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The Logic to Quantify Operation of Social Regulation

Mei-ping Liu *

School of Public Affairs, Xiamen University, Xiamen Fuajian, 361005, China

Abstract

In the process of social regulation, the Selection of resolution about conflict between the regulator and the regulated, directly affects the efficiency and social equity of the regulation. The costs and benefits of social regulation were quantified by the opportunity cost , to promote the execution of regulation and to avoid violations. It is still not perfect for the Chinese market, and has multiple objectives on the social regulation. At present, by improving the level of social regulation, it can change the weak position of consumers in negative level, and encourage the moral consciousness of producers to in positive level, promoting the better material and spiritual aspects of market together.

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*Keywords:*Social regulation; cost-benefit Analysis; opportunity Cost

1. Connotations and object's characteristics of social regulation

1.1 Connotations of social regulation

Caoyi Zhi (1992) refer to social regulation as "For workers' and consumers' safety, health and sanitation, environment protection and disaster prevention, to develop certain standards and prohibits in the quality of goods and services as well as various activities which accompanied with the producing of these goods and services."[1] Since the 1970 s, while relaxing economic regulation, western countries' governments begin to

* Mei-Ping Liu. Tel.: 015396282093.
E-mail address: meipingliu@163.com

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turn the focus of regulation to social regulation fields. In order to improve the efficiency of regulation, it is necessary to measure the various costs and benefits brought by regulation to determine the need for regulation and how to choose the optimal regulatory tools. As Robert. W. Hahn (2006) mentioned, the first cost-benefit analysis report, which was submitted to Congress in 1997 by the United States Office of Management and Budget (OMB), estimated that in 1997 the cost of regulation in American society was 198 billion$, revenue was 298 billion$, and net income was 100 billion$. In theory, the cost-benefit analysis of regulation has important significance for government regulation. However, to accurately assess the social costs and benefits of regulation is quite difficult, social regulation can not only consider the costs and benefits of regulation comparison, it also needs to consider factors such as social justice and sustainable development of the economy and so on. Therefore, the cost -benefit analysis only provides an referable assessment standard for regulators to develop and implement regulatory policies.

1.2 Characteristics of social regulation object

As the object of social regulation, environmental protection, products' quality and services' provision, citizens' security and safety have some characteristics such as public goods, non-value, negative externalities and information asymmetric, etc., these are the reasons for market failure . Public goods refer to non-exclusive, non-competitive products whose production and consumption are indivisible and universal. Pure public goods is a kind of inseparability in producing and consuming, non-competitive and non-exclusive products, which has joint supply and ruled out the possibility that others are not spending. In addition, there exist quasi public goods which not only have characteristics of pure public goods but also can be priced according to the principle of beneficiaries afford.

Non-value characteristic refers to denying the market value of goods function from the perspective of ethical norm by society. The goods, which can formed freely configurable but whose producing is forbade or restricted by social ethics, such as drugs, anesthetics, nuclear fuel, nuclear reactors, etc., are not advocated by society. And the production and sales of these goods is forbade or restricted by the state according to the provision in terms of legal system.

Negative externality refers to the impact of certain economic behavior to external, resulting in the private cost is greater than social cost, and make private behavior cause additional losses to society.

Asymmetry of information refers to the difference of distribution among various economic entities, such as between producers and consumers, between buyers and sellers, one of which is in dominate position due to more information possession, the other one of which is in inferior position due to less information possession.

2. Premise of internal and external property right in social regulation operation.

2.1 Define and protect property rights characteristic externalities

In the real world, property rights theory which lacks of nation is a incomplete property rights theory. State as the main part to provide basic property rule is in favor of reduces transaction costs in a large scale. Facing negative externalities, if the state "doing nothing", it will spent much time for negotiating . Even appeared the phenomenon as Umbeck (1978) described: under the condition of anarchy, "using violence to define property rights ." In this way, a lot of resources will be allocated to the non-productive invalid purpose. State property in the public domain is not want to eliminate externalities, but in practice often limited by objective conditions, leaving a large number of "public domain."The reason as follows:

First, limited to the development of technical means. For example Shaanxi is the pilot reform to turn contracting right to coal mine into private property rights. The process of privatization is based on the

accurate estimates of coal reserves. Whether to have sufficient theoretical techniques to ensure that the sale price of state-owned mineral deposits reasonable, is an important condition to state property loss. In addition, China has no statistics on the water pollution caused by underground water and coal cinder produced during coal extraction. Making rules of tax must rely on the estimates of the size of damage of externality, so it is difficult to develop an appropriate types and amounts of taxes.

Second, the lack of property rights issues concerning social science knowledge. Definition and clarification of property rights generally consists of three levels: the first is the initial property rights, namely property ownership. This is the basic contents of the delimitation of property rights and explicitation; followed by under conditions of the decomposition of property rights, the delimitation of property rights and explicitation; the third level is the so-called externality, the delimitation of property rights and explicitation caused by external influence, including external economy and external diseconomies. External diseconomies is the main economic activity of a property caused other property losses , which resulted in the issue of who gains the benefit, who bear the loss .According to western property rights theory , which is based on the original delimitation of property rights, resulting in a new issue of property rights. So it is in the process of delimitation continually, it is difficult to delimitate based on the existing infrastructure and technology infrastructure organizations. For example, the first level of the ownership of mineral resources is relatively clear. The second level of ownership blur, principal-agent relation caused the the virtually absence of property owner and fight of the. The third level of property has not been reflected in the law fundamentally, such as the delimitation of right to use the surface in the mining area and external analysis and delimitation of the right of agricultural and construction influenced by the using of the right of mining, and so on .

2.2 Property characteristics of internality

1).State's role in solving the internal problems. By definition of Spulber, internality is the benefits and costs endured by traders, but not reflected in terms of the transaction, which includes positive internality and negative internality. In fact, internality is the market failure caused by incomplete and asymmetric information which written in the standard microeconomics. According to the above analysis of property rights of externalities, countries are more likely to provide a framework to solve internal problems. Take safe production as an example, China has enacted a number of laws and provisions to mediae security relations of production. It has been clearly explained how to define the responsibilities of labor injuries in the "Labor Law" ,the standard labor contract also helps a lot to avoid straying into the trap contract. We can say that the scope of internality greatly reduced as Spulber’s definition.

2).Public domain features and solutions of internal property. Consumer safety and producers’ safety are very seriously, so the crux of the problem lies not in the definition of property rights given that so much relative laws. Western property economics, property rights system contains a definition of property rights and property rights protection. In fact, because the definition of property rights is not easy, so although in the law all the resources are defined clearly as privately owned, there is a total "public domain" in the actual economic life, those nominally belong to private assets, but since the actual execution costs of private property can not be too high to maintain exclusivity of their rights. Therefore, property rights in law and property rights in fact are usually not the same, and the extent of such inconsistency depends on the degree of effective protection of property rights.

In reality, property protections not only just rely on the private force, but also on the Group's strength and national power. The protection of property rights in our country is relatively small. Consumer interests have repeatedly been hurt although there is a "Consumer Protection Law.

3. The quantification and compensation process of cost revenue in social regulation operation.

3.1 Quantify the social opportunity cost of regulation cost-benefit.

Social regulation comes at a price, and that price is the cost, in addition to the tangible costs, there are intangible costs which are evaluated in terms of opportunity cost. Opportunity cost refers to get an opportunity by abandoning another opportunity. Samuelson referred to opportunity cost as: "When we are forced to make a choice between scarce goods, we have to pay the opportunity cost; the opportunity cost of a decision is the value of another kind of available best decision [2].

There is a revenue difference between choosing and abandoning social regulation, the revenue difference is caused by the choosing. This revenue difference can be considered as the value space of regulation cost and revenue. About the relationship of regulation and economic behavior, there are three scenarios:

1).The economic behavior fully considers the impact of social regulation;

2).The economic behavior ignores the impact of social regulation, but not intentionally exercised irregularities to profit (which should be the most common);

3).The economic behavior fully established on the basis of speculation and profiteering by a variety illegal means.

For the above three cases investment appraisal respectively:

Assuming after assessment, the expected profit of 1) is u_0, the expected profit of 2) is u_s, which means that the opportunity cost of economic actors is $u_s - u_0$. Let $u_s - u_0 = k_1$ (apparently $k_1 > 0$), the k_1 can be considered as the basic price compensation which economic actors who stick to regulation deserved. Only when an economic actor is given the compensation price which is not less than k_1, his cost paid for regulation seeking is compensated least.

There is only a model of sticking to some kind of regulation, but there may be n kinds of methods of the corruption of the regulation, assuming after assessment, kinds of unregulated possibilities exist in 3). The expected profit values of this unregulated behavior were $u_1, u_2 \ldots u_n$, respectively. Let k_2 Obviously there is $k_2 > k_1 > 0$. In order to reflect the reward and encouragement for accepting regulation, it is not enough that just let the cost of regulation be compensated, then, it might as well get value from (k_1, k_2), any value got is the reward profit of regulation, can be called the surplus of regulation. Let $u_1, u_2 \ldots u_n$, taking the average $\frac{\sum_{i=1}^{n} u_i}{n}$

Rather than take the minimum or maximum, is fairly modest both reflect the reward of accepting of regulation and not excessive reward. In this open interval $(k_1, \text{n}\, k_2)$, all the values are sufficient to have different level surplus after covering the costs of regulation k_1. In other words, any value in this open interval can ensure that regulation benefits outweigh regulation costs, the economic actors are not only got compensation because of sticking to regulation, but also got the additional reward for accepting regulation. And this reward of regulation gain value from an interval, rather than fix value in a numeric point like

regulation costs, virtually formed a kind of competition mechanism about regulatory constraints, namely more abandoning of unacceptable regulation behavior, more reward.

Use M to represent benefit of accepting regulation, there are three cases for valuing M:

M < k_1, regulation cost cannot get enough compensation, production suffer from setbacks;

M= k_1, is just to cover the cost of regulation;

k_1 <M < k_2, regulatory costs has got compensation, and there are certain regulatory surplus.

Two additional notes must be presented here:

First, the compensation of regulation cost clearly must guarantee. But regulatory surplus should be given? About this point, consultations and provisions should be made by relevant regulatory entities considering the existing conflict and crisis of regulation of society.

Second, in the process of quantifying the regulation costs and profits, a case cannot be excluded, when $\max\{u_n\} > k_2$

since k_2 is the largest extreme value of regulation profit, but the profit caused by reject the regulations is greater than the extreme, in this case the economic actors may still be tempted to choose the behavior of rejecting regulation. So, for this case, it should be by law to impose sanctions and punishment. In other words, it is to ask the producer to take self-proof responsibility for abnormally high profits.

3.2 Social regulation costs or earnings derived from subsidies

Because of the costs of regulation are not fully directly reflected in the accounting books, and thus regulation earnings cannot be completely reflected by market prices. It is obviously impossible to rely on market forces to make regulation revenue greater than or equal to the regulation cost. Here may as well refer to the approach of Pigou who represent welfare economics: relying on government intervention. To make up for the cost of regulation, can directly use government power to set the support prices? Answer is no. First, the consequence of support price is supply exceeds demand, in order to solve this problem, the government would have to increase inventory or expand external demand. Secondly, the support price essentially forces consumers to pay for regulation. In fact, regulation revenue groups in society are free to have a choice of "reward" or "no reward" for regulation, forcing consumers to pay for regulation is undoubtedly a violation of the right of the freedom, which runs counter to the inherent fairness required by regulation.

Pigu proposed that the way of taxation should be used for negative externalities caused by the behavior unacceptable. Referring to this line of thought, financial subsidies should be adopted for the compensation of regulation costs and regulation surplus. Because the government is the natural representative of the public interest, the government revenue comes from the society; this is a fair and efficient manner for government paying for regulation by financial expenditure. Financial subsidy is transfer expenditure, it can bring income redistribution.

Because the output reducing in the same price, the supply curve S move to left, will cause net social benefits reduced. In order to ensure that when the market price is P, production still reached Q_0, have to let producers get p_t, but due to the moral cost of producers have not been admitted by society, whose price obtained from the market is Po, therefore the difference $p_0 - p_t$ can only be filled through this fiscal subsidies way.

Because S curve is only the supply curve under natural producing, subsidies for difference is only equivalent to a regulation revenue M = k_1 regulated income just to cover the cost of regulation. If you want the regulation income to be outweigh the cost of regulation, that regulation surplus (or regulation reward) exists, fiscal subsidies should be greater than the amount of $p_t - p_0$, but the maximum amount should not be greater than the value of k_2 which evaluated by evaluation system. Referring to discussed above, the difference $p_t - p$ is financial subsidies which must be given, the subsidy higher than the difference $p_0 - p_t$ is a subsidy can be negotiated.

4. Conclusion

In order to make a more precise quantification possible, more accurately reflects the returns and rewards about acceptance of regulatory; we must minimize the interference with other factors to quantify this process, which requires a certain environment and foundation.

The first is the information environment. Transaction costs are the loss of social welfare, transaction costs can not be completely eliminated, but it can be reduced by open information. But because of the complexity of reality makes the media information regulation not always comprehensive, it can be used as a complement to regulation on the case law of some significance, though the case law itself is not perfect. Such as the U.S. Times-Sullivan rules can ensure full media oversight role. But this year has also been some question, one of which is considered the rule encourages irresponsible behavior of the media.

Followed by property basis. Property ownership is a legal form of economic relations. Property rights and freedom are synonymous, property rights and freedom, are bound to make the right choice at the possible behavior. Traditional economics focuses on the study of revenue allocation mechanism, while modern economics focuses on the configuration mechanism of power. It is a necessary prerequisite for Pareto improvement to improve the system of property rights only under conditions of clear property rights. In short,a well-functioning social regulation, in favor of government regulation of the development, implementation of social policies and then the government functions.

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