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MORAL HAZARD IN MARKET TRANSACTIONS AND OPTIONS FOR MITIGATION AND ELIMINATION

НЕБЕЗПЕКА МОРАЛІ У РИНКОВИХ ОПЕРАЦІЯХ ТА ВАРІАНТИ ДЛЯ ПОМ'ЯКШЕННЯ ТА ЛІКВІДАЦІЇ

The problem of moral hazard is very relevant for the present time. Moral hazard initially comes from the basic problem of agency relationship - namely, from post contract opportunism. It lies in the fact that after the conclusion of the contract agent's actions may not correspond to the interests of the principal. This problem occurs for two reasons. Firstly, the principal and agent may have different interests. Secondly, a large value has asymmetries of the information that we will consider in future. Moral hazard is indicated by the probability of the adverse effects conclusion of the contract to the actions of the agent. There is a problem of principal-agent, which will also be discussed in this paper. For the first time the term "moral hazard" arises in the literature devoted to problems of insurance. Moreover, in future with the development of institutional theory, scale impact and spread obtain large value.

Keywords: Moral hazard, agent`s problems, market transactions, transaction`s control, decreasing of moral hazard.

Проблема морального риска очень актуальна в настоящее время. Моральная опасность первоначально исходит из основной проблемы агентских отношений, а именно от пост контрактного оппортунизма. Это связано с тем, что после завершения действия договора агент может не соответствовать интересам принципала. Эта проблема возникает по двум причинам. Во-первых, у принципала и агента могут быть разные интересы. Во-вторых, большое значение имеет асимметричная информация, которую мы рассмотрим. Моральная опасность возникает в момент окончания контракта и при возможности побочных эффектов, от действий агента. Существует проблема главного-агента, которая также будет обсуждаться в этой статье. Впервые термин «моральный риск» возникает в литературе, посвященной проблемам страхования. Более того, в будущем с развитием институциональной теории масштабное воздействие и распространение получают большую ценность.

Ключевые слова: Моральная опасность, проблемы агентов, рыночные сделки, контроль транзакций, снижение морального риска.

Introduction. John Commons attaches great importance to transactions, the representative of the old institutionalism. In his studies, he paid more attention to legal factors. He even has a theory called: "The Theory of transactions." This is his main scientific merit. The basis of this theory is the idea of rarity of resources. Of course, if

resource is rare, then there is a conflict of economic agents about their use. This conflict is solved by committing transactions, which are the basic institutions of society.

In the opinion of John Commons, transaction - is the main category of economic science. According to him "transaction - is not the exchange of goods but alienation and appropriation of property rights and freedoms created by society." The difference between the exchange and Transaction indicates the difference between the physical movement of goods and the movement of ownership of these goods. Moral hazard in market operations were also described by Akerlof G.A [1], Armstrong M. [2], Belk R. [3], Kihlstrom R.E. [4] Resnick P. [5], Shaked A. [6], Weber T.A. [7].

The aim of the research is to research when Moral hazard appeal. Describe moral hazard in market transactions. The objectives of the research: To analyze theoretical aspects; To describe influence of behavioral finance. To analyze options for mitigations and eliminations.

The methods of the research. Preparing the work, the following methods were used: Systematic analysis of the scientific literature; Comparative analysis; Systematization, comparison and summarizing of the results.

Results. Market transactions - a kind of transactions assuming the same legal status of the participants (counterparties), i.e. to carry out a market transaction must be mutual voluntary consent of its counterparties to perform. And as pointed out by John Commons, market transaction is an exchange of ownership of the goods occurring on the basis of a voluntary agreement of both sides of the transaction.

The examples of market transaction operating of the hired worker and employer can serve as on a labor-market, operating of creditor and borrower on the market of monetary resources etc.

Usually there are two basic reasons for moral hazard in market transactions.

- First: the concealment of implicit qualities of goods sold.
- A classic case here - selling used cars or even new, but with a bad track record. For example, the newspaper "sport cars" encourages its readers to buy "Daewoo", listing some of its components manufactured in Italy, some - in Spain, but not talking about those parts that are produced by domestic manufacturers, and most importantly about those who made them. Sometimes the perception of the buyer can be regarded as moral hazard.

- Second, careless disposal of trust property. Careless disposal of trust property is divided into: a waste; risky use of trusted property, inconsistent with its owner.

Consider some examples relating to excessive spending:

- Provincial sits in a taxi at the South train station and requests quickly take him to Zhuliany airport, a taxi driver shows him Kyiv, making a circle around the Khreshchatyk, and only then get to the airport. There is a typical case of unfair usage of trusted property - in this case the passenger's time which is more important than money. Nevertheless, the taxi driver cannot earn in another way and therefore take the risk that client miss the train. Of course, the prerequisite is the incompetence of the client.
- Broker manages a portfolio of shares, which he has entrusted by the client. The duties of a broker is constantly maintain a portfolio of stocks in a state of stable, maximizing profits and insured against risk. To do this, the broker must, without asking the customer to buy and resell some blocks of shares. Nevertheless, the broker gets a commission for each transaction committed by him, so he sells shareholdings in 2-3 times more often than required. It is also unfair usage of trusted property, which is not connected with direct risk to the owner of the property, but it imposes additional costs.
- A classic case of unfair usage of trusted property - poor maintenance of rented apartments. Actually, the tenant is always contains an apartment in worse shape, than the owner. No matter what the lease he signed, he is not the owner and maintain it worse.

There are several ways to solve the problem of moral hazard.

Control above the actions of agent. It is possible to toughen supervision over the activities agent, increasing the amount of resources spent for this purpose. In firms, workers often mark the arrival time and finishing time. Employers buy computer programs that count the number of keystrokes that make secretaries, video cameras watch after cashiers. Perfume company "Kalina", for example, has introduced a different color uniforms. Thereby there is an additional possibility to control workers (you can determine which employees are not at their workplace). As a result, some workers dissatisfied with increased control, left the company. All measures to tighten supervision of employees, as a rule, expensive, and often control costs may exceed the benefit, which is achieved in this way.

Control - a search for additional sources of information about the agent, about his

efforts, his honesty and diligence. Control, however, is not always associated with additional expenditure of resources. Creating of competition between agents can be one of the possible ways of organizing of behavior control. If agents have conflicting interests, they will be willing to disclose the relative merits of their product, highlighting the shortcomings of the products of its competitors. However, rely only on competing sources of information, of course, impossible. All of them keep silent about the general shortcomings for their goods.

The effect of competition can be used within the organization. For example, the company McDonald's uses such control system. Its employees know each other only by numbers, and do not know the names. Apparently, this facilitates their mutual control each other. They should report about errors and negligent behavior of their colleagues, earning themselves points in the ranking. However, this method of control of the company has its limitations. Creating an atmosphere of competition between workers can destroy elements of trust and willingness to cooperate, making it more difficult to solve problems that require joint efforts of agents.

Incentive contracts. The second way to deal with moral hazard - an association of interests of principal and agent using incentive contracts or participate of the agent in the results.

Control may be associated with too high costs. Sometimes about the activities of the agent can be judged by his results, in this case, you can create an incentive for proper behavior by paying a fee for good results. However, this method of preventing moral hazard may be limited by the following factors:

- a) the agent's behavior is often only partially affects the result and it is difficult to isolate the impact of the efforts of the agent on the final results. Sellers of tea, for example, may try very hard, but in the hot summer, the product will be sold poorly, despite their efforts, and ice cream vendors will show considerably smaller diligence, but the weather conditions will affect the dramatic increase in sales. A similar effect occurs if the results are determined by the behavior of the agent, but they cannot be accurately measured.
- b) The conclusion of incentive contracts are limited by agent's level of tendency for risk. Majority of people are not inclined to take risks. They would rather choose a small but steady income than uncertain income that is above the average, but depends on factors unpredictable and uncontrollable by them (weather conditions, general economic conditions or even just luck). The question arises as to who should bear the risk associated with the action of

random factors. When using incentive contracts employer shifts some of the risk to workers if things go well, the workers will receive additional income, but if things go wrong, the impact of adverse conditions on the welfare of the employer will be slightly mitigated since he will pay workers less reward.

Here is an example of stimulating the conclusion of the contract.

Consider the following example, how to use the incentive contract can solve the problem of moral hazard. You have decided to sell the apartment and hire a real estate agent. Of course, you would like that your agent make his best in the search option, however, to check his validity is difficult for you. He could be very hard showing your apartment at any time of the day, praising its merits or may exert minimal effort, working only during the day and in the evening, when potential buyers would inspect your apartment, to hurry home to his family.

One of the possible solutions to the problem - to judge the actions of an agent as a result of his work. You wait for a month, and if the apartment is not sold, you refuse services of the agent. However, he can make arguments in his defense, referring to an inactive nature of the real estate market at the moment, and convince you that the market enters the stage of recovery, and if wait a bit, then he will be able to find a good buyer. You do not understand the real estate market and you find it difficult to evaluate these arguments. You cannot watch the efforts of the agent and cannot judge them on the final result, as for sale apartments may affect the external circumstances that are beyond the control of the agent.

Let's see if we can use incentive contracts to solve this problem. What we have to offer a contract to the agent that he appeared incentives to exercise maximum diligence in the sale of your apartment. We use the following assumptions.

1. The agent can make large or small amount of effort, engaged in the distribution of your apartment. *Ceteris paribus* agent will prefer a low level of effort. Suppose that agent can sell at the maximum price of 200 thousand dollars, and at a minimum price of \$ 100.
2. Further assume that our agent is not inclined to take risks. This is a reasonable assumption. The agent has a family, he must pay for education and treatment of children, etc. So he will not agree to a zero income. Agent agrees to secure income, which is less than the unreliable income, the expected value of which will be the same.
3. You act in a role of the principal and you are risk neutral. Suppose that your apartment will be sold to the highest in a month or at low cost. If you do not hire an agent, then sell the apartment for only 80 thousand. US., Since you do

not know how to do it. The agent has to pay a certain minimum. Let it be \$ 2,000. Per month if he is making the maximum amount of effort and the apartment will be sold with absolute probability. If the agent takes a minimal amount of effort, you will only receive \$ 1,000. If there is some risk that it will receive less than these amounts, the agent will require a large payment, so that the expected value will be the same.

How should look a contract that you have with your agent, taking into account these premises? First of all, we will make the initial contract in which there are no problems of agency relations, and then we weaken preconditions, bringing the contract to reality. We first assume that we have a complete and perfect information about the actions of the agent and we exactly know is level of effort. Then our optimal contract is as follows: we pay the agent \$ 2,000, If he makes a high level of effort to sell our apartment, and do not pay at all, if the level of effort is low.

Why this is the best contract?

- We pay the agent the amount of money intended to pay.
- We achieve a high level of effort on his part, because he prefers to receive \$ 2,000. Than getting nothing.
- We achieve what he works for us and not somewhere else.
- We do not need to worry about the fact that he is not inclined to take risks, because the agent knows that if he showed a high level of effort, you will receive \$ 2,000.

Although we cannot be sure that the apartment will be sold at the maximum price, as chance and luck cannot be excluded completely, but we can at least create a sufficiently large probability that it will be sold at the highest price.

However, the optimal contract can be regarded only as a the initial, because in reality the level of effort the agent cannot be determined, it is unobservable quantities.

Solving the problems of moral hazard is given a lot of time and effort.

Conclusions. Institutional Theory expands the world economic theory. It adds factors that usually are not considered by classic economic theory. One of these factors is moral hazard. About 30 years ago, there was institutionalism as a trend contrasted with classical economic theory. Now it is a full-fledged institutional analysis, which is often considered in modern economic theory.

Opportunism, bounded rationality, asymmetric information, moral hazard - the factors that somehow affect the relationship between economic agents, and these factors must be considered with the modern economic science. This paper is relevant for any economist who is new to financial markets or financial behavior and needs to systemize his knowledge. This is relevantly new branch in economics which needs further development especially in countries with development economy.

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