Multi-dimension Analysis of Social Credit Structure

ANALYSE MULTI-DIMENSIONNELLE DE LA STRUCTURE DU CRÉDIT SOCIAL

Wang Xiqin

Abstract: in this paper, the three-dimension social credit structure made of three vectors including individual credit, organization credit and social credit environment, accordingly, three levels form, they are individual credit and organization credit, social credit environment and organization credit, social credit environment and individual credit. After analyze the interaction between every level vectors. A conclusion is drawn: It is social credit environment that determine the whole social credit condition. This text proceeded with the analysis of the cause of social credit environment of China and put forward the crucial way to improve the credit condition of china. 

Keyword: Individual credit, organization credit, social credit environment, opportunism

Résumé: Dans ce texte, la structure tri-dimensionnelle du crédit social est composé par trois vecteurs, y compris le crédit individuel, le crédit d’organisation et l’environnement du crédit social, en conséquence, trois niveaux de formes y correspondent : crédit individuel et crédit d’organisation ; l’environnement du crédit social et crédit d’organisation ; l’environnement du crédit social et crédit individuel. Après avoir analysé l’intéraction de tous les niveaux du vecteur, il en ressort la conclusion que l’ensemble de la condition du crédit social est déterminé par l’environnement du crédit social. Ce texte donne suite à l’analyse de la raison de l’environnement du crédit social en Chine et propose des solutions pour améliorer la condition du crédit en Chine.

Mots-clés: crédit individuel, crédit d’organisation, environnement du crédit social, opportunisme

1. SETTING-UP OF THE LATITUDE OF CREDIT

1.1 Establishment and defining of vector latitude

Credit includes three rank orders, which are credit nature of individual, organization and social credit environment. They interact and influence each other, then have formed the credit state of the society. So, this paper builds the three-dimension social credit structure by three vectors including individual credit, organization credit and government credit Just as Fig. 1

Individual credit in this text doesn’t mean one’s all credit nature in society, but the nature, shown as a member of a organization. As to individual, he has both selfish attribute and social attribute. While speak to organization, according to the psychological definition, there are the following common characteristics: a) Its member has common society need or goal, no matter whether they realize it; b) It has a certain structure form, makes members in certain relation, thus keep frequent mutual contact and completion of the common task; c) It have one's own normal and conductive inclination, which influence or restrain its own staff. Organization this text refers to includes various kinds of enterprises and institutions. Organization credit is not only a inside inclination but also an outside posture as a integral. Social credit environment in this paper has extensive content, it is divided into institution environment and non-institution environment, the former include historical and cultural environment. The later include the arrangement of various rights and kinds of rules.

1.2 Basic assumption of the Vector characteristic

For convenience, this text generally supposes the followings:

---

1 Economic and Trade School, Huazhong Agricultural University, China.
* Received 25 April 2005; accepted 3 May 2005
With a view to the research of sociology, people have nature of human, colony and individual. Because of the difference between the three kinds of attribute, “people can not represent all the attributes consciously at the same time in a flash, they always show their different attributes in time order, one kind of attribute is shown every time and then” And according to supposing to people's attribute in management, there are economic people, social people and complicated sayings of people, while studying this problem of credit with sociology, ethics, economics characteristic, this text supposes with complicated people for the starting point, at the same time people's values will be influenced by environmental factor and changed. For convenient, organization refer to all enterprises and institutions who takes making maximal benefit as their mainspring objective in formal or in fact, so the assumption of rational people still works.

2. LEVEL ANALYSIS OF THE CREDIT RELATIONSHIP BETWEEN EVERY LATITUDE

2.1 The Analysis of Individual - Organization Credit Level (XOY level)

No matter individual or the organization all face two kinds of choices on credit: Keep one's word or break one's promise. Bases of decision are different to organizations and individuals, the organization regards making profits as the ultimate purpose, individual has one's own yardstick, which means the personal behavior may conform to or crash with the organization's benefits. If individual can earn the organization's support depend on whether his behaviors accord with interests of organization. Its association matrix is as follows:

**Quadrant I.** If a organization itself stresses credit, it requires its members stressing it too. It works in two ways: constrains and encouragement. The credit behavior of the other may make individual's receive the ring of light effect and receives the society's belief, this kind of encouragement function will excite individuals and pay more attention to credit too, if most of individuals and organization both abide by the principle of honest, the brand effect of the organization will be realized under the normal market condition.

**Quadrant II.** But because of complexity of individual, even organization with honest for the creed, not getting rid of the speculation behavior of specific members either, the individual behavior at this moment not merely violates the trade rule, has encroached on the interests of the other side of the trade, and has corroded the prestige of the organization, the organization needs to retrieve credit through certain efforts, in this way , it is inevitably for the organization to enlarge expense, so, the organization is in consideration of one's own
interests, will doubtless punish those who doesn’t stress credit.

**Quadrant III** If the organization chooses to swindle, perhaps there are some staff members out of honest personality and ethical intuitive knowledge, will choose to refuse to cooperate, will even attempt to expose the fraud action, obviously his motive is not in accordance with organization, his behavior will be squeezed and even retaliated against.

**Quadrant IV** If a organization itself doesn’t stress credit, must requires its members to coordinate its fraud, so as to obtain the ill-gotten gains. if all the members choose to cooperate, mean they gang up too. In a situation that external social supervision and mechanism of punishing are not perfect, the possibility of fraud is higher. Explain in terms of psychology, mainly because responsibility is spread, namely individual feels if the behavior acts improperly, its responsibility is shared by everybody, but will not be undertaken to be punished by himself only, then individual is more probably apt to act improperly than when he is alone.

Therefore Organization will always trigger its machine to filtrate its alien members and present a integral organization. By this way, the organization warns its members and influences the behavior even value orientation of most individuals. On the other hand, every individual is a cell of the society, the organization, as a mediacy, will settle a kind of social atmosphere finally by filtration function. It is obvious that choice of a organization act as a key role in building the whole social credit.

### 2.2 organize credit - the level analysis of the social credit environment (YOZ level)

The organization’s behavior inclines to depend on the external inducement and behavior motive. Under common motive--making profits, the choice of the organization’s behavior depends on the external inducement mainly. On condition that the credit behavior can draw higher anticipated net income, the organization will pay attention to it, otherwise, give it up. The acquisition of the net income mainly depends on the social credit environment.

**Quadrant I**: In a situation that social credit environment is good, which means the too market is open, fair and competition, no intervention and activities of seeking for rent, the trader can find his commercial partner freely. If the organization keeps one’s word, in an open market, the sign of his frame will act, which will not only prompt the probability of repeating the trade, and will also attract more trading partners, thus the trade range enlarged and surplus accumulated. In other words, the organization will earn the considerable prize of “credit rent”.

**Quadrant II**: In a situation that social credit environment is good, which means at the same time the credit institution system is sound, effective, and the system is fair to every trader. The supervisor will discovery the fraud and enforce the law impartially, thus play the deterrent function of executing one as a warning to hundred. If the organization has frauds, will inevitably receive his due punishment.

**Quadrant III**: If the social credit environment is abominable, it can be seen in many ways, such as the system itself lagging, government always making unpredictable changes, the supervisor being easily bribed. This result of unstable, unfair and seriousness credit environment, the risk of trade rise, succeeding with the shrunk circle of the trade. Since kinds of constrain is lack, the normal credit order is unable to maintain, dealers have opportunities to speculate by bribe or betraying his partners.

**Quadrant IV**: Under the situation of social credit with abominable environment, if a organization stick to his credit, while other side abandon it, the former may bear more cost. For example, a certain organization with a large amount of funds receivable that can't be regained still stick to his credit, it has never been in arrears with his own creditor. In fact, the fund is used free by debtor, opportunities cost take place. On the other hand, Because he have not adopted the behavior of speculating it means the increase of another kind of opportunities cost that is to take up others' fund free. It is obvious, in a situation that the social credit environment is abominable, it is uneconomical that the organization chooses to keep one's word.

Therefore, on the premise of satisfying rational people to suppose, the behavior choice of the organization depends on the social credit environment, when social credit is with good environment, most organizations will choose to keep one's word, otherwise, it will make the reverse choice.

### 2.3 Analysis (XOZ level) of relation between individual credit and credit environment

When individual is regarded as a member who come from his organization he act as his organization in transaction, so the social credit environment affect him indirectly, it restrict the organization directly at first, then the organization conduct its constrains on his staff.

When social credit is with good environment, because most organizations will choose to keep one's word, therefore require its member to put its frame first, transmit the advantageous information to maintain its creditable image to the society, on condition of well inside control, the individual apt to obey its rules on credit, but the inside control system can't be guaranteed to eliminate all cheat, even when the social credit system is good. The personal opportunism behavior still exists sometimes, if this kind of opportunism behavior
is perceived afterwards, the organization will realize the influence immediately and take strict measure on him, in case of further loss, the social credit environment takes shape and restrains to the individual credit behavior indirectly.

![Fig. 3. The relation between social credit and organization credit](image)

Under the situation of social credit with abominable environment, individual has also two choice: fraud or honest. According to the proceeding analysis, if the social environment is bad, the organization tend to speculate, when its member stick to honest, he will be isolated by his organization, his just action may in cost of being fired. If personal swindle accords with interests of organizing, in a situation that the social credit environment is abominable, will get the support of organization and evolve to the collective collusion. Of course, if he is not on behalf of the organization, the cheater will be expelled, but it is easier for individual to find another work. He can engage in the fraud again and again.

**The interaction during the three dimension:** If the outside affirm or reward the behavior of stressing credit in social environment and penalize severely the fraud organization, which means too the individual is encouraged and protected someway. If the outside does not adopt any positive action when individual act in behalf of society, that means to save individual personality one must in cost of sacrificing the individual interests. Obviously, that is what a rational person will not do.

**Conclusion:** The social credit environment has determined to the choice of the organization, and go to step further, influence or determine the individual credit behavior. the outside credit affect the individual indirectly by the media of organization. It works just as a lever.

![Fig 4. The relation between social credit environment and individual credit](image)

Individual credit / social credit environment = Individual credit /organize credit * organization credit / credit not social environment of

The condition of individual and organization resolve the social credit condition altogether, therefore, the circle of the credit of the whole society is formed.

The social environment is out of control for organization, the later can only adapt to the former, not change, just as the organization for individual. So, our credit construction should proceed with credit environment, form the effective restraint of organizations and individuals progressively.
3. CHINA'S PRESENT SOCIAL CREDIT ENVIRONMENT: VARIOUS KINDS OF RESTRAINT ARE IN THE STATE OF RELAXING

3.1 Historical cultural environment

No matter how perfect the institution is, its execution relays on the executive inevitably. In china, the code of ethic have long been known as "gentleman put more eyes on personal loyalty then on benefits, while a mean person does contrary". and this has become a code of action, but in this code, so-called personal loyalty is usually limited in the relation between friends, it does not meet the requirement of the market economy, with the equal chance and equal condition to every participant, it is "general loyalty" to all participants in the market. In market economy, the transaction is the open, it has broken the boundary of region, the trade happens among strangers mostly, therefore emphasize the contract instead of acquaintance relation. Each participant in equal situation should has the same chance. Traditional "acquaintance's culture" certainly will destroy the principle of fair, just and open in market economy. In fact, in china today, under the impact of commodity economy, the personal loyalty of the friend in the pure meaning has been already rare, it is the interweaving of "profit" and "justice", if the party only saw the so-called "loyalty" each other, it will ignore the interests of other participants in the market existing extensively. it is the fertile soil for kinds of opportunism of individual and organization.

3.2 political economic environment

On the market of the competition, every trade subject has abundant right to choose, either party needs to make the other side's trust, otherwise the trade is unable to continue. China is just in time of transforming its economy machine which makes the middle condition: between administration monopoly and economy freedom. The defects of institution makes the interweaving of rights and interests, which offers enough space for various seeking rents and designing rents. Sometimes, only the person who can obtain a privilege from a officer by bribe will earn the maximal benefits. In reality, this can be seen by many “soybean residue project” in all parts of the country.

3.3 System running environment

The operation of market economy ask for explicit and clear property rights, according to the first law of coase, a clear-cut of property rights can eliminate exterior problem and cut off the transaction fee. In china, the public ownership has last a long time, as result of a obscure division of property rights, a large piece of "public field" has been attracting many shepherds. This can be seen in many ways, such as state-owned assets having become private freely, many state-owned banks having lost their huge amount of loan. Since no one can charge for the "public treasure", no rational person or a organization will obey the principle of sincerity in cost of giving up themselves possible benefits.

4. CONCLUSION

In order to improve the whole society credit condition, the crucial steps is following: first, make a distinct boundary for property rights further, define the obligation and right for the government, then open the rule and the process of all transactions, a fair, right and open market environment with a function of self-clean-up will come out.
REFERENCES
王冰. 楊虎虎. 自發信譽機制與社會強制信譽機制. 江漢論壇, 2003, 03.
易小明. 從人的三重屬性看當前中國所有制變革的合理性. 新華文摘, 2002, 08.

THE AUTHOR
Wang Xiqin, Economic and Trade School, Huazhong Agricultural University, Wuhan, Hubei, 430000, P.R.of China