

ECONOMIC ANALYSIS OF THE RESIDUAL POWER IN THE ARMY - FOCUS ON THE ENFORCEMENT OF THE ARMY'S BY LAW

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Abstract: *A Supervision decision in the army is actually the decision making whether or not to carry out the army rules and regulations when a disobey behavior happens. However, the army rules and regulations are incomplete because of the information costs, language uncertainty, general application finiteness, individual comprehending deviation, social influence. In the army, the supervisor is encouraged to use discretion, which means the supervisor takes advantage of tacit residual power to enhance the rules and regulations' adaptability through changing the enforcement investment and the enforcement way. Nevertheless, the flexible enforcement is a "rapier". On a positive side, a loyal supervisor's flexible enforcement is actually reasonable in consideration of the cost and the damage of rule-breaking behavior. On a negative side, a disloyal supervisor's flexible enforcement probably means an improper decision or discretion influenced by intuition, bias, political situation, etc. Whatever, same illegal behavior probably leads to different consequences, which will destroy servicemen's rational expectations seriously and do harm to norms' rigidity and rules' reliability.*

Keywords: *Army regulations, Flexible enforcement, Enforcement costs, Enforcement damages, Rule-breaking damages, Flexible enforcement damages*

1. INTRODUCTION

Flexible enforcement of the rules and regulations in the army is a common phenomenon. In face of a disobey behavior, supervisors often say: "It can either be as big or as little." Between the range from the big to the little, there exists the discretionary power. Flexible Enforcement is a two-edged sword: considering the cost and the damage of a rule-breaking behavior, a loyal supervisor's flexible enforcement is actually reasonable in spite of some risks. But we must not ignore that a disloyal supervisor's flexible enforcement probably means some improper decision or discretion influenced by intuition, bias, political situation, etc., which is harmful not only to efficiency but also to rules and regulations. And it will also destroy servicemen's rational expectations seriously and damage norms' rigidity and rules' reliability.

Organization's regulations look like the contract between the employer and the employee. One important character of the neoclassical contract theory is the perfection of contract, which means contract is signed orderly without outside interferences, the parties could predict the events might occur and consequently they have no reason to violate the contract. And even though contract's dispute happens, the third party could also enforce the contract. Ronald Harry Coase (1937) has negated the neoclassical contract's assumption of complete information and made the people recognize the transaction costs. Simon (1940) has changed the neoclassical contract's assumption of "Rational Man" with the conception of "Bounded Rationality". Transaction Cost Economics has revealed the facts that the contract is imperfect because of the transaction costs. To remedy the imperfection of contract, Grossman and Hart (1986) divided the contractual rights into specific rights and residual rights.

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Incomplete contract theory is applied into organizational management. Hart(2001) proposed a new viewpoint—assuming parties can give short-term commitment and carry through “games of commitment”, contract would become perfect after the event.

Along the idea of dynamic programming, researchers have deepened the study of contractual rights. DaiZhiyong and Yang Xiaowei (2006) has applied it into economic analysis of the law's selective enforcement.

They regarded the selective enforcement as the application of residual rights which is the remedy method for incomplete law. Anglo-Saxon's Law and Practice has the similar viewpoint: when an unexpected event happens, owner can decide how to use assets. Although many outcomes have been made as above, research in military organizational management has been scarcely involved.

To be honest, military management is a typical case because the will of commanding officer conflicts with the norms rigidity.

2. IMPERFECTION OF THE ARMY'S REGULATIONS AND RESIDUAL RIGHTS

Rules and regulations in the armed forces are incomplete for that, firstly, it's impossible for any regulations to elaborate on all conditions accurately because of information costs.

Secondly, even though there are regulations for all conditions, the language of the regulations is uncertain such as semantic fuzziness, various interpretations, language ambiguity.

Thirdly, the regulations can't be applied to the whole armed forces generally because the whole armed forces are in various different areas.

Fourthly, each supervisor has the individual comprehension deviated from others. Fifthly, there are other social influences on regulations' explaining such as policy, ideology, social status.

The first three factors on above belong to legal factors and the last two don't belong to legal factors.

All in all, the two types of factors together result in the regulations' uncertainty.

The imperfection of regulations resulted from the legal factor need to be made up by giving supervisors residual rights.

The core of residual rights is that supervisors can carry out a regulation flexibly according to unexpected circumstances. In fact, we can see some regulations' flexible enforcement in the army. For instance, scientific and technological cadres in the army should work on time in China, but working on time is not suitable for the scientific research job.

If only research outcomes should be taken into account for cadres' performance assessment, “working on time” is unreasonable.

Thus, in practice, “working on time” has not been carried out very well in many grass roots units. However, when the factor which is not legal factor gets involved such as superior supervisors tend to understand regulations rigidly and emphasize rigid enforcement, as a result, flexible enforcement rights will be drawn back - as soon as a formal file comes from the superior, the regulation of “working on time” will be carried out strictly for a short time and if disobedience happens, it will be given a heavier punishment.

3. PRELIMINARY ANALYSIS ON FLEXIBLE ENFORCEMENT: CONSIDERING COSTS

Facing disobedience, whether or not to carry out regulations and how flexible regulations should be carried out all depend on cost trade-offs. No matter how to enforce, enforcement always needs investment which can result in costs. No matter how to ignore disobedience, ignorance will always result in damages.

Because of the imperfection of regulations, any enforcement is always with flexibility. The key is to what extent flexibility should be.

It is widely believed that a decision of selective enforcement depends on enforcement costs. In armed forces, we believe it as well.

Assuming other conditions unchanged, the lower the enforcement costs are, the less enforcement flexibility will be. For instance, the cost of enforcing “working on time” is very low - the popular way of supervising is to sign in.

If only take enforcement costs into account, supervisors are easy to supervise. But reality is just the opposite that many supervisors mean to take relaxing management in scientific research unit, which means obviously that enforcement costs can't explain it.

From economic point of view, if carrying out a regulation will lead to social lost, this regulation must be an inefficient one. Just like secret protection regulation which demands inquiry for the protection of secrets before the paper is published. Secret protection regulation maybe is not an easy-enforced regulation because that, firstly, the secret check stays in the proceeding form of check.

Secondly, it has seriously reduced the enthusiasm for cadres to research in the military field in case of complicated inquiry procedures and any risks.

As a result, cadres would do more general research, which means the lost for the army.

Considering the lost, the supervisor would ignore the regulation's enforcement.

Table 1. Influence of Enforcement Costs and Enforcement Damages on Supervisors' Enforcement

		Enforcement Damages	
		Yes	No
Enforcement Costs	Low	Slacking Enforcement	Strict Enforcement
	High	No Enforcement	Slacking Enforcement

In conclusion, enforcement costs mean the resources that the regulations' enforcement will consume.

Enforcement damages mean the reductions of profit for the army because of enforcement. These two types of costs are resulted from regulations' imperfection, could be called the legal factor.

Facing disobedience, supervisors will logically choose to enforce regulations flexibly in view of two types of costs.

Beside two types of costs, there are other costs involved. If a regulation is effective, which means there is no enforcement damage and disobedience will lead to damages, which are called rule-breaking damages.

And if supervisors ignore this disobedience, the flexible enforcement will move forward to reduce norms' rigidity and rules' reliability, even imitation of disobedience, which are also called damages - flexible enforcement damages.

Table 2 Influence of Rule-Breaking Damages, Flexible Enforcement Damages on Supervisors' Enforcement

		Flexible Enforcement Damages	
		High	Low
Rule-Breaking Damages	No	Strict Enforcement	Not Sure
	Yes	Strict Enforcement	Not Sure

In conclusion, there are two types of damages and the next one-flexible enforcement damages, plays the decisive role.

If flexible enforcement damages are very low, whether or not to choose strict enforcement depends on supervisors' subjective factor.

Otherwise, supervisors will choose strict enforcement, whatever rule-breaking damages are, because they want to show their legitimacy.

4. FURTHER ANALYSIS ON FLXIBLE ENFORCEMENT: CONSIDERING SUPERVISORS' TYPE

In the army, the superior entrust the subordinate to supervise and enforce regulations in each level.

Because the agent is a self-interested man, his own target is not always in accordance with the organization target.

If compensation mechanism meets incentive compatibility, the agent would fulfill himself by fulfilling organization target automatically.

This kind of the agent is called loyal supervisor. Otherwise, he or she is called disloyal supervisor.

According to the different target, supervisors' flexible enforcement should be divided into two levels: one is the flexible enforcement by loyal supervisors, the other is the flexible enforcement by disloyal supervisors.

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4.1 Loyal supervisors' flexible enforcement. The army wants to achieve the utility at the lowest cost, so loyal supervisors' target is to look for the minimization of enforcement cost under the utility constraint.

Assuming loyal supervisors try to change the enforcement input and enforcement way to achieve the minimization of costs including enforcement costs, enforcement damages, rule-breaking damages and flexible enforcement damages.

Facing "efficient regulations" and "inefficient regulations" under different circumstances, loyal supervisors would make the different choice of enforcement.

Circumstance I: Efficient Regulations Enforcement

If regulations are efficient, there is no enforcement damage and there are rule-breaking damages once disobedience happens. Thus, loyal supervisor's target function is as below:

$$\min: C=i + n(i,w) + h(w) \quad (1)$$

In formula(1), "C" is total costs, "i" is enforcement costs, "n" is rule-breaking damages, "h" is flexible enforcement damages, "w" is enforcement way (flexibility).

Now we are trying to acquire the optimal solution for "i" and "w".

If "w" remains the same, assuming no budget constraint on "i", according to formula (1), we can obtain the optimal enforcement costs with formula (2):

$$\frac{\partial c}{\partial i} = \frac{\partial n}{\partial i} + 1 = 0 \quad (2)$$

Rule-breaking damages' increase will accelerate enforcement costs. Because we have assumed there is no enforcement damages and enforcement costs are total costs.

Loyal supervisors are looking for the minimization of total costs.

When rule-breaking damages are very serious, he has to look for another way to minimize total costs.

The way is to change enforcement way (including no enforcement input, quick input and late input), which can influence rule-breaking damages.

If "i" remains the same, according to formula (1), we can obtain the optimal enforcement way with formula (3):

$$\frac{\partial c}{\partial w} = \frac{\partial n}{\partial w} + \frac{\partial h}{\partial w} = 0 \quad (3)$$

Analysis of n(i,w): "n" is decreasing function of "i" and "w", which is

$$\frac{\partial n}{\partial i} < 0, \frac{\partial n}{\partial w} < 0$$

That means more enforcement costs and more flexible enforcement way, quicker stop of disobedience, which means much less rule-breaking damages.

When rule-breaking damages has happened at beginning, only less enforcement input can stop it. So we can say enforcement input has the biggest marginal returns.

But if damages are proceeding and after that, regulations are enforced, even more input can't stop it as time goes by and damages will become more.

So we can say enforcement input has decreasing marginal returns. In another words, we can also say enforcement input has the increasing rule-breaking marginal damages,

$$\text{that's } \frac{\partial^2 n}{\partial i^2} > 0$$

Analysis of h(w): flexible enforcement damages depend on flexible enforcement, because that flexible enforcement destroys the cadres' anticipation of steady regulation and also conflict with "governing the armed forces by law", which leads to flexible enforcement

$$\text{damages increased, that's } \frac{\partial h}{\partial w} > 0$$

And frequent flexibility can abolish the normalized usage of regulations in military, which probably leads to damages accelerated,

$$\text{that's } \frac{\partial^2 h}{\partial w^2} \geq 0$$

In conclusion, flexible enforcement not only reduce rule-breaking damages $\frac{\partial n}{\partial w} < 0$, but also

$$\text{increase flexible enforcement damages } \frac{\partial h}{\partial w} > 0$$

Thus, the influence of "w"-enforcement way- on total costs is not sure.

Strengthening the enforcement (another kind of flexibility) can make rule-breaking damages reduced a little or even cannot make damages

reduced, which means $\frac{\partial c}{\partial w} = 0$ in formula

(3) and can only make flexible enforcement damages increased, so formula (3) is impossible and the optimal value of “w” should be zero, which means the optimal solution is to enforce according to regulations.

In another condition-strengthening the enforcement can make rule-breaking damages reduced a lot, the optimal choice is more flexibility,

$$\frac{\partial c}{\partial w} < 0.$$

But more flexibility means more flexible enforcement damages. From the formula (3), a loyal supervisor will try to make the marginal returns of flexibility equal to marginal costs of flexibility.

That is to say, only if the flexibility is effective, can supervisors utilize it. So facing some trifles, supervisors should not enforce regulation flexibly.

Circumstance II: Inefficient Regulations Enforcement

If regulation is out of date, enforcement will lead to organization lost or enforcement damages, and otherwise, disobedience often will not lead to any real damages.

For this kind of regulations, the optimal choice of enforcement investment and way is zero.

In reality, this choice maybe go through a gradual process, that’s to say, the supervisor will reduce enforcement at first, and then do no enforcement.

Circumstance III: Same Regulation’s Enforcement in Different Cases

In terms of different cases, such as different groups and different districts, disobedience may result in different costs and different returns, and different outcomes of $n(i, w)$ accordingly.

This condition causes that the same regulation’s enforcement is different in different groups and different districts.

4.2 Disloyal Supervisors’ Flexible Enforcement. Armed force is a pyramidal pattern organization and supervisors in each level undergo the pressure to promote to be a higher officer.

Thus, their enforcement choice is always influenced by the political environment.

If the political environment is mild, whether or not to enforce regulations is only related to performance for promotion.

If the political environment is hard, enforcement will be strengthened to meet the superior for promotion.

The important factor influencing on promotion is performance, so this paper assumes that seeking promotion is the target of the supervisor in each level.

Circumstance I: The case with large rule-breaking damages, many peoples involved, and small flexible enforcement damages

If facing the case with large rule –breaking damages, many peoples involved and small flexible enforcement damages, the supervisor will try to conceal it by solving it inside at beginning. Thus the enforcement way is more flexible.

Circumstance II: The case with large flexible enforcement damage

Anyhow rule-breaking damages are, if the case has induced negative externality because of no control as fast as it would be, for instance, if the case is paid attention by the superior level, the enforcement will be interfered by the high level, and so the target function is same with formula(1).

Circumstance III: The case with no rule-breaking damages and small flexible enforcement damages

If the case has no rule-breaking damages and no influence of flexibility on rule-breaking damages, the supervisor will not care about it.

And if no enforcement doesn’t induce any negative externality and the superior level doesn’t care, the best enforcement choice will depend on how supervisors’ performance are related to it.

So, supervisors’ enforcement choice in this case is not sure.

5. CONCLUSIONS

Enforcement flexibility is resulted from the conflicts between the law's unification and the enforcement situations variety.

The flexible enforcement is a popular phenomenon in many countries' public organizations. On one side, regulations' universality needs to ignore the all kinds of cases.

On the other side, regulations can't easily change. If in a stable world, any regulations or laws are perfect and need not flexibility. But the world is not a stable one- situation is different and future is not sure, and there exists deviation between universal regulations and real needs, we only have two choices: the one is to abolish current regulation; the other is to enforce current regulation selectively.

Each choice has costs. If the regulation changing cost is too high, selective enforcement of current regulation would be the better choice.

So the armed forces always encourage supervisors to enforce regulation flexibly, which means the implied residual rights for supervisors, with which supervisors could enhance the regulations' adaptability by changing the enforcement investment and enforcement way.

We can see that from the above, in short term, flexible enforcement has its reasonable efficiency, which can explain the phenomenon of flexible enforcement in public organizations.

Flexible enforcement means the solution is more influenced by the supervisor's subjective factor, which is more easily influenced by the intuition, bias and political situations.

This flexibility induces that the same disobedience has the different legal ending, which will strictly upset the cadres' rational expectations and destroy rules' reliability.

As Montesquieu ever said before: it is eternal experience that the person who has authority is likely to abuse power. Supervisors' residual right could make each solution of case follow their own needs.

If supervisors don't care the disadvantages of flexibility and disloyal supervisors deliberately utilize this authority to meet their own interests, regulations will exist in name only.

This kind of flexible enforcement damages will make total costs infinitely large.

Accordingly, it is very important to put the residual rights into legal system.

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