a kind resource allocation in emergence.

But the purpose of the former is raising war funds while the latter is supplying expenditure for non military operations.

From the object of Mobilization or the coming of Mobilization resources, though they both are fiscal resources, the former is mainly from individual citizens or organizations and some other non military domain, while the latter is mainly from military domain, and is to reallocate the specific military expenditure.

In fact, what the meaning of "Inverted" is reflected here. What can be seen from the purpose and coming of mobilization is that FM is "shifting resources from marketplace to the battle ground." Which means the process of shifting the civil financial resources to military financial.

While IFM shifts resources from the traditional country security resources supplying domain to social security domain and is the process of shifting military expenditure to the civil finance.

What's more, we can see from the mobilization that the former's is the central government, whose implement is in coordination with army, the latter is mainly army.

From the method FM, mainly include budget administration tax policy, sale of bonds, income distribution etc (Pigu, 1921; Keynes 1941) IFM is main method is budget administration, implementing forcedly by military command mechanism.

From the mobilization environment and effect to see, both are in an market economy back ground but the former is a kind of decollating to fiscal resources and need to care about the influence on the operation, while the latter is a kind of decollating to military resources and need to care about the effect on the traditional security function.

3. THE THEORETICAL FOUNDATION OF IFM

With the concept of security, one country mainly face with the traditional threats, which come from the outward of economy society, like typical the other nations aggression, and the national defense security is mainly military security at this time.

According to this point view, there is a mutual benign mechanism between economy society development and national defense security.

On the one hand, the condition of the economy society development not only determine the quantity and quality of military member and the army's weapon level, but also the mechanism and information of army, battling pattern, as well as the form of military stratagem.

So economy construct can support the solid material foundation to national defense construct.

One the other hand national defense security can give an stabilize external environment to the development of economy society, so if the enemy invade us and we lack of national security, our national survival would lose support, not to mention economy construct and social development.

In terns of developments, economy society development and national defense construct is mutual promoted.

Because the development of economy society can strengthen national economy, so as to support more economy resources to national defense construction and our national security can get guaranteed.

While the rising economy extent of national security conversely promotes the development of society, so the rising extent of national security increases the opportunities of economy rising, except for supplying a good economy rising environment.

Participating in some economy activities might undertake a bit risks when the safety level of one country relatively is low.

This kind of behavior could be retrained to some extent, while people predict little risks when the level rises, and their desire to undertake the risks will be much stronger.

The American economist, Louis believe that, tradition and taboo can restrict opportunities, while breaking away from them and undertaking risks will acquire more economy boom opportunities.

The greatest boom occurs in the society one can find the opportunities and prefer to inspiring with enthusiasm catch the opportunities.

In fact, setting up a keynote project that can rise our economy has been in debate in our country in a long time, and the points of contradiction always concentrate on whether national security can support its regular operation.

There is an obvious example as setting up the Three Gorges irrigation project.

With the further development of economy society, national security level can rise; as a result, they both increase circularly. Seen from the opposite direction, if the development of economy society retard or stagnate even fall back, national defense construct must lost support even be encumbered.

The decline of national security necessarily lower the confidence to develop economy society and reduce the investment opportunities the disadvantage aspects of the development of economy society will be worse, and resulting in low national security, at least vicious circle is formed.

As non-traditional security threatening becomes increasingly predominant, the meaning and extension of country security concept enlarge continually.

The traditional security conception which contains military security mainly is gradually replaced by the new country security concept which is made up of all kinds of securities.

As is believed in the new security concept, non-traditional security threats have the independent generating mechanism and popular harm.

It means that in the post cold war time no matter how different each country's national conditions are from social development and security requirement, country security will be confronted with the double challenge of traditional threatening and non-traditional threatening.

In fact, our country is not only affected by the traditional factors of territory dispute and regional armament race, but also threatened by the non-traditional threatening factors of terrorism, national separatism, region extremism and ecological environment, which means even if the outer threatening is removed, the development of economic society may not have access to enough security insurance, because of the non-traditional security threatening source corning from the inner society.

Obviously, the existence of non-traditional security threatening directly course the partial invalidation of the self-fit mechanism in which the economic society development is in harmony with the national defense development in traditional security concept.

Due to the fact that non-traditional security threatening coming from these years is increasingly serious nowadays, some threatening can only be eliminated when military force gets involved.

Consequently, the key to realizing the harmonious development of economic development and county defense development lies in whether the army is duties can be expanded from traditional security protect to multi-directions.

As a result, from this point, enforcing opposite direction finance mobilization and extending the use of military forces from protecting national security to traditional security areas are the inevitable choice to maintain the positive interaction between economic society development and country defense establishment.

4. THE TIME AND SPACE DIMENSIONALITIES OF IFM

If we regard non-traditional safety as a kind of production, because of its non exclusion and non competition, it belongs to a public production. We must obey the principle that first cost suits income, that is to say that we ensure the range who should be responsible for the first cost according to the range who get benefit. Benefit range is to say that benefit from traditional safety is limited by region, the residents in this region benefit while the others don't.

The main body to be responsible for the first cost is who bear the cost of traditional safety production, and government always becomes the direct main body as a muster of public requirements. Usually, the local government should undertake the cost when the influence range is limited in a fixed region and can take concrete strength, like safety personnel, policemen, to supply non-traditional safety. When we face the big threat that related with several regions even the whole country, our center government should afford the corresponding cost without the consideration of cost sharing mechanism and the non-traditional safety should be supplied by army. In this perspective, when non-traditional threat do harm to several region even the whole country benefit, we should consider IFM implement.

Hypothesis does not consider time constraints when the market price of the traditional new classical model, the producers will organize production according to consumer preferences, and according to the market to adjust production at marginal cost equals marginal revenue, so as to realize the profit maximization through such market forces can in the case of cost minimization of organized rescue and relief as well as the victims of the life safeguard.

From this perspective, using market mechanisms to produce public goods (the provider of public goods is still by the government), the use of social forces to carry out the victims supply security is the most efficient. After joining the time constraints, however, the conclusion is no longer true.

Because of the influence of transaction cost facts will continue to highlight. At this point, the normal operation of the market conditions is damaged, the price mechanism fails, producers to deal not only in search needs, looking for transaction objects trade negotiations, trade agreement, trade pay more than the market sound on transaction costs, market mechanism and the destruction of the negative effect on the trading behavior produces a lot of additional cost.

And with time constraints enhancement, the transaction cost increase. Therefore, in this case, providing salvation through market mechanism is not always best-efficiency.

Also, on the other hand, if you don't consider time constraints, under the condition of the division of labor and mature market, production efficiency of the below the market efficiency.

In other word, the army production efficiency of the people's production and living facilities necessary after a disaster is far lower than the latter. If joining the time factor, however, backing in the real world, also need to modify.

As mentioned above analysis, the market of the enterprise in order to conclude the transaction, at this time, will pay a high transaction cost, and high and even unable to reach a deal.

And army bureaucratic organization structure, make the allocation of resources within the armed forces and the production process in accordance with the administrative commands and plan to arrange, thereby greatly reducing the transaction cost of a rescue operation, therefore, in the case of time constraints, the stronger, the transaction cost factors are the key to decide the production efficiency , should choose military force to maintain the non-traditional security at this time, but after time constraints gradually relaxed, the transaction cost factors weakened gradually, the management cost and cost of production factors gradually highlighted, at this time shall be selected to socialization, use market mechanisms to implement security.

If we use C_1 and C_2 to represent the all cost doing rescue and relief work of enterprises and military organization, use t to represent time. then:

$C_1(t)=C_{ET}(t)+C_{EMP}(t)$,

$C_2(t)=C_{AT}(t)+C_{AMP}(t)$,

The C_{ET} and C_{AT} the equation represent the transaction first cost of enterprises and military organizations, C_{EMP} and C_{AMP} represent the first production and administration cost of their operations.

Generally speaking, army takes the military command mechanism, so C_{AT} almost equal with 0.

Calculate the differentiation of $[C_1(t),C_2(t)]$ about time, if MC_{AMP} -MC_{EMP}<MC_{ET}, IFM should be carried into efficiency;

while if MC_{ET}<MC_{AMP} -MC_{EMP}, we can use market adopting the social supply method.

So, the t is boundary to end IFM when MC_{AMP} -MC_{EMP}=MC_{ET}, the add should be given by other government department after this, like department of civil affairs, the social security department etc.

5. THE OPTIMAL SCALE OF IFM

Dealing with various threats and performing diversification military activity are mission requirement which new stage gives to army.

But under the budget constraint, the more resources allocated at traditional safety, the less allocated at the non-traditional safety.

So IFM have the optimal scale. Here we assume there is a reasonable military leader who pursues for best country safety function, because in the new stage, military function includes maintaining traditional safety and non-traditional safety, so the size of the national security function mainly refers to the function of traditional safety (S1) and non-traditional safety (S2); meanwhile the military recourses that achieve this general security function are form state funding, in other words, it subjects to budget constraints.

In this way, military leader must make the military spending allocation equilibrium between the traditional safety protecting and the non-traditional safety protecting on the premise that the minimum demands of non-traditional safety and non-traditional safe are satisfied.

Our thought is finding this equilibrium conditions to decide optimal allocation of total military spending between two functions, and then ensure the optimal scale of IFM. Next we will use modeling to solve optimal scale.

Build Stone-Geary form model, and then:

$$W = \alpha \log S_1 + (1-\alpha)\log S_2$$
$$= \alpha \log(MTS - M^*) + (1-\alpha)\log(MNTS - T^*) \quad (1)$$

Among them W represents security function, α is security preference parameters, and α and 1-α represent the financial resources allocated on the traditional safety and non-traditional safety function accounted for the proportion of the total military resources, MTS and MNTS represent military power protecting the traditional safety and non-traditional safety, so

$$M\,E = MTS \cdot p_{mts} + MNTS \cdot p_{mnts} \quad (2)$$

Among them ME represents total military resources, p_{mts} and p_{mnts} represents unit ensuring funds of military power protecting traditional safety and non-traditional safety.

Because what perform the ensure task of protecting non-traditional safety and traditional safety all are military power, having a homogeneous, so we assume p_{mts}=p_{mnts} ,and assume unit military power ensuring funds is 1,then equation(2) can be simplified as:

$$M\,E = MTS + MNTS \quad (3)$$

M *represents the minimum traditional safety threshold, and it can be replaced by the military power that resists to enemy´s attack.

$$M^* = \beta_0 + \beta_1 \cdot M_1 \quad (4)$$

Among them M1 represents the power of enemy; β_0 is military strategic parameters, represents anti-enemy conflict strategy: if it is passive defense, β_0<0,if it is initiative attack, β_0>0; β_1 is Lanchester coefficient that reflects military strength relative efficiency in the battle, so β_1>0; β_1 can also reflects our army´s reaction degree to the change of enemy military power´s change, soβ_1 can be greater than, less than or worth to 1.

T* represents the minimum non-traditional safety threshold, and it can be replaced by the non limit dealing result of the non tradition safety

$$T^* = \gamma_0 + \sum \gamma_i \cdot T_i \quad (5)$$

The T_i of equation (5) represent the i class non-traditional safety, and T_i>T_0 (T_0 is the boundary of IFM carried into execution, which is decided by the time and space dimensions); γ_0 represent the military operations policy to non-traditional safety; γ_i represent the non limit dealing coefficient of non-traditional safety.

Build the Lanchester equation as follow:

$$L = \alpha \log(MTS - \beta_0 - \beta_1 \cdot M_1) + (1-\alpha)\log(MNTS - \gamma_0 - \sum \gamma_i \cdot T_i) + \lambda(M\,E - MTS - MNTS) \quad (6)$$

We can get the best military expenditure allocation to several safety threat:

$$MNTS = (1-\alpha)\cdot(M\,E - M^*) + \alpha T^* \quad (7)$$

$$MTS = \alpha(M\,E - T^*) + (1-\alpha)M^* \quad (8)$$

Equation (7) gives IFM's optimal scale. However, the implicit condition of this conclusion is that national safety mainly depends on the military strength flux. In fact, national safety depends on military strength stock.

We must add the time factor t, make the static model extend into dynamic model.

Our country´s military power of stock K(including equipment and human capital) can be defined as total spending depreciation value in the past, represented as:

$$K(t) = (1-\delta)\cdot K(t-1) + MTS(t) \quad (9)$$

Among them, δ represents rate of depreciation, is a parameters remaining to be estimated. Because what this article researches is in peaceful stage, so the depreciation is passive rate, isn't damage in war. In the same way, we can assume enemy military power stock K_1 as the above, is

$$K_1(t) = (1-\delta)\cdot K_1(t-1) + M_1(t) \quad (10)$$

Next

$$S_1(t) = K(t) - (\beta_0 + \beta_1 \cdot K_1(t)) = MTS(t) - M^*(t) \quad (11)$$

Then we can redefine $M^*(t)$ as

$$M^*(t) = (\beta_0 + \beta_1 \cdot K_1(t)) - (1-\delta)K(t-1) = \beta_0 + \beta_1 \cdot [(1-\delta)\cdot K_1(t-1) + M_1(t)] - (1-\delta)\cdot K(t-1) \quad (12)$$

Then

$$MNTS(t) = (\alpha-1)\beta_0\delta + (1-\alpha)M\,E(t) + \alpha[T^*(t) - (1-\delta)\cdot(MTS(t-1) + T^*(t-1) - M\,E(t-1))] + (\delta-1)\beta_1 \cdot M_1(t) \quad (13)$$

Equation (13) just is the optimal needing scale of IFM after considering time factor.

6. THE POLICY SYSTEM ARRANGEMENT ABOUT PROMOTING IFM FUNCTION

In theory, if the sum of the needing scale of IFM and money demand scale to deal with traditional safety threats is more than the budget constraints, then however we allocate resources ,we always attend to one thing and lose another, being hard to make every safeties achieved. But in reality, this question doesn't exit. Because as far as every IFM practice, when army carry out operations other than war to deal with non-traditional safety threats effectively, the surroundings are still safe. But what still needs to be pointed out is that the function of IFM is low. Specific performance in allocation disequilibrium on time, money isn´t enough in emergency support early, but latterly, there are a large number of supplies, then many supplies are unused; and allocation disequilibrium on space, it is mainly that money support on every unit carrying out operations other than war is unequal.

Specific performance in some areas have multi-channel supply is enough and has rest, but other areas don´t have supply or are short of supply, on the one hand, it´s waste; on the other hand, it´s shortage.

Money stranded and shortage phenomenon exist at the same time, which causing allocation disequilibrium on space; inefficient functioning, money support appears for outages and hysteresis; wasting, there are repetitive purchase, uncontrolled cost, inefficient support, relax management and some other problems; out of line with the ensuring strength from non-military department.

To improve the function of IFM, on the one hand we need to build valid IFM management system.

This system must be in line with the comprehensive integration, quick response, such as structure distinct requirements.

To be specific, we should build a logistic support as the main body of the regional joint funding support system.

In this system, we can build all military(such as headquarters), regional (such as war zone) and action army three levels support institutions, each institutions, respectively, to raise, support, management, coordinating and other specific support duties.

In the current circumstances, we can build the combination of regional logistic and system support money support system as a transition system.

In the other hand, we should perfect the IFM management system. First, we need to formulate and perfect IFM plan, and it's specific content includes money demand and limitation of cash reserves, support system, emergency response procedures, fund-raising channels, support pattern and choosing support way, setting support institutions and staffing, job duties and division of tasks, and emergency drill in peacetime, if need, we can also set non-traditional threat warning monitoring system; when we formulate IFM plan, we should make the procedures simplified, the content valid, the project detailed, the operation flexible, the start quick.

Second, we should establish the contingency reserve system.

As the preparing storage section of IFM, contingency reserve is mainly used to support the rapid raise additional materials equipment, and force needed for the shipping fees, early in the mission within a short time.

Third, formulate the standards for ensuring adequate funding scientifically.

The standards for ensuring adequate funding for scientific formulation are in charge of the general logistics department financial department jointly with the related business department.

The specific formulation should be combined with all precious spending data for performing different tasks.

Considering units at all levels, implements time of the task, labor intensity, and the difficulty of security factors. we should make all kinds of funds allocation, use and manage standards according to the principle "scientific and reasonable, easy operation, easy to manage" to formulate a standard system matched with the system.

Forth, create a new development fund model. Try to make the contingency plans to ensure and random security combined as well as logistic support and system guarantee, designated security and accompanying security, fund guarantee and physical guarantee, self-protection and assistance security.

We adopt the way of combination of for-some security and for-all security as well as emergency safeguard and security after, vertical guarantee and horizontal guarantee, temporary safeguards and common security, based on the factor of specific practice and the technical progress.

Fifth, clear the method of funds supply. In an ordinary way, we can take measures such as collecting and submitting an expense account, reimbursement for one's actual expenses and all-in rate. Besides, in special cases, the method of responsibility to control is feasible. Sixth, build the coordination mechanism for ensuring adequate funding.

The main purpose is to strengthen the coordination of reverse fiscal mobilization and other main coordinating funds, as well as, behind the financial department and other professional service, funds safeguards action and combat command and synergy, and funds safeguards and local security forces.

Besides, we should take measures to strengthen financial management, strict supervision and control, update the information technology means, allocate, financial security equipment and train the ability of personnel quality.

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