

The contracts theory, unfavorable selection and the efficiency problem of interacting agents

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Аннотация. A new version of the contracts theory in terms of economic agent's interaction analysis, their competition, ideas about unfavourable selection, legal efficiency/inefficiency, institutions dysfunction is elaborated in the article. The author evaluates efficiency criteria and offers his own model of effective contracting, considers conditions and restrictions of contract interactions of agents subject to the model of agents' behaviour in a view to legal efficiency and opportunism. The critical estimation of O. Williamson's contracts theory is given and the author's classification of contracts and the basis of the contract theory corresponding to the changed format of modern contracting on a microeconomic level are suggested.

Abstract. В статье развивается новая версия теории контрактов исходя из анализа взаимодействия экономических агентов, их конкуренции, представлений о неблагоприятном отборе, правовой эффективности/неэффективности, дисфункции институтов. Автор даёт оценку критериям эффективности и предлагает собственную модель эффективной контрактации, рассматривает условия и ограничения контрактных взаимодействий агентов в зависимости от модели поведения агентов с точки зрения правовой эффективности и оппортунизма. Дается критическая оценка теории контрактов О. Уильямсона и предлагается авторская классификация контрактов и основы контрактной теории, отвечающей изменённому формату современной контрактации на микроэкономическом уровне.

Ключевые слова: contract, competition, legal efficiency, secondary markets, "contract" welfare, lawyer's "paradox", opportunism.

Keywords: контракт, конкуренция, правовая эффективность, вторичные рынки, «контрактное» благосостояние, «парадокс» адвоката, оппортунизм.

1. Contracts and Competition. Incentives Formation of Economic Behaviour

Within the limits of modern non-institutional theory there emerged three schools of studying contract interactions of three types of contracts: agential contracts (the theory of agency relations), self-performed contracts and relational (informal) contracts. Contracts are referred to legally obliging standards which organize not only the process of making a deal, but also define the character of imposed obligations regarding realization of industrial-economic activities of agents. Basically, institutional production structure can be set by a network of contracts, and the firm may present a certain portfolio of contracts or contract obligations within the limits of legislatively issued contract warrant.

Agential contracts are considered from the point of view of agents' interaction under conditions of contracting uncertainty caused by asymmetric property of information. Self-performed agreements (contracts) arise due to imperfection or absence of the ways of ensuring contract execution. And, at last, incomplete (relational) contracts are based on the so-called post-contract opportunism when high transaction costs make it impossible (unattractive) for the agent to follow contract obligations. As a result, these obligations are breached. The fundamental reason of this phenomenon is heterogeneity of the investments which are carried out by agents-parties of the contract to execute it. In any case, the general efficiency of contracting at each type of contract depends on costs and the routine of contract execution. Besides, opportunism level (pre-contract and post-contract) and "legal" efficiency of realization of economic contracting are both of importance.

Competitive process is developed by means of contract interactions, therefore the conceptions of a perfect competition, for example, as about the process in which a considerable amount of homogeneous goods are offered on the market and obtained by a large number of sellers and buyers; they influence each other in no way; there are no restrictions on goods, prices, resources; there are no obstacles for entering the market and all the necessary information is completely accessible, are an ideal form (idealistic model) of economic interaction, especially from the point of view of contract theories.

In his lecture "Competition as a Discovery Procedure" and his earlier works F. Hayek defended the thought, that competition is a process of forming an opinion on all the events in the market, that is, it is a process of continuous information changes, gathering, distribution and analysis of facts; it is a procedure of discovering new facts the use of which is subordinated to the purposes of specific agents and is aimed at the achievement of a certain success in the market.

Thus, according to F. Hayek, competition at the agent's level is a procedure discovering knowledge about consumer preferences, technological possibilities, investments, institutions, etc, disseminated in a society. In relation to knowledge the given approach looks static as "discovery" is made from the available volume of knowledge. Nothing is said about the time of this process, as well as about the possibility of some useful experience loss and loss of knowledge during the rivalry between agents. Competitive process dynamics is unstable, in other words, there are periods of aggravation and slackening. However, there is always a certain volume of knowledge and experience needed to sur-

pass the rival, this variety of knowledge and experience being a peculiar "consumable materials" which will never be needed more. Besides Hayek's concept does not consider the inefficiency of the competition procedure as a "discovery". The one who has lost the struggle in the market could possess unique knowledge and experience, and the one who has won could take advantage of opportunistic considerations or information providing a short-term benefit. Such practice often occurs in modern economy and confirms high probability of having an inefficient result as an outcome of competitive process, when the best agent does not win. In connection with the noted features the idea of competition as a natural selection, like the phenomenon occurring in biology, becomes also invalid. Really, if better qualities are rejected and remain unclaimed, it is not isolated anomalies but genetic changes in the functioning of social structure. Similar situations are described by the term "unfavourable selection".

The sphere of innovations is highly competitive (not in the sense of the pure competition model, but in the sense of monopolistic and oligopolistic competition sharpness) because decisions in this area are made by specific economic subjects during limited enough time slot. Competition as a behaviour form, apart from creation of new perspective objects for investment, is capable to liquidate by chance other objects attractive enough for investment and having certain market perspectives. For example, one invests in the firm which over a short period becomes bankrupt notwithstanding sudden competition. It is thus very probable, that the investor will not be paid back and even will not be compensated a part of his losses.

Besides, it is necessary to keep in mind, that the organization of competitive economy and its maintenance in a proper condition require considerable investments. Those who have lost in competition or the subjects switched off the competition process due to various circumstances are often considered as the agents who are unfairly rejected by the free market and who need social help greatly. Such perception of economic reality is not only proved, but is also reflected in concrete actions of government social policy.

Generally, the agent can resort to one of three behaviour models depending on correlation of its aggregate income, wage and the cost of undertaken efforts. If we designate income and real wage of i -subject as R_i and W_i accordingly and the real contribution of the individual to a social production Z_i or I_i , then at a time slot $[t_1, t_2]$ the following situations are possible: I) $R_i > W_i$; II) $R_i = W_i$, and also $R_i > Z_i$; $R_i < Z_i$; $R_i = Z_i$.

Unification in the economy of the type $R_i = Z_i$ for all $i = 1 \dots N$, is an improbable event as public institutions possess power, and this fact inevitably leads to disproportion between contribution and compensation. If the income received by each subject is equal to its contribution into economy then we can speak about distributive optimum, an ideal economic situation. Actually individuals make various investments in public production. Therefore at best they can receive compensation exceeding their contribution or equal to it.

Thus, unevenness of own efforts plus institutional heterogeneity (expressed in heterogeneity of human capital) predetermine inequality in the re-

ceived income. That is quite natural. However, aggregate income cannot correspond to the investment in public production. It can exceed it for one individual and be lower for other individuals. The contribution of each subject is its investment into creation of the gross product. The received income depends on the size of this investment, its qualitative characteristics, institutions which are responsible for effective utilization and the return of the deposit. Certainly, the possibility of investment realization is defined by the income of the previous period, accumulated savings, and institutional condition of the given period. In other words, it completely depends on the past, path depends.

Economic life is created by a man, but, simultaneously, there are conditions in the economy, institutions, organizations and structures which define the character of human capital reproduction. The following chain of interactions about which Trygve Magnus Haavelmo wrote in his Nobel lecture: "Having accepted some existing society for the initial point, we can consider it as a system of rules and regulators in whose frameworks the members of the society should functionthe results of individuals' reactions to the set rules have the opposite effect on the rules themselves..."¹. Thus the permanent process of institutional changes is carried out, the leading part in which is played by the man and his changing behaviour models. The problem of human capital reproduction appearing in two forms, individual and public, acts as the central theme in the theory of human capital development. The decision of this problem is not simple because the search of an optimum proportion between the sizes of the individual and public capital is complicated, to say nothing about independent scientific problem of capital measurement, human capital estimation, and the so-called social investments necessary for its reproduction.

The capital theory shows us the major property of capital and its heterogeneity. And this property and the available difficulties to consider the given aspect in economic models limit the "efficiency" of created theories of capital. J.Hicks noticed, in particular, that capital heterogeneity is a stumbling block of modern capital theory². However, as far as human capital is concerned, heterogeneity problem here is even more sharply. It is heterogeneity that generates effects of inequality, maintenance, uneven distribution of investments, and greatly influences economic growth and development. Contracting rules serve the original skeleton forming contours of such heterogeneous system and making it possible for its functioning, setting efficiency characteristics and even efficiency "ceiling".

The present stage of economic development is characterized by the increased speed of institutional changes and isomorphism of institutional forms. Information becomes a commodity having its own value, and intellect becomes interspecific resource forming consumer welfare cost. It imposes special restrictions on the process of individual con-

¹ Haavelmo T. Econometrics and the State of General Welfare // Nobel Prize-winners in Economics. A Look from Russia. – St. Petersburg: "Gumanistika", 2003. – P.526-533

² Hicks John Robert The Mainspring of Economic Growth // Nobel Prize-winners in Economics. A Look from Russia. – St. Petersburg: "Gumanistika", 2003. – P.124-140.

tracting and contract types, as we can speak about a special model of agents' behaviour, innovative behaviour (the basic characteristics of this model will be given in the last item).

If aggregate income exceeds agent's wages the size of incidental earnings, including the shadow income, is positive: $R_i - W_i = \delta_i$, $\delta_i > 0$. In the case when aggregate received income of the individual exactly coincides with wages, two variants are possible: 1) $R_i = W_i > Z_i = l_i$ and the subject gets non-earned rent $r_i = (R_i - l_i) > 0$; 2) $R_i = W_i < l_i$ and the subject is exposed to operation, the size of which is measured $e_i = (l_i - R_i) > 0$. And the operation size, proceeding from the received equalities, is practically non-earned rent taken with the opposite sign: $e_i = -r_i$. Hence, comparing contribution and compensation it is very important to take into account inequality sign to establish precisely what social process prevails.

Let's admit that the agent possesses all the necessary information about the current situation in which he is. Then in the first case he will try to fix his positions of the addressee of non-earned rent, and in the second he will direct his efforts to curtailment of the activity. The model of the latent sabotage, evasion from performing the established functions can be applied in the firm by separate workers. It is necessary to notice, that in the first case labour productivity of the subjects for whom income (wages) considerably exceeds contribution can fall due to decrease of labour efforts because of the desire to rest more, and in the second case due to labour demotivation because of very low compensation. Other things being equal, if any similar behaviour model covers the majority of economy agents, economic system shows slowdown of growth rates or is driven to stagnation.

Having presented aggregate income in the form of the sum including wages and incidental earnings, we will have two inequalities: 1) $l_i - W_i - \delta_i < 0$ 2) $l_i - W_i - \delta_i > 0$. If the wages are rather low $W_i < l_i$ then validity of the first inequality can be provided exclusively by high value of the incidental (shadow) income, which makes non-earned rent. It follows from the second expression that to overcome operation is possible by wage increase, adjusting it to the size of individual's personal contribution, or eliminating this kind of activity, lowering labour efforts and reorienting them on getting illegal incomes. Certainly, during a period of time $[t_1, t_2]$ each individual experiences the change of situation in a range from operation to acquisition of non-earned rent, passing a point of distribution optimum in which contribution and compensation are equal: $R_i = l_i$. Hence, agent functioning is a non-equilibrium process at which equilibrium is a particular case. Thus, there is always some models set of operation and extraction of non-earned rent in the economy and if there is an excessive concentration (prevalence) of two named models of behaviour or both models simultaneously, the consequences for social development will be very negative. With domination of operation model wages obviously mismatch individual's contribution. Besides, if its share in aggregate income, which in this case is less than the size of individual's contribution, is insignificant, it increases the value of addition δ_i - the incidental (illegal) income. Extraction of non-earned rent under conditions of operation model is quite possible, as the motive of getting a bribe or any other dividend

sharply increases, especially if individual makes large efforts at his basic work and considers the pay for his work to be low, having no possibility to change work place or trade or experiencing certain difficulties in it. He has only one variant to increase his aggregate income to use his resource of power and to infringe the norms for extraction of rent without applying additional efforts. In a situation when aggregate income exceeds contribution $W_i + \delta_i > l_i$ various variants are possible: 1) $\delta_i = 0$, $W_i > l_i$ - wages exceed cost estimation of individual's personal contribution and non-earned rent is equal to zero $r_i = 0$; 2) $W_i < l_i$, $\delta_i > l_i - W_i > 0$ and $r_i = 0$ - though wages do not exceed contribution of individual, but additional earnings are so high, that provides excess of aggregate income over the personal contribution without the necessity of non-earned rent extraction; 3) $W_i < l_i$, $\delta_i < l_i - W_i > 0$ and $r_i > 0$ - additional earnings do not allow to get the income more than contribution and the subject provides it, using his authority or breaking the standard norms.

Choosing the behaviour model the agent compares his income not only with the personal contribution, but with the contribution and income of other subjects, professional groups, and with the living wage and access costs to various social standards. Therefore to predict what competitive strategy he will choose is difficult as this choice is influenced by many factors. The only thing we may speak about definitely is about the influence of competitive strategy on investment process. Very often the problem of investments is presented apart from the behaviour models of concrete economic subjects as if investment process occurs on itself or represents independently located model realized under the influence of certain special motives. In practice, investment as expenditure decision, becoming an action, is the integral element of the general behaviour model of the subject. If the events happen according to the operation scheme, investments can be directed by the agent in the areas, following which it will be possible to avoid submission of the given model. In other words, it will be investments to overcome operation. In the case when there is an additional rent, such spheres as rest, entertainments, purchase of luxury goods etc will be invested. If the model of exact contribution and compensation conformity operates, efforts on acquiring the access to possibilities of non-earned rent extraction are invested. Certainly, such ways of behaviour are observed, if the agent has full information about the status quo and has corresponding aggregate income. But even using all the income on purchase of foodstuffs, the agent pays taxes which are nothing more than the investments into social production. These means are accumulated by the state and are used for investment in other sectors of economy.

Ungrounded contrasting of state and market has led to distorted perception of functioning results of economy's public sector. The work there is often characterized as less effective than in a private sector where competition is higher. In economy such stereotype is extremely dangerous, not only because it mismatches the valid order of things but also because it kills the desire to search the ways of activity efficiency increase of the state and public sector. If the government and those sectors of economy for which it is responsible for are actually inefficient in comparison with private enterprises,

there are two principal reasons: the first, low responsibility of officials for performing its functions and weak control mechanisms, and the second, erroneous economic policy. As we see, the idea is not in the form of property or property right.

The manager of a private concern is employed by its proprietor, and this appointment might be as erroneous as the appointment of the official by a person who is selected by the people, the proprietor of the state funds, for realization of their interests, concerning efficient control of the named funds. In both cases the relations problem of the type "principal-agent" is present, but in the second case it is more difficult, as nobody is insured from an error at the stage of choice which is carried out by direct vote though in joint-stock companies with the scattered holding of stock the decision on managers' appointment are made by considerable number of proprietors using the similar voting procedures. And the error probability at micro-level is less thanks to more information available by proprietors. However, such assumption is far from being always fair.

The character of the created welfare acts as a distinctive feature of production in the public sector. Therefore, it is necessary to consider manufacture inefficiency in the public sector not in the aspect of choice, voting, property or absence of competition in the sphere, but from the point of view of technology and properties of created product or service. Competition absolutization as the most effective form of economic behaviour and development is based on abstract assumptions of free market functioning and low price of welfare, and effective allocation of the resources, achieved in the equilibrium point. But for individual not only the price of welfare is important, but also the size of received real income, and the possibility to concentrate the investment in only one direction for the decision of a certain problem, which competitive market cannot solve accumulating the demanded volume of investments. Properties of the produce welfare define the way of economic managing and contracting type. If we accept, that properties and characteristics of welfare are invested, control over the distribution of investments represents the way of economic processes coordination. Thus, transaction costs of contracts conclusion and their observance define the efficiency of contracting and, finally, influence the investments efficiency. It is especially evident in the markets of high technology production where competition is developed on the basis of technical (technical-economic) parameters of the workable products. Competitive process in such markets is characterized by the information asymmetry which can be overcome only by knowledge of personnel involved in the process, or by monitoring of scientific and technical information and/or contracting process (pre-contract arrangements, contract conclusion and execution). However, the peculiarity of this asymmetry is in the fact that information is asymmetric in both the principal and the agent party. In other words, the manufacturer of high technology production and the customer can have distorted information both about the behaviour model at the contract conclusion, and about technical and economic parameters (qualities) of the product (the contract purpose).

2. Unfavourable Selection. Secondary Markets and Efficiency Criteria.

The theory of agential relations considers interaction models of agents as the relations developed between the principal and the agent, characterized by information asymmetry. The subject of analysis is an impact of this information asymmetry and information rent on the process of welfare exchange and production, and, as a result, on specific markets functioning (insurance markets, educational markets, etc.)

The classical examples of such asymmetry are the following situations:

1. The relations between the lawyer and the client. The lawyer is always better informed about his own abilities, experience and about the essence of the case which he conducts.

2. The driver and the insurance company. The driver knows more about the condition of his car and about the condition of roads on which he drives.

3. The firm and the state. The firm possesses more information about costs of the project realization than the state.

4. The landlord and the employee. The landlord is more informed about the condition of the house and its utensils, and employee is more informed about his own abilities and whether he can repair the damage or not.

Thus, these examples show that informational structure of economic events is not the same. Before the contract conclusion the agent possesses more information on his qualities, than the principal. If the exchange between the parties is beyond competitive relations and if there is no special interests protection of the subject which is less informed, there is a so-called unfavourable selection, i.e. less informed agents appear in a relative loss, and more informed agents, aspiring to maximize utility, undertake actions, causing damage or losses to less informed subjects.

In the example with the lawyer he is not only better informed on the abilities, but he also knows the set of precedents on considered articles of law. Thus, it raises the probability to turn the scale favorably. A classical example is the market of the second-hand cars. In this market the sellers of the cars and the buyers are differently informed on the quality of cars. As George A. Akerlof showed, in such markets information is asymmetric as the buyer does not know the quality of a certain car, and the price in such market (the secondary market of the second-hand cars) will always be lower than the price in the primary market of the same product. This price is defined by the quality of the product, and the quality, in its turn, is defined by consumer preferences so, that the average quality of the product in the secondary markets will decrease as it will be profitable for a seller to sell the products whose quality is in lower part of distribution. As a result, the average quality will decrease step by step, and as a result the price will decrease as well. Ideally, the final price which will suit the buyer at moment N can be equal to zero that means collapse of the market. The shown phenomenon of the secondary markets is also the phenomenon of unfavourable selection (a version of pre-contract opportunism). This phenomenon arises owing to information asymmetry and inefficient market mechanism of supply and demand.

The central concept of the theory of unfavourable selection is the concept of information rent which is understood as the dividend received by the agent who can buy the goods for some price which approaches the real price of this welfare. Examples of situations which are described in the theory of information asymmetry are the following processes:

1. The relations between employees and employers on the labour market.
2. Labour intra-firm contracts.
3. The markets of experimental goods.

Unfavourable selection in the system "the principal - the agent" is connected with information asymmetry (pre-contract opportunism), and also with the emergence of the moral market (post-contract opportunism). Costs of control over the agent's behaviour stimulate him to maximize his own utility to the detriment of principal's interests, i.e. this agent concentrates on the performance of only those points which are registered in the contract, thus the agent does not feel moral obligations. The possible solution of the problem "the principal - the agent" is in the coordination of the purposes of the employee (the agent) and the employer (the principal). For this purpose it is necessary to draft a contract so that it will stimulate the agent to refuse opportunism. Manifestations of moral risk are various enough, but they can be classified as information asymmetry which is the reason of moral risk appearance. There are two such types.

1. Internal information asymmetry in relation to the contract. For example, the manager has more precise information about the shares and their distribution than a certain shareholder.

2. External information asymmetry in relation to the contract. For example, all hands are working at a certain project according to the customer's task, and each member of the working group knows about the contribution of each other in realization of this project, in contrast to the customer. That is why, each member of the group can select a behaviour model which pursues the aim to mislead the customer or to drag out time of order's execution. However, the last circumstance is explained by the theory of contracts though actually this situation is far from reality. The matter is that the dragging out of the execution time of the contract in high technology industry, in particular, is fraught with serious costs not only for the customer (the agent), but also for the executor (the principal). If the totality of "unfinished" contracts is high enough for the firm, there can be a risk of its bankruptcy. If the customers dissatisfied with these circumstances apply to the court, the costs and penalties of the affairs in this totality of contracts also will sharply decrease the firm's stability.

The first type of asymmetry results in moral risk with the latent actions, and the second type results in the occurrence of moral risk in the team. The moral risk arises in the commodity, labour, credit, etc. markets. Factors of uncertainty at the contract conclusion, opportunism and diffusiveness of responsibility act as the factors generating moral risk.

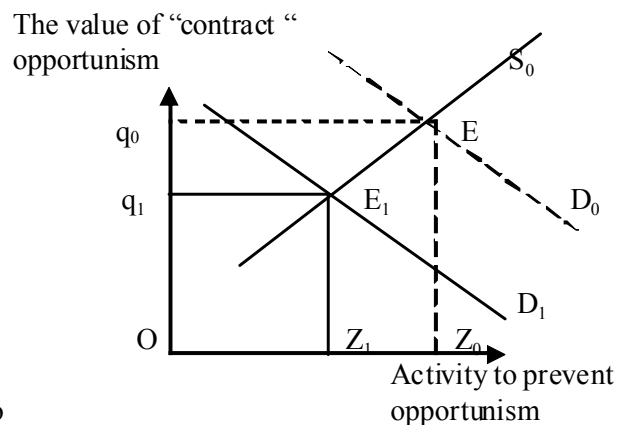


Figure 1. Contract opportunism in the innovative sector of economy.

The situation inherent to the sectors and markets generating innovations is shown in Figure 1. Contract relations can be described by the value of opportunism and expenses on the activity to prevent opportunism. Then curve S_0 symbolizes the offer of opportunism models and is defined by propensity and conditions which promote opportunism including the stimulus connected with the estimation of expenses and benefits generated by usage of such model or refusal to use it. Curves D_0 and D_1 designate the opportunism reaction of agents. At lower level of competition and higher monopolistic possession of some technical innovation, the curve D_0 occupies position D_1 , which at the same propensity to opportunism will mean moving of the system from point E to point E_1 . The general result is in decrease of both the opportunism value, and the expenses for prevention of such behaviour models appearance: pre-contract, contract and post-contract opportunism.

The "successful" opportunism, as well as the situation of unfavourable selection, can provide unexpected benefits for the agent (the amount of obtained benefit is meant, as it is considered, that the agent uses opportunism model purposefully). In the innovative sector of economy firm's functioning stability will be defined by the number of contracts in the firm's portfolio, namely, the output level which they provide with the available capacity. Hence, it is possible to speak about some optimum size of contracting for a certain high technology firm. The excess of this size reduces the parameters of functioning stability (the model of "ambitious firm", when it undertakes the working out, not possessing inter-specific resource for its realization), or it demands capacities increase at the expense of investments. The curve of firm's stability will move upwards and to the right, thereby, increasing the optimum of contracts number and the possibility of stability maintenance (Fig. 2). Only if the number of contracts is small N_{min} (though in a certain case this number can be not so small) the smaller capacity will produce the better stability parameters, rather than the big one. This is connected with the non-comparable level of constant expenses set by bigger capacity. At any $N > N_{min}$ the firm's functioning stability U_2 will be above U_1 . Certainly, the level of "contract" diversity defined by the share of each contract in the firm's capacity and in the output, influences the stability because if, for example, 70 % of output and 90

% of the employed capacity of the firm correspond to one contract then the situation with this very contract will define the firm's future, its strategy and, certainly, stability.

Firm's stability

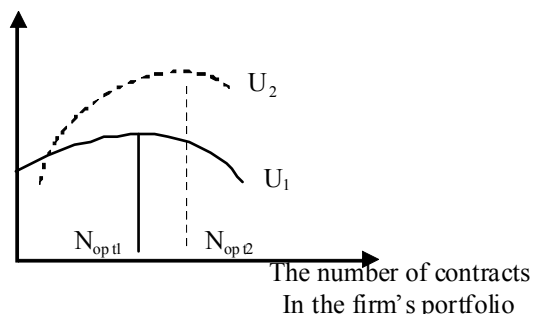


Figure 2. "Contract" stability of a firm.

As the client is an expert in innovative economy, that is, he understands the technical parameters and the physics of the ordered product not worse than the producer does, then information asymmetry arises not to the one, but to both parties at a time. In other words, the model of "double opportunism" operates. At the same time, it is important to notice, that the client can put such a problem (and it is especially characteristic for innovative sector), the solution of which is not quite clear both for him and for the executor (producer). Such contracts appear in the public sector and provide the defense of the country (military economy). At such contracting capacities' increase, organizational changes, creation of inter-specific resource for this very contract as a component of performance process of the contract can be provided at once.

The so-called self-performed contracts (agreements) are designed on the basis of the condition, that benefits from contract default are essentially less than long-term benefits from its observance. In this case each agent, the participant of contracting, will maximize his own utility. The stimulus to be fair, that is, not to follow the opportunism way in the contract, is supported with the fact that to be fair is more profitable than to be unfair. At breach of contract by one of the parties, the contract will be automatically terminated.

In his work "Economic Value of Honesty (the Forgotten Factor of Production)" Russian economist I.I. Janzhul asserted, that "no virtue creating the greatest riches in the country, has such great value as honesty. Therefore, all the civilized states consider it to be their duty to provide the existence of this virtue by the strictest laws and to demand their execution. Certainly, honesty is meant as a promise to execute; honesty as a respect to somebody else's property; as a respect to anybody's rights; as a respect to existing laws and moral rules"³.

Thus, these principles describe the bases of fair contracting, the problems connected with the provision of trust while effecting economic transactions and the observance of the property right. In essence these are the requirements or conditions of self-performance of the contract and an important contribution of Russian economic school to the

bases formation of modern contracts theory (and the world knows nothing about this contribution).

It is possible to suggest the following correlation between the level of honesty and labour efficiency for economic system (see the Figure).

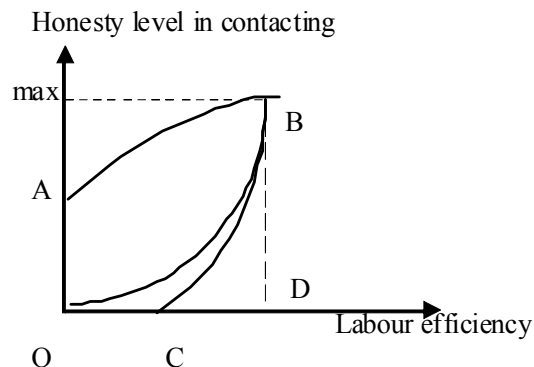


Figure 3. Interdependence of honesty and labour efficiency.

Active development of "information" economy has essentially affected the change of labour relations as not only individual behaviour model, tastes and preferences has undergone changes, but also its moral basis. First, there appeared "a century of crowd" when separate individuals are disseminated on the cyberspace; each of them is before the TV screen or computer display and he does not need anybody or anything, the analytical information is delivered to him, he knows all the news he is interested in. Secondly, the growth of information potential eliminated the difference in intellectual development of individuals. Now, on the average, the difference in intelligence between individuals makes no more than 1,5-2 times while the difference in incomes reaches 10-15 times, and while comparing some groups of the population it is 20, 40 and even 100 times. It is the difference discrepancy in intellectual abilities and incomes that will define the existing scale of social contradictions. Thirdly, individual behaviour is rationalized, moral-ethical component has less effect, imitation of cultural norms providing higher living standard (life quality) becomes stronger. Thereby, the probability of destructive consequences of such individual behaviour for economy, owing to strengthening of demonstration effect increases. And this factor increases the demand for limitation of social norms and public order regulation.

As it is shown in Figure 3, with the level of honesty increase the labour efficiency can increase up to the maximum values (point B), but if the honesty level in economy is reduced, then development will correspond to branch BO or BC. Thus, the efficiency of "labour" factor is reduced, this process being completed on the line OC to which final efficiency C corresponds if there is no fair behaviour models, or this efficiency will be almost zero at point O. With the growth of honesty level labour efficiency can decrease in one case: if labour relations are completely based on dishonest principles and reject fair behaviour models. In the latter case the growth of honesty will not result in efficiency increase of labour, but it cannot be long for the same reason. There can be two states of labour efficiency for honesty level above point A: low efficiency along AB

³Janzhul I.I. Economic Value of Honesty (the Forgotten Factor of Production). – St.Petersburg, 1911. – P.8-9

line and high efficiency along OB line. It will be defined by the peculiarities of institutional structure and technological possibilities of economy. In other words, the high level of opportunism can be observed at effective labour and high efficiency. This situation may correspond to excessive contracting when a lot of additional rules and norms and there appears legal "overregulation" of economy, that is, "the legal burden" is too high and it forces the agents to benefit from contracting by means of infringement of these norms and their obligations ("dishonesty" model).

As for the problem of labour operation and efficiency, it is possible to present it graphically. Operation is the result of uneven distribution of the market and "contract" power and it stimulates labour processes to a certain level. However, as soon as the operational rent becomes excessive, it sharply de-stimulates labour. It is possible to raise the efficiency of labour and productivity in such point exclusively at the expense of technological changes. Heterogeneity of human capital plus uneven distribution of the market power together with the generation of operation effect consolidating these kinds of heterogeneity are a structural basis of information asymmetry effects.

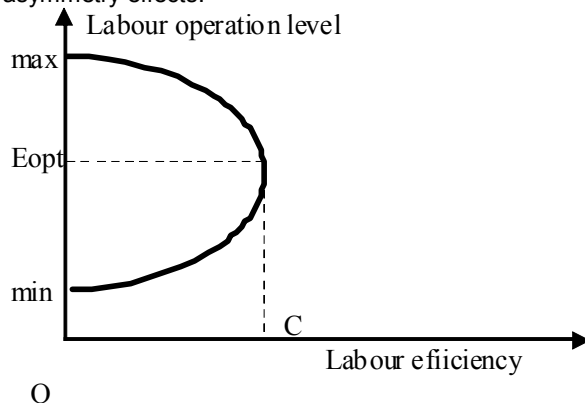


Figure 4. Operation and labour efficiency.

Minimum labour efficiency also corresponds to the minimum operation in point O (Figure 4). With operation growth, that is, with the increase of compulsion to work, its efficiency will grow to a certain optimum operation level not causing any protest, and then owing to latent and open sabotage and accumulated dissatisfaction, the labour efficiency will decrease at operation growth and will approach to the minimum values of point O at the maximum operational load.

Thus, if we act on the premise that a certain acceptable level of information asymmetry corresponds to the optimum operational load, then asymmetry level may be measured by the amount of operational rent.

Certainly, to take into account the profession is an important aspect as both operation model (the relations between the principal and the agent) and labour efficiency estimation and the effect of information asymmetry depend on it. The state of legal institutions strongly influences contracting efficiency and economic transactions productivity.

Studying contract interactions, not simply the contract's efficiency aspect, which in the neoclassical economic theory is described by the points of Pareto-efficiency and the so-called "contract curve",

is important. With reference to contracting it means, that it is impossible to redistribute a resource (asset) within the limits of the contract so that to bring more satisfaction (additional utility) to one of the contract's party not simultaneously damaging the second party, that is, lowering satisfaction, moving this agent to the lower utility level (indifference curve). Benefits, costs and the risks connected with contract's obligations and with the achievement of the contract's purposes are of great importance. The opportunism problem is also sharp, as the more the risk not to execute the contract, the more the probability, that the agent will purposefully be dragging the performance of certain tasks and will search for the reasons for non-compliance of some functions and contract's obligations in the whole. Such model can be applied for agents at once subject to possible judicial consequences. Such examples are numerous, especially in the sphere of high technology industry and innovations. The reason is that the risk of activity in the named sectors is high enough. There is a point of view⁴, that technical systems improvement occurs for the account of economic efficiency decrease which is manifested in the inability to achieve Pareto-optimum result in resources distribution as competitive balance is not attained. The general result is defined by comparing the benefits from scientific and technical progress and efficiency losses from distribution of resources. However, it is necessary to notice, that, 1) scientific and technical progress demands resources, 2) it is not absolutely clearly, even theoretically, how probable the point of competitive balance and the efficiency connected with it are, especially in respect to the sector demonstrating scientific and technical results. If it is somehow possible to estimate the benefits from scientific and technical progress, then it is impossible to define precisely the losses, as it is difficult to represent the economy's state in this point. And if it is possible to define these losses, hypothetically representing the economy without any technical changes, then how will the benefits provided by technical progress be estimated? The problem is considerably complicated in the long-run and actually turns into a problem in which it is necessary to compare what is, and what has never been and hardly ever possible, the Pareto-optimum point (construction).

Besides, the criterion of Pareto efficiency proceeds from the assumption of reliable estimation of agent's own preferences by himself, the state of the other participant of contracting being not considered. To be more precise, the agent does not present it as exact as he estimates his own one. However, to estimate one's own state and, all the more, the state of the other agent is actually not simple. It is this reason that acts as a restriction of Pareto-criterion application. And, besides, the point in which it is already impossible to redistribute a resource to improve someone's position but not to worsen anybody's one, is unknown. Usually this point is represented on a curve of production facilities or on a "contract" curve. At the same time, the dynamic changes of economic system do not make this curve static. It constantly changes both the arrangement (that is, it moves) and prominence/concavity due to very different factors. But certainly, at any movement any point of this curve means

⁴ Ruff L. E. Research and Technological Progress in a Cournot Economy.- Journal of Economic Theory .- 1969. - №1.- pp. 397- 415.

Pareto-efficiency, when it is impossible to increase the consumption of one good, not reducing the consumption of the other one. All the same, the analysis carried out does not allow telling anything about how the consumption (well-being) will be distributed between various groups of agents consuming the changed correlation in the basket of goods from one good to another. Kaldor—Hicks criterion, which was to solve the problem of efficiency criterion and well-being estimation, did not solve the efficiency problem either. That is because according to this criterion if a certain state is more preferable than the other one and those groups of agents who gain while moving to this state compensate the losses arisen in the course of this transition to the suffered agents, and perceive their own state as advantageous (as a welfare gain), then it is possible to assert, that the general welfare raises. R. Zerbe has shown that such efficiency according to Kaldor-Hicks actually means people's readiness for indemnification, and it is equivalent to such voting when voices are given weight, depending on readiness to pay indemnification.⁵ Such treatment of Kaldor-Hicks principle does not solve the problem of well-being efficiency estimation as the estimation dramatically becomes complicated. It is difficult to estimate the readiness of various groups of people and then to provide indemnification on the scale of economy. What is possible for the situation of two indifference curves and two agents may be completely false for larger quantity. Therefore, both T.Scitovsky's modifications and A.Bergson's remark about the necessity of taking into account the system of values develop the criterion which is more "alive", than Pareto-criterion, but they support the idea about system's effectiveness and its well-being increase. To my mind, "adaptive efficiency" is a perspective criterion. And it is reasonable to present "allocative" (resource) efficiency as a necessary condition, and to consider adaptive efficiency a sufficient criterion.

Adaptive efficiency characterizes the ability of economic (contract) system to train and acquire knowledge, to encourage innovations, perceive risk and to endure various experiments, for example, restructuring. Adaptive efficiency, unlike allocative efficiency, represents efficiency of the rules action which set the development of economic system at a time. With reference to contracts it is important enough, as contract's efficiency depends on its execution time. Actually the contract is concluded for a certain period of time. Infringement of time arrangements is interpreted as contract infringement.

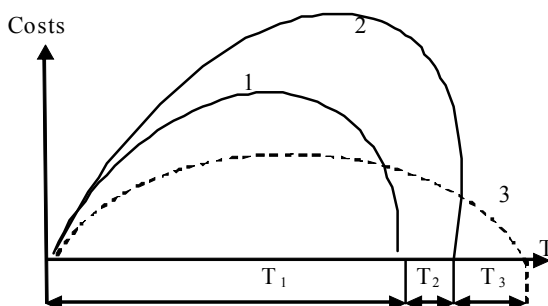


Figure 5. Contract Costs.

As Figure 5 shows, the increase of contract execution time (curve 1) from T_1 to (T_1+T_2) , which corresponds to curve 2, leads to the growth of costs, this growth being so considerable, that it will provide non-compliance with the contract and even firm's bankruptcy. At the same time it is possible to have contracts when the time of their performance essentially grows to $(T_1+T_2+T_3)$ and costs can even go down a little (curve 3). It is a contracting case in high technology sectors when firm's efforts concerning the terms of contract performance are overestimated which demands larger expenses. Points T_1 ; T_2 ; T_3 provides an interesting effect. The matter is that even if the contract is fulfilled, it can all the same have certain utility for the firm connected with the development and accumulation of inter-specific resource (the statement is true at least for innovative sectors). In essence it distinguishes "the contract welfare" from the general consumer welfare, whose utility will be equal to zero, when the welfare is consumed. Moreover, the welfare marginal utility will decrease, with known reservations, and in the case with the identified contract and with the increase of its performance time it can still increase, expectation of such result stimulating the agent to "delay" the execution time of contract obligations. The increase of contract's performance time can be considered as opportunism model in operation if the agent gets additional utility.

According to our concept, at the upper point of adaptive efficiency the purpose of institution existence is designated and long-term; it is interconnected with other purposes; the application area is stable; functional filling is high at a strictly certain set of functions; a period before the change of the standard is considerable; action costs are rather low; rejection degree is low; stability to casual change (mutation) is high. For macroeconomic dysfunction or the bottom point of adaptive efficiency all the listed parameters have the opposite meaning (see Table 1.).

Table 1. Efficiency Parametres of Contracting Agents

	Contract characteristic	Adaptive efficiency (the upper point)	Economic dysfunction (the lower point of adaptive efficiency)
1	Purpose of conclusion (the contract purposes)	It is designated and long-is urgent, it is interconnected with other purposes	It is indistinct and short-term, or has the subordinated or compelled value
2	Appendix area	stable	unstable
3	Functional Filling (support)	High functional potential at strictly certain set of functions	The functional potential is low or falls at spontaneously varying set of functions
4	Period before change	considerable	Short, or permanent change promoting transaction costs growth
5	Action costs, including transaction costs and opportunism	acceptable, rather low	Unacceptably high
6	Degree of contract rejection in firm	low	high
7	Stability to changes (external and internal)	high	low

⁵ Zerbe R. Economic Efficiency in Law and Economics. – Jr. Elgar, 2001.

It is necessary to notice, that with reference to adaptive efficiency, aggregation is hardly appropriate, that is, it is designated by the system, by all the parameters on the specified groups in Table 1. It is possible to judge about its change both according to quantitative changes of separate parameters and qualitative assessment of the same and other parameters.

Actually it characterizes the ability of economic system to train, encourage innovations and counteract the risks and be ready for the solution of the arising problems, preventing the development. However, in our opinion, its achievement is possible only with a certain achievement in the area of allocative efficiency. While factors of production are used inefficiently, it is not absolutely pertinent to speak about the increase of adaptive efficiency, though the established rules appreciably define the possibilities of allocation and its efficiency.

The producer (creator) of a high technology product (of basic or improving innovation) is always better informed about the possibilities of his product than the potential consumer. Therefore, the situation of unfavourable selection is the immanent characteristic of innovative sphere functioning. At the same time, the model of dishonest behavior or opportunism can arise and naturally mix with the model of "adverse selection" which can mean both the use of somebody else's technical decisions, adoption ("technical" espionage, etc.). The listed processes generate the higher risks in the field of innovations, to say nothing, that the markets of innovations reveal the effect of "race" when the speed of technical result use and the market entry has the defining meaning in the competition. The risk of carrying out of the research and development is high enough, all the more, the available experience and data in this sphere show, that usually from 20 to 35 and even to 40 % (in isolated cases) of research and development can come to an end with negative result. But it is not always clear, whether the negative result of research and development today and tomorrow will turn into the positive one the day after tomorrow. And from the bookkeeping-economic point of view this research and development has already been recognized as inefficient.

The high risk of contract performance demands big costs to execute it, and small risk provokes big expenses under the contract, which also correspond to higher costs. Therefore, the curve describing the interrelation of risk and contact costs is shown in Figure 6 on the right and it takes the U-shaped form.

At innovations, to be more precise, when the contract concerns creation of innovative result, the U-shaped curve "costs-risks" is shifted to the right and downwards, so that the risk optimum is shifted. There is a situation, when the minimum general costs correspond to larger risk (points r_{opt1} and r_{opt2}). The risk rises due to unpredictability of innovative result and high uncertainty. However, innovation introduction for the same risk value provides smaller costs. Figure 6 on the left shows the interrelation of profitability (efficiency) of the contract and the risk of its performance. We can see, that there is a certain optimum risk, at which efficiency is the highest. Simultaneously, for low risk there can be high efficiency ($r_1 < r < r_{opt}$), and for high risk there can be low efficiency ($r > r_2$). The same indicator of efficiency (profitability - R^*) may be achieved at relatively low and high risks (r_1 and r_2 accordingly).

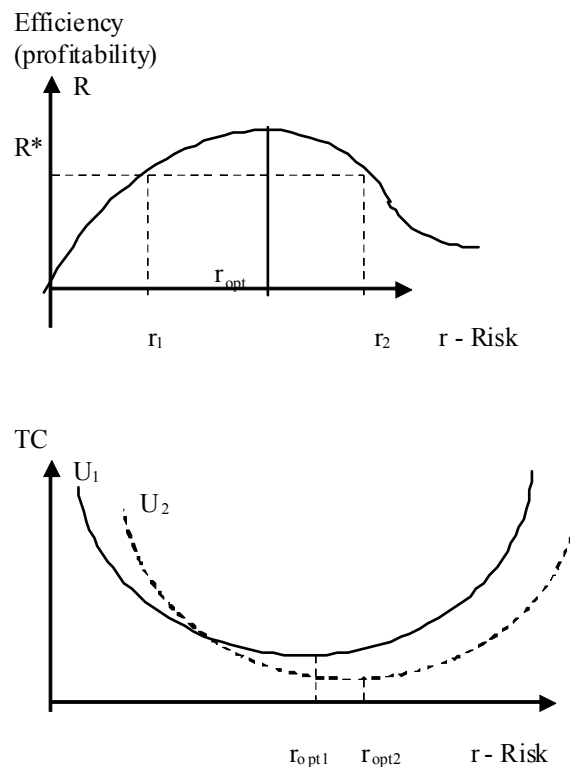


Figure 6. Efficiency, Costs and Contract Risk.

The phenomenon, when high profitability corresponds to smaller risk and low profitability corresponds to high risk, arises due to the structural and motivational disproportions in the development of an economic system, whether it is a firm or a national economy. Thus, in Russia, in particular, transactional sectors (banking-financial sector) have larger profitability in comparison with the real sectors of economy (industry, "high tech") at smaller risk, than in the real sector (though, certainly it is necessary to consider that the nature of risk is far from always being identical at such comparisons).

Summarizing, it is possible to introduce such value as "contract welfare" (P). Considering that by the moment of time T this welfare for a high technology firm flows into inter-specific asset (intellectual, technological resource which also has a property of decay, obsolescence), but from the point of view of contract implementation, it is exhausted. Mathematically this indicator can be presented as follows:

$$P = \int_0^T [(p(t, v(t)) - c(t, v(t)))e^{-at}] dt \quad (1)$$

And the contract profitability R , which is equal to the ratio of the contract general profit P to the amount of used resources (expenses) on the contract performance, will be:

$R = \{1/(c(t, v(t)))\} P$,
 where: $p(t, v(t))$ - benefits of contract performance (income flow);
 $c(t, v(t))$ - costs of the contract conclusion and performance;
 a - interest rate;

$v(t)$ – the speed of resources use, including the adaptation speed of (costs changes at the moment of time t).

Having accepted that $P = TR - TC$ and having differentiated on time the value of “contract welfare”, having equated the result to zero and having solved the equation, we will get the formula of contract costs at the point of the highest well-being which looks like:

$$c(t, v(t)) = \int_0^T p[1 + 1/ed] dt$$

where p - the product price under the contract and ed - demand elasticity for a product.

The firm's income from the portfolio of carried out contracts is defined as

$D = \sum d_i r_i$ where d_i - income under i contract, and r_i - risk of the contract performance.

It follows from formula (1), that “contract welfare” depends on $v(t)$ - speed of resources use. This value defines the flow of income and the flow of expenses. Thereby, the efficiency of contract performance depends on flows' speeds.

3. A Problem of “Lawyer” and “Legal” Efficiency

In the contract theory it is considered, that selection in the system “lawyer-agent” is unfavourable. If we use the analogy with G. Akerlof's classical market of “lemons”, the quality of the given welfare in this market should decrease, which should be reflected in the service price. In other words, the client will offer the smaller price because he doubts, whether the situation is actually as such as the lawyer describes it. The client understands that he is not as proficient as the employed lawyer. But the client's doubts in lawyer's cleanliness are compensated by his reputation and hopelessness of the situation for the client. Therefore, price reduction of the welfare does not occur in this case as it happens in the secondary market of cars. Poor quality welfare excludes the high-quality one in the secondary market because of the asymmetrical information. Consumer's understanding of the fact that the greater part of the cars sold by him are of lower quality is an important condition of demand curve shift downwards and to the left in the case of cars' secondary market. However, such psychological reaction leads to even lower degree of quality, and the market price will be low, so that it will be possible to sell high-quality cars at this price. The reason is that it is difficult (almost impossible) to provide (technologically) high quality of the relatively complex welfare at low price, so the parity “high quality - high price” remains. However, in the secondary market this parity is infringed due to the shift of the demand curve, which leads to further decrease of welfare's quality. In the market of legal services the situation differs from the cars' market though the effect of “unfavourable selection” still operates. However, it does not lead to price reduction on a service or to quality reduction of a service. There are some reasons of such situation, in my opinion.

First, the quality of a service is defined by judicial decision in favour of the agent (and the decision is a variable value, that is, the benefit scale for the agent can vary and it is defined by legislation. For example, the claim can be answered partially, the adverse party is surcharged for smaller

sum, or the sum of claim is reduced, etc.) or by the punishment of the agent who did wrong or committed a crime and turned to the lawyer for help.

Secondly, the lawyer secures or represents the client's interests in court, but the fact that the service is provided should be proved by the court decision, at least by the intermediate court. At the same time, lawyer's activity does not stop with such decision as either the adverse party, or the client himself, being not satisfied with the decision of the court and aspiring to increase the utility from this decision can appeal against this decision. Thus, with reference to the market of advocacy services there is a problem connected with the fact that the welfare (service) is provided in the course of its provision. For the market of cars as a final welfare, this characteristic is not typical.

Thirdly, the service is provided for the first time and to provide it for the second time is problematic, because it will already be the other service provided most likely in absolutely different circumstances (procedural, judicial, relational in the system “principal-agent” – “the lawyer-the client”). Though the client can certainly refuse the services of one lawyer and turn to another. However, it does not guarantee the result of the second lawyer. Besides transaction costs can sharply increase.

Fourthly, the client can define the quality of a service only according to the court sentence, besides it is difficult enough for less educated agent to estimate how his utility was lowered by the court sentence and how the lawyer opposed this decrease. Thus, comparison of the price which the client pays for lawyer's services and the result (the court decision or problem's solution) is sure to be an important circumstance.

More than that, it is interesting, that in the secondary market of cars pre-paying of round sums is practically ruled out. And with regard to the “lawyer's welfare” there is a practice of considerable advance payments, that is, payments when it is impossible to consider the service to be rendered yet, but the lawyer is already carrying out a certain work with the court and Public Prosecutor's Office.

Fifthly, the offer of lawyer's services depends on the number of lawyers as a professional group, crime rate and legal restrictions, and, besides, “legal constraints” when the agent is institutionally forced to turn to the lawyer (jurist) (execution of papers, documents, etc.), in other words, because of “legal bureaucratism” of economic system as a whole. The demand for the lawyer's services is defined by the function of the crimes number depending on the probability of the criminal's capture, punishment and other factors. Such characteristics as police and court effectiveness, wages in the law-enforcement system, current and capital expenses influence both the supply, and the demand for lawyer's services. If the crimes number or the volume of “legal bureaucratism” are very high, then the demand for lawyer's services will exceed the supply. The workload of one lawyer with the cases will increase, and the price of his services will also essentially increase (as it is impossible to satisfy the demand quickly and to prepare the necessary number of lawyers). It is obvious, that the quality of these services and professionalism level may decrease. Otherwise, when the volume of crimes in the economy is low, as well as the “legal bureaucratism”, supply will exceed demand; meanwhile the service price will not

fall due to a peculiar effect of a “ratchet” which is caused, for example, by the delay in proceeding, imitation of heaviness of the case by the lawyers’ community. Lawyer’s service of high quality (which we will understand as necessary utility achievement for the client in an acceptable time limit) has higher price when the demand increases as the supply is limited (the supply curve is vertical), and when the lawyer’s service is of poor quality the amount of services increases together with the price as the supply curve is not vertical, but has a positive inclination.

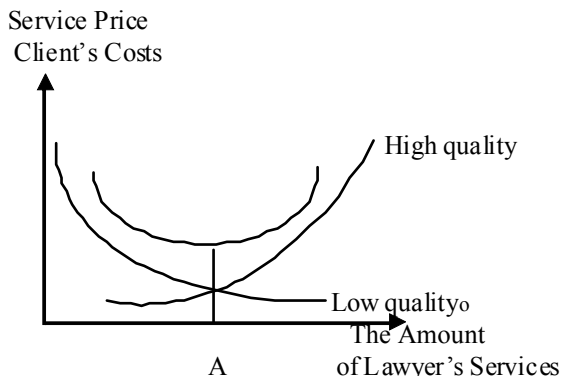


Figure 7. The Quality and the Price of The Lawyer's services.

Figure 7 shows the change of client's costs subject to the quality and amount of rendered services of the lawyer. The more the amount of the lawyer's services, the more the costs of the client and the price. But if the quality of services is low, then even the small amount of these services will result in considerable costs for the client, and a large amount of such services will be estimated at low price. Therefore, the real situation corresponds to enveloping curve. Poor quality services are provided in small amount and they correspond to large costs (situation before point A - on the left). At the starting point the agent does not know whether this service will be of poor quality or high quality. But the lawyers' reputation which can be measured, for example, by the number of the won cases, gives some necessary information for proper choice. In case of high-quality services there is always very high price and the demand for such services is also high. High price corresponds to the quality and considerable amount of these services. However, as it will be shown later, the situation when the client pays more off-the-record payments and it also concerns the payments expansions under the official contract. It is profitable for the lawyer to optimize the process according to the scale “price - reputation (the won case) – case duration”. Therefore, the model of “fee extortion” which makes the basis of the so-called “paradox of the lawyer”, from our point of view, has certain internal restrictions.

“Paradox” of the lawyer is manifested in the following. The lawyer provides a service, whose size and utility for the client are defined by the organizations (structures) which do not depend on the lawyer directly. There is no competition between them, though there is a competition between lawyers. Public Prosecutor's Offices and courts do not compete among themselves concerning this service in a “market” sense. There is no competition in each such structure. They are absolute monopolists re-

garding providing a service in the form of a decision or a sentence. Another pair of shoes is that between Public Prosecutor's Offices of different levels and courts of different instances there exists a special kind of interaction, rivalry, usually professional and bureaucratic, connected with demonstration of their success to higher instances (The motivation is the desire to receive the award for crime exposure or to get a promotion, etc.) . In connection with these circumstances the lawyer who can co-operate with Public Prosecutor's Office and court for a long time becomes known in these structures and gets reputation. The paradox is that he becomes a “transactional” intermediary between the Public Prosecutor's Office and law-enforcement structures and court, quality of his services not decreasing, but the price increasing with the restriction of the amount of rendered service. Thus, it is necessary to notice, that the Office of Public Prosecutor and court compete with each other and it is possible to consider this kind of rivalry competitive as it is a question of sentence scale - court decisions and depth of punishment. The Office of Public Prosecutor puts forward the estimation - the offer in this occasion, and the court makes the definitive decision and agrees or disagrees with this estimation, and such disagreement can be in both parties - punishment reductions and increases. Thus, the lawyer's efficiency in the client's opinion is defined by the court's decision and the position of Public Prosecutor's Office which can initially propose mild penalty. The scale of all these actions of three subjects - the lawyer, Public Prosecutor's Office and court are within the limits of established institutional norms. If the law provides punishment (Z), varying in the range $X < Z < Y$, then the lawyer, court and Public Prosecutor's Office have a haggling subject with the client within the limits of this range. The general utility of the client and marginal utility in this interval are reduced and the size of necessary costs increases to prevent the outcome connected with the setting of the upper limit of the specified interval. If the client actually deserves punishment X, but owing to asymmetry does not guess, that his actions can be treated exactly, so there is a motive to represent a situation in such a way, that punishment can be Y. If protection of client's interests demands means P_X as highly professional lawyer is not required, it is profitable for the lawyer to present a situation, that client's expenses should be $P_Y > P_X$. He consciously “plays” information asymmetry practically without any damage for himself. On the contrary, such model of behaviour provides very high income and reputation. The value $a = P_Y - P_X$ is “the lawyer's rent”, and the lawyer's income is made up of the official salary against the concluded contract and value a, that is, $D = W + a = W + P_Y - P_X$. However, the lawyer distributes the sum $P_Y - P_X$ among himself and corresponding representatives of court and Public Prosecutor's Office. Such implicit contract agreement actually represents corruption model which is based on professional knowledge of legal system representatives and on the fact that people know each other for many years of their professional work. Due to this circumstance the probability of agents' capture comes almost to zero; legal norms and laws' application become the object of purchase and sale; client's possibilities in overcoming the norms depend on his budget (plus imperfection of the norms creating the specified ranges). If border Y tended to

X, then $P_Y = P_X$ and the lawyer's income would become equal to wages (contract agreement). This is one condition of counteraction to the corruption model and the second condition is practical realization of personnel rotation principle.

The process of agents' training occurs at present in the social environment, determined by institutions. Besides, there are some typical costs, basically connected with the acquisition and processing of necessary information. It is important to notice, that nobody guarantees positive effect of training, as it is possible to disseminate and perceive negative information as well or less significant from the possible number of alternatives. If rationality is limited, then expectations are also formed on the basis of such premise. Expectations of agents can come true, or cannot come true and it is not the fact that expecting something, the agent will behave adequate to expectation. In other words, expecting, the agent can undertake actions which totally disagree with his expectations.

For example, the agent believes, that constitution guarantees his rights, presumption of innocence, in particular. However, in practice this right can be violated. The agent can be prosecuted for the action he has not done, or his economic actions may be interpreted as criminal, actually not being so. Thus he will be forced to prove the innocence. Why does it occur?

A possible variant (answer) can be the following. The concerned agents simply buy the services of law enforcement bodies directed against unnecessary competitor, or the agent who has refused them to obey and to realize their interests. There is a strategy provoking the infringement of this agent's rights, or resulting in misuse of functions (law enforcement bodies, court), or to efficiency (quality) decrease of these functions, system's dysfunctions. The competitive process also develops in the same framework. Such type of competition can be called "false competition". The changed functions and norms operate either parallel, or substitute the ones operating earlier. In essence, it means degeneration of the basic economic institutions serving such type of competition, not simply serving, but organizing and recreating it. Expectations of the "law-abiding" agent are connected with the observance of constitution and the declaration of his rights, actually, contradict expectations of the competing party selecting, as a matter of fact, the illegal form of competitive struggle as this party aspires to present the actions of "law-abiding" agent as illegal with the illegal methods. These methods are simply based on bribery of the interested or responsible persons, including law-enforcement structures. In case of success of such competition, economic zone will lose the "law-abiding" agent, but "unabiding" agent will arise and strengthen his positions.

Legal efficiency in this case sharply decreases, and, other things being equal, it does not allow to provide higher national income which would be possible at prevailing influence, domination of "law-abiding" agents in the economy. Hence, different groups of agents possess various expectations and form them proceeding from their purposes. Such expectation creates the model of their behaviour which is defined in many respects by the condition of institutions, their efficiency, including the institutions ensuring the performance of norms.

Economic growth is influenced by the legal efficiency of economic decisions. Not so long ago and absolutely not casually the research made by Datta S.K. and Nugent J. B. on the statistical material of 52 countries of the world showed that with the increase of lawyers share in labor forces by 1 % economic growth is slowed down by the value from 4,76 to 3,68 %.⁶

With the increase of economic growth rate the legal efficiency can either decrease, or increase. In the first case, the growth occurs at the expense of losses in law institutions functioning, in the second, it is the increase of their efficiency that provides growth rate increase. The number of dysfunctions can decrease with the increase in growth rate to a certain value, but then there will be their increase, from the moment of point A in Figure 8, or the number of dysfunctions (dysfunction scale, depth) can systematically accrue up to the greatest possible growth rate on curve A_0A .

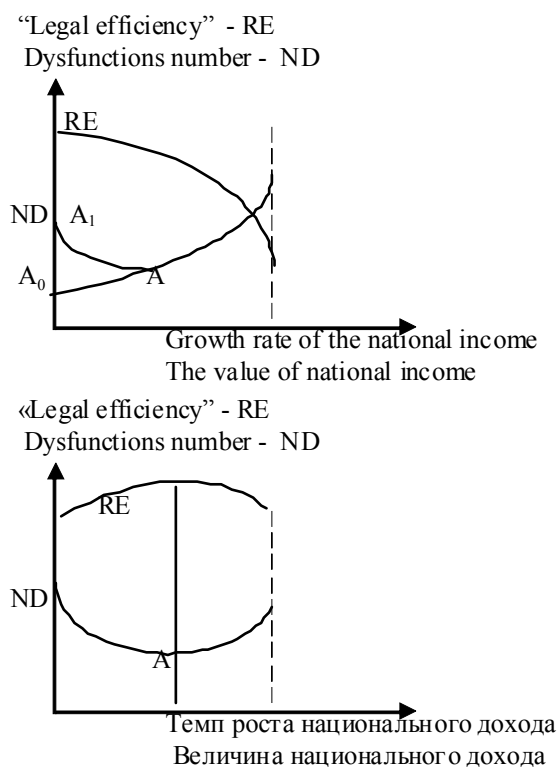


Figure 8. Legal efficiency and system's dysfunction.

Thus, "legal efficiency" reducing, will reach such level (displayed in the Figure by a stroked line), that the further increase of growth rate and size of the national income will become simply impossible. Under legal efficiency we will understand the ability of the system to provide economic advantages to "law-abiding" agent, that is, the one who accurately carries out the established norms provided that the norms themselves do not program inefficient conditions or actions, or do not lead to the development of deviance models directed on infringe-

⁶ Datta S., Nugent J. Adversary Activities and Per Capita Income Growth // World Development, 1986, vol. 14, №12.- P. 1458.

ment or detour of these norms. In the Figure on the right the situation when with the growth of the national income or with increasing growth rate legal efficiency increases with the decreasing number of dysfunctions (effective economic policy of growth), but then, after point A, there is an increase of dysfunctions expressed in the decrease of legal managing efficiency. Let's pay attention to the fact that in both cases the national income growth is observed. However, the situation is possible when decrease in legal efficiency will cause, or occur owing to the delay of growth rate or due to the reduction of the national income.

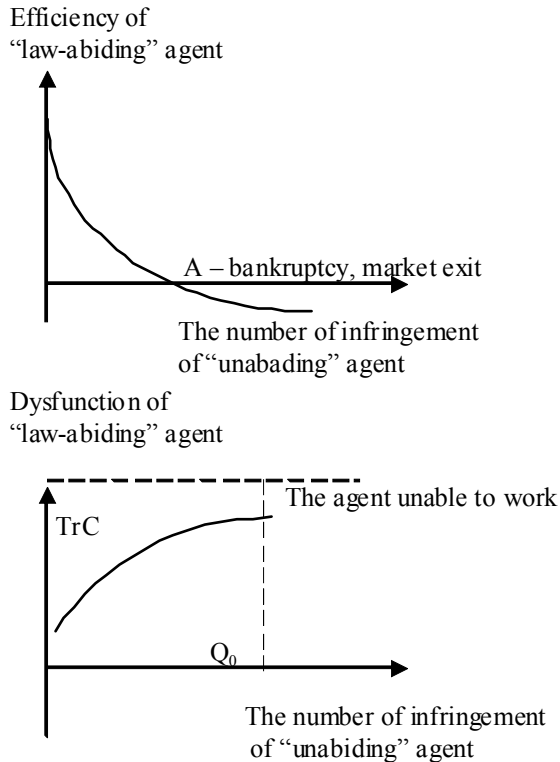


Figure 9. Economic Agent Efficiency at Inefficient Law.

If the legal system of economic activities is arranged in such a way, that committing illegal activity "unabiding agent" does not bear any responsibility, and law-enforcement structures are organized so, that they start to check the activity of the "law-abiding" agent, appealing against the actions of "unabiding agent" who also uses legal inefficiency and appeals against the actions of the "law-abiding" agent, then the frequency of these infringements exceeding the speed of law and sanctions application, can increase transaction costs of "law-abiding" agent so, that it will reach such level of inefficiency and dysfunction that he will finish his functioning because of bankruptcy (Figure 9). Such legal inefficiency generated by the basic institutions, allows building special behavior models, not referring to general views about conducting economic activity allowed by the law. Such model is not fixed in any code of economic behaviour and, nevertheless, it is not forbidden by the law; it comes to as if lawful use of law-enforcement structures in economic activities. Actually, the use of law-enforcement structures is carried out secretly, as it is forbidden by the law.

However, to reveal such sort of infringement is extremely difficult, as introduced rules and high transactional inefficiency of judicial system and supervising structures do not allow revealing such infringements and models which become part of economic process. The motive of the specified activity is supported by the following economic correlation. The subject - infringer commits such infringement as there is no accurate negative designation of it and there are no mechanisms of revealing and punishment. Besides, he makes illegal investments, in essence in corruption when expenses from the point of view of his expectation of disappearance of "law-abiding" agent, financing this disappearance, pay off the fact of its disappearance. Such model has also another logical explanation from the point of view of legal inefficiency. Driving the firm to bankruptcy or firm's capture is a behavioural model, action strategy, and its economic development for the interested agent. Realization of this strategy becomes obvious when expected benefits will be more than the investments into infringements and stimulation of the law-enforcement system acting as a protector of these infringements and helping the destruction of the "law-abiding" agent. It shows only one thing: the economic system can grow to a certain limit, but it is the growth under conditions of legal inefficiency of the system at high loading of illegal economy and deviations of agents' behaviour models, other things equal, (that is, without taking into account the positive world dynamics) will be braked, or will be curtailed. The anti-system growth scenario is possible, that is, the system in which abnormal rules and models of behaviour prevail. These rules have ceased to be considered by agents as abnormal and have become "true" rules, actually not being such.

4. Contracts and Institutional Changes

The theory of contracts offered by Oliver E. Williamson which follows from the transaction costs theory may be considered an original statics of neo-institutional theory. Basically, the problem of contracts types' definition, contracting modes depending on these or those criteria, including the form of asset, transaction costs, the degree of information asymmetry and opportunism was solved. This theory is appropriate for clarification of various processes of interaction in the organization and between the organizations in order to specify legal and economic consequences of capitalist system institutions functioning. All Williamson's theory is based on two premises, that the agents behave restrictedly rational, and, that there is opportunism in their behaviour, that is, a behaviour way or a model of turning to advantage at contracting using insidiousness and deceit. The transaction costs theory, as Oliver E. Williamson fairly believes, is micro analytic and allows estimating contracting costs. As a matter of fact, the question concerning the existence of transaction costs theory is, at least, polemical, and is rather strange, to the maximum, as then it is necessary to speak about the theory of production costs. And in this case it is not be absolutely clear what the theory of investments will represent. In any case, as investments are an expense, that is, costs, because money is invested in some project. Or it may be not money, the investment medium is not important in this case. Then it turns out, that the theory of investments should somehow unite the theory of pro-

duction costs and the transaction costs theory. The question whether there can be theories of one kind of costs from a methodological point of view still exists. All the costs eventually form full expenses of economic process which they describe. Ideally, the theory should explain this process, and the parties of the explanation from the point of established regularities for costs can be different. But Williamson, as a rule, describes the situation in his works as though such theory has already existed. But in some places he uses a term "the concept of transaction costs". And at the same page "the theory of transaction costs asserts, that management of contract relations first of all is carried out by the institutions of a particular order of settling the conflicts"⁷.

And what is meant by a particular order of settling the conflicts? Certainly, in this doctrine I see a naive and unsubstantiated attempt to develop Ronald Coase's idea following from his tautology when interaction of two parties of the transaction transfers the costs on the third party. Judgments can be avoided, if the parties can come to an agreement, and the structure change of the property will not affect the result of the production. Under particular way of settling of conflicts Williamson understands the self-generated mechanism, mechanisms, to be more exact, for maintenance of adaptive, consecutive decision-making with independent participants of the contract. These mechanisms assume both information search, and solution of debatable problems. I think, that reduction of the theory to the aspect which is far from life, is an inadequate step and excessively strong assumption. Contract relations management assumes rules observance of the contracts conclusion.

On the basis of some conclusions and several classifications Williamson builds the description of contracting system within the limits of various corporations, and the structures formed by them (holdings), and, besides, different forms of interaction within vertical and horizontal integration. Certainly, he manages to cover the important layer of problems, but it is not full as the interrelations of different costs are not considered and system efficiency concepts are not introduced. Williamson's work to which I make reference and will do further on, contains a number of assumptions and definitions which actually set the result, but they are indistinct enough per se and require additional explanations. For example, management structures are understood as coordination mechanisms of economic activity. Then, what are, in this case, management mechanisms? And why do they change? And how does this changeability influence the costs? It can seem surprising, but the management structure is an institutional unit in whose framework the transaction integrity is defined.⁸

Management structures are a classical market, a mixed form of contracting and a hierarchy.

Transaction is understood as a micro analytical unit of the analysis in the theory of transaction costs, arising when the goods or service cross the borders of the related technological processes.

Transaction costs are the costs of contract's drawing up, negotiating and ensuring safeguards of

the agreement, and, besides, costs connected with inefficient adaptation, contract's changes, errors corrections and economic system management costs.

The mixed form of contracting appears in the form of long-term contract relations preserving autonomy of participants when specific guarantees are provided.

The hierarchy is transactions carried out within the limits of the incorporated property and falling under administrative control, and the market is a "field where the independent parties come in exchange relations".⁹

Besides, Williamson introduces the concept of specific assets which has special value while performing a certain contract and which cannot be re-structured for a different function to use them alternatively (there is a very rigid restriction for assets). Specialized equipment or very rare high qualification of workers or engineers, in particular, present an example of such asset. Such assets mean little beyond the given contract or outside the limits of the given firm though the last statement is rather strained, because, as a rule, there is a possibility to apply both the equipment and agents' knowledge either in an alternative mode, or by firms-competitors. Assets specificity takes different forms, and organizational decisions (according to Williamson) depend on these forms. And specificity of a site, specificity of physical assets (the equipment for specific operations), specificity of human assets, owing to the obtained knowledge and experience, and the so-called target assets represented by investments into capacities expansion are usually distinguished.

Thus, the accuracy of theoretical highlighting, which follows from the classification assuming independent estimations of difficult enough processes specificity as investments into capacities, or estimations of agents' intellectual potential, cannot be high. The firm's size, work's specialization, even output nomenclatures and the firm's technological potential will define its specificity of assets. But together with the specific part of assets, there is also a stereotypic one, that is, a non-specific portion of assets which in terms of price can exceed specific assets. Besides, the firm represents a certain portfolio of contracts, which it fulfills, each contract having its own period of time, risk and profitability.

Depending on the definitions of basic, I would say, main elements of intellectual structure we have these or those conclusions which do not at all fit for the explanation of the event happening in

⁷ Oliver E. Williamson The Economic Institutions of Capitalism – St. Petersburg, 1996 – P.23

⁸ Oliver E. Williamson The Economic Institutions of Capitalism – St. Petersburg, 1996 – P.28, 690

⁹ Oliver E. Williamson The Economic Institutions of Capitalism – St. Petersburg, 1996 – P.688-690. Here the agreement between the buyer and supplier concerning the exchange conditions which are set by the price, assets specificity and guarantees is understood as contract. It is an oral or written agreement. And transaction costs theory is defined as follows: microanalytical construction. The main attention is paid to the agents' behavior. The main point is assets' specificity and comparative institutional analysis, and a firm as a management structure and not as a production function. But if the costs or, to be precise, their part, and separate components such as managerial, production, administrative are analyzed, then the difference is only terminological, reassuring oneself that your doctrine is different from the ones already used, but it is not so if we examine it carefully.

other conditions, when the listed terms do not mean the same defined by the researcher or mean more and this was not taken into account. When it is said, ostensibly on the basis of theoretical generalizations, that the firm using M-structure will be more integrated, than the one which applies U – structure, in practice everything can appear to be the other way round, depending on how you have defined “integrity” and how you have taken into consideration other functioning circumstances of the specified structures. This property limits the use of any theoretical schemes: they should either really have the general character, and more system, or specify, that they can explain and describe but no more than that. In this case it is not necessary to absolutize them if there are phenomena of higher level defining system’s properties which practically set and form both the structures, and behaviour. Financial system, credit availability, the monopolistic position of the firm supported with patents, well-known image and brand, its position in the given region can be referred to such factors. Then it is possible to consider any similar characteristic to be a specific asset, but these characteristics obviously do not refer to the given classification. Any classification is always limited to a certain set of factors, and thus cannot consider more important or significant ones, as all the factors dynamically vary and the theory should take into consideration this evolutionary property of importance change of the economic life facts and the development factors (evolution) of any situation or the phenomenon, including microeconomic level - contracting.

It seems to me that at firm’s institutional theoretical scheme (and it is necessary to raise the problem in such a way as the theory of transaction costs is a conceptual construction which does not show the theoretical problem gist), it is necessary to start with those current institutions which form motivation, behaviour model and allow changing this model in the process of situation development. (It is impossible to raise a problem of the theory creation of a separate cost. It is a methodological differentiation of a science. Then there should be a theory for each kind of costs and there will be a problem of theories and actions coordination which at once generates several kinds of interconnected costs mutually defining each other.) Having constructed such evolution model of the firm existing in a sector or population, competing to other firms according to current rules, it is possible to investigate those processes which will be developed at rules change or alteration in this or that way and actually to grope the rules which at some intervals provide the most effective development, both for a separate firm, and for the whole economic structure within the limits of the sector, population, and national economy. At creation of such models micro analytical level of firms’ contracting analysis will certainly be a part of them as a component defining the choice and costs. In the work I gave an idea of contract well-being and its measurement considering a portfolio of contracts. The fact is that, even considering a separate firm’s contract which, by the way, can take a small share from the total output and sales, it is impossible to define a corresponding share of the operating specific assets because stereotypic assets are also involved, and specific properties carriers, agents, for example, simultaneously possess both kinds of assets. At the same time, these assets cannot at all

affect the time of the contract conclusion, negotiations costs, information search against the contract, and the subsequent behaviour, for example, opportunistic one providing transaction costs increase. Moreover, the contract form is static and legally fixed, including all three kinds (neoclassical, classical and implicit contracts about which O. Williamson writes); therefore, the specificity of assets ostensibly defining the contract form (though in some case it can really define this form, but it may be a particular case, not natural, for what Williamson put in a claim), in practice, does not influence anything just because institutional neutrality can be observed. Specificity of assets defines all the activity of the firm, and the contracting forms are set legislatively, as a rule. Another pair of shoes is that informal relations, latent contracting can appear due to different reasons, but here the analysis is necessary in each particular case and there can be no general rule, as in this case it is necessary to consider a lot of limitations: corruption, nepotism (the system of connections, relationship etc.). Williamson tries to absolutize the forms of contracts, objectify the process of contracting generating transaction costs, but he does not see, that actually this process is formulated by legislative possibilities and economic conditions and sector’s economic structure in which the firm develops, and, besides, by its production facilities and objectives, the general efficiency and functioning. There is also a certain order of things within the limits of the available legislation at contracts conclusion. Types of contracts and possibility of their change are also usually fixed legislatively, that is, by formal standards. It is a reality of modern economy. The theory cannot but see the reality, otherwise, it is simply either a fiction, or it explains nothing, and proceed from general dogmata which are, besides, incorrect. In economy almost any object is an institutional formation, therefore, to reduce management structure to the fact that it is an institutional formation is simultaneously right and wrong. It is wrong, because it is not absolutely enough. It is not an institutional structure, but a set of elements accepting and selecting decisions and operating on the established rules and changing these rules. As for the contracts at micro-level, these subjects can hardly change the system of contracting rules. It is presented for them exogenous. The portfolio of contracts for the firm can depend on the share of firm’s specific assets, but a separately taken contract does not, if, of course, it does not represent more than half of firm’s scope of work. So, large projects and large-scale contracts are especially individual, say, in the sphere of science, fashion, art, and are certainly defined by the specificity of asset, simply because the subject, concluding it, is such kind of asset by himself, and the site, as a rule, plays a subordinated role there. But with reference to the firm these conditions and this so-called theory cannot operate in the way it is stated.

Assets cannot influence the contract in any way. If the contract is concluded by two or more parties of players it is a game contract: a certain agreement between competitors or co-signatory in which the game rules carry out the function of additional obliging behaviour norms. In this connection institutional changes in economy can strongly influence the performance and the conclusion of contracts and costs. Even if they change costs in other kinds and forms of activity, when some rules are

changed, the costs can supplement or replace each other (as three kinds of transaction: parallel, supplementing or cross), so that the change in one place will result in the growth or decrease of transaction costs in other place, in other contract.¹⁰ Contracting also occurs, as I see it, in three basic modes: parallel contracts, supplementing contracts and cross contracting.

In the case when we observe the game of a grand master and a second-rate player, it can be considered as a voluntary agreement, that is, a contract. It not a standard contract, but competing, playing contract and with vague result. If in the course of contract realization, there will be a change of the rules concerning the game itself, not only the result will be even more poorly predicted, but well-being will be distributed so, that any of the known static criteria cannot describe the given change.

If the grand master from one country plays with the grand master from another country, one of them can quite win. Hence, such situation will also be interesting from the point of view of economic analysis. Then it comes out, that the parity of titles does not mean the parity of abilities, experience, that is, formal standards performance does not guarantee the quality of training, sufficient for competitive victory over the similar player representing other social, economic and cultural environment. So, to establish the standard or a rule does not mean yet to achieve high efficiency. It is possible to pitch so, that it is quite easy or impossible to achieve. Besides, the ways of training, mentality of players-agents, possibilities, traditions and even interpretation of results differ in different institutional environments. Thus, institutional planning, even at identity of the method, is obliged to consider the specificity of the institutional environment organization.

Institutional changes can provoke the termination of contract performance, or induce one of agents to opportunism. Moreover, the opportunism is not the static form of a deceit or insidiousness, it develops exclusively in a playing variant, that is, opportunism constructions with two and more players are built.

Making a start from definitions presented above, it is necessary to confirm clearly their incorrectness. The market is not an "arena" if only the word "arena" is applied virtually or metaphorically here. It is the combined term of several sets, anyway, more than one agents' interaction concerning the exchange of some welfare or valuables. Thus, presence of two agents is necessary. Otherwise, it is not clear, who establishes the price and for whom. It is theoretically possible to imagine, of course, that one agent produces, fix a price, sells and buys himself. It is an ideal degenerated market bounds. If there are two agents it is possible to have a certain hierarchy according to this or that criterion even considering their interaction. For example,

both agents have different personal income. Then one agent occupies higher position in relation to another one according to income level. The same is true for the level of education, possession of some technology, this or that behaviour model, etc. Then the market is a certain set of similar interactions presupposing authority of one subject over the others. With reference to hierarchies the property should not be necessarily combined, and the mixed form of contracting is a usual business not only in the long-term period, but also on short and average intervals. Introduction of such definitions obviously limits the contract model and the theory of contract relations, gives it a certain local, but not the general context, and determines conditions of the country which the researcher providing the wording represents.

Technological determinism of Veblen-Galbraith is forced out by the contract determinism of Williamson, this determinism being characterized by high discontinuity of behavioural prerequisites which are applied in this theoretical construction. The danger of such idea is that incorrect, administrative orientations arise. The reality is richer and not so discontinuous and determined by norms from the outside in relation to the contract, and contracting problems are far from being always solved privately, but initial propositions of neocoasian type are transferred to the area of contracting studying which, in essence, is the area of the exchange taking a form of a transaction. Contract essence appears in the form of planning (when the limited rationality is equal to zero, and the opportunism and specificity of assets are of great importance), promises (at which the limited rationality and specificity of assets have high value, and the opportunism is equal to zero), competition (specificity of assets has no value, limited rationality and opportunism have the highest value) and, at last, management mechanism, which is understood as a situation of presence of behavioural preconditions in the greatest value (opportunism and limited rationality) and high specificity of assets. It is interesting, that planning is identified with rationality at once, that is, with the absence of limited rationality. It is not understood as a process which is also rationally limited. The promise assumes the absence of deceit and insidiousness though it is checked only when the promise is broken. Competition ostensibly cannot occur at specificity of assets. Then what should be done if not one, but two or three agents possess unique knowledge, and they can quite compete. The matter is that contracts, even having the characteristic on specificity of assets, compete by the fact that they require finance and credit which can be inaccessible, limited and without which application of specific assets will not be achieved. In this sense, whatever the assets were, including specific ones, competition between contracts occurs in the area of finance which in their turn predetermine the scale of assets use, and, in a certain degree, their specificity.

Depending on specificity of assets and presence or absence of contract performance guarantees, the expediency of three organizational structures application is described in theoretical construction of Williamson. They are: multi-divisional, M-structures, when guarantees are provided, holding, H-structure, when there is a refusal of guarantees in the case of decentralization, and in case of centralization, functional structure, U-structures. It is

¹⁰ For some reason very few people from institutionalists apply marginal analysis to transaction costs, and the classics of the given genre R.Coase and O.Williamson do not do it either. As though the concept of averages, marginal, fixed, variable and other costs disappears for this kind. I believe that the very attempt of the considered application of this analysis is capable to correct many positions of the so-called transaction costs theory. Author's comment

also absolutely incorrect to oppose aspiration to efficiency growth and the real purposes of monopoly. Moreover, contracts can be subject to detailed classification, for example, according to the criterion of purposes, functional filling and contract maintenance. In this case "the performance guarantee" is a derivative of one or several obligatory functions. It is performance insufficiency that raises probability of default and reduces the amount of guarantees. Other criteria, namely area of the contract application, imposing the specificity on its execution, its action time, costs of actions, and stability to internal and external changes are also possible.

At the conclusion of this or that contract, representatives of the organization are hardly guided by minimization estimation of transaction costs, or by change of transaction profitability. A problem of the modern rules of accounting is that they refer these costs to the general costs of management or to overhead costs. Within the limits of certain contracting actions there is a motive to carry out these actions with as small costs as possible, but the purpose is not always realized. Besides, contract profitability is an indicator which will be known after the contract is concluded and is being carried out. And in this case, at the first stages of the performance this indicator will have one value, and by the end of the contract it will be absolutely different. Therefore, the genuine evolutionary approach to consider contracting and develop the necessary theory is contracting in time, not on the abstract criteria of "limited rationality", or opportunism presence, but on more intelligible and contract criteria which were discussed. Besides, it is very important to understand, what the contract means for the firm or the organizations. If it makes 1 or 3 % from the total amount of works, it is one thing. If it is 50-60 %, it is a large-scale contract on which the functioning and the organization's future, possibility to lose solvency and to become bankrupt, for example, directly depends. Price discrimination, barriers on entry into the industry, limitation of competitors' strategy, stimulus, the property rights, and strategic management will influence feasibility of the contract and its conditions.

The same assets can have specific value for one contract, and no value for others, presence of specific assets having the same value for the firm or the organization as fixed capital. After all, the funds serve the firm's activity, the organization as a whole, and can be applied for different actions, processes and contracts in unequal degree. If some asset corresponds to a contract, it does not mean at all, that it will have the same value for other contract. And as it is known, there are some contracts, a certain contract portfolio, in the organization, though the situation with one contract is also possible. If a specific asset corresponds to each contract, then the general value of such assets for the firm is equal to the indicator of specific assets of the organization as a share from the general value of assets of the organization. If we assume, that Williamson is right in his definition and the market is really a certain arena of agents interaction in the exchange, then market management costs are the costs of their interaction, that is, the costs of this "arena", where there is at least two co-operating agents available and, certainly, capable and contracting with each other. What is market management, in principle? Is it the operating influence formed by this interaction and if there are

a lot of players, then it is a certain total vector having operating influence, that is, a point of application and considered as a certain compulsory force for agents who form it by their interaction, and for agents who are not involved in it, or is it something else? In any case, to assert, that powerful motivation¹¹ is characteristic to the markets, that is, to ascribe interaction the properties of a separate agent is incorrect and from the analytical point of view it gives no result and explains nothing.

As a result there is a strange comparison of bureaucratic costs of intra-firm management and the so-called market management costs subject to the change of assets specificity degree. The problem is that specificity degree can hardly accrue in the course of time (only in some special cases of contracting) as with the lapse of time there is an alignment on assets due to technical progress and assets appearance of other specificity degree. Besides, if specificity of an asset is defined with reference to a certain contract, how we can summarize specificity and speak about a certain uniform specificity on contracts totality. After all, intra-firm management costs have to do with the whole firm, that is, all contracts portfolio. And a specific asset for one contract is not specific asset for other contract. Thus, in the classical so-called theory of contracting there are insuperable difficulties arising because of inadequacy and incorrectness of the applied analysis: classifications interacting with improperly introduced definitions. Incomparable costs are compared, there being an obvious adjustment to prospective result, as though the market form of the organization is preferable if to proceed from the analysis of correlation of industrial and administrative expenses, intra-firm and market management costs which are incomparable as there are minimum two co-operating agents in the market, agents and costs in the firm and in the market being different in the content and stylistics. Eventually, conclusions are made that the markets are more effective than the internal organization. That they provide motivation, it is trivial, and they limit bureaucratic distortions and realize economy in scale. These facts are known from classical microeconomic theory. Can the specificity degree of an asset accrue in the framework of at least one contract? Either contract rules should be changed or it is necessary to modernize the asset itself during contract performance. Then asset specificity can be probably increased relative to a starting point. Otherwise, especially with time course, specificity will decrease. How will it affect intrafirm bureaucracy and management costs of the contract? It is important to notice here, that bureaucracy cannot be connected with the specificity degree of firm's assets. To be more exact, this connection cannot be so strong, that it should be taken into consideration at behaviour estimation of costs. Other factors connected with economic structure, set by technological possibilities, use of resources, the general structure of expenses, etc. make contribution to costs change. Transaction costs for the firm's contract portfolio can be equal, or are approximately identical, but factor costs for different contracts are different, and this will define the dynamics of the firm's general costs.

¹¹ Oliver E. Williamson The Economic Institutions of Capitalism – St. Petersburg, 1996 – P.161

In connection with what was said I will suggest absolutely different classification of contracts detailing their condition and influence on the behaviour of the general intrafirm management costs. With the increase of assets, especially the share of specific asset in the general assets, intra-firm management costs should increase, because management complexity of this asset increases. There appears a need to train the personnel. Probably, these costs will go down on some area of specific assets growth, but the result depends on the size of specific assets in their general size at the starting point of contracting and from appropriation of these assets to the given contract. The assets increase in the short period can lead to output reduction per asset

unit as the output volume will not change quickly and a product share per asset unit will, certainly, be reduced.

If we introduce the following basic parameters with which the characteristic of contracting process is given, namely: the purpose, functions, application area, action costs, action time, or the time before contract cancellation, internal stability of the contract and the external stability caused by the reaction to the change of rules, legislation and other standards infrastructure, regulating the given sector of economy where the contract is concluded, then there are the following kinds of contracts and contracting regardless of the fact what assets support these actions (see the Table).

Table. **Kinds of Contracting Depending on the Process Parameter**

Contract type	I. Organic			II. Mechanistic		III. Balanced	
	Target	Functional	Object	Economical	Localized	Externally unstable Neutral to opportunism	Internally unstable Institutionally neutral
Kind (line) Parameter (column) of the contract							
Aim	+						
Function		+					
Application area			+				
Costs of contacting and contract performance				+			
Period of action (before the cancellation)					+		
Internal stability						+	
External stability							+

The sign “+” means a strongly pronounced sign of the given contract and contracting process and prevalence of the characteristic over all the others. Certainly, any contract can be characterized by each of seven parameters, but those noted “+” mean the main parameter of the given contracting. For example, the highest priority of the purpose, which does not vary whatever occurs, or the priority of a set of basic functions, when it is possible to change the purpose, if only functions remained invariable, define the target and functional contracts accordingly. Rationality can be considered as aspiration not to diverge from the given type of contracting, or as a realized choice of this kind of contracting. If one agent chooses one type, and the other participant of the contract chooses another, there is a conflict of interests under the discrepancy of the kinds of contracting. There appear deviations of contract actions that entail weakening of each of the relevant contracting type signs and dysfunction increase of the given actions and considered contracting. The subject contract means, that the subject domain of the efforts application of the contract is of the highest priority. The economical contract means that agents proceed only from the necessity of maintenance of low costs, both contracting itself and contracts execution, or one of them. The localized contract means that time is the main limit for this contract, either on its execution, or before its change, when either opportunism arises or the formal norms according to which the contract is realized, change.

Neutral to opportunism contract is an internally steady one, that is, such kind of agreement in which opportunism is excluded even at the emergence stage. Institutionally neutral type of contract is a contract for which it doesn't matter whether external rules and standards change and how quickly.

Summarizing contracting characteristics, we have three types of contracts: integral, mechanistic and balanced which can be of two subtypes: externally and internally unstable.

1. The integral type of contract which solves the problems of goal attainment, exact function execution, or subject domain description and observes the borders of the efforts application. It is integral because it is connected with the achievement of essential items.

2. The mechanistic type of contract reduces the algorithms performance and fixed contracts to a certain routine, the purpose, functions and application area of the efforts usually being typical. And only one thing is important. It is how small are the time costs and the costs necessary to attain these stereotypic purposes or to hold on before the initiated changes, for example, from the outside.

3. The balanced type of contract is a contract which is the steadiest one against internal conflicts, or against external changes. In the first case it is neutral to opportunism, to deceit, insidiousness, used as a model of participant's own purpose achievement in contracting. In the second, it is institutionally neutral, that is, steady against external changes. In other words, the contract is executed and the purpose is attained only due to its stability to external changes. Meanwhile, internal stability can be much lower, and some degree of opportunism is permitted while executing such contract. The first subtype can be designated as externally unstable contract, and the second, as internally unstable one.

Thus, in the case of a chess game it is a typical integral type of contract. If the same game is ad interim, the contract becomes mechanistic because the properties of integral type will be less significant. If there is a change of game rules at the moment of game, we have externally unstable balanced type of

contract. If there is opportunism of players, the contract is internally unstable. In any case the game type of contract is a specific form of contracting because dynamics parameters start to play the larger role, eventually, the defining one. Then, it is absolutely unimportant, what type it is from the point of view of a validity and registration. Whether it is classical, neoclassical or orally made deal. In modern economy contracts above certain sum which is defined in each concrete case with reference to given economic system cannot be basically concluded orally, or with superficial legal registration as the probability of a loss is great. Prevention and insurance are carried out by means of legally obliging contracting, according to the established legislation. Certainly, the share of oral transactions in the economy to some extent demonstrates the availability and development of institution of trust in economic system. But usually "small" transactions are described by oral agreements. By the way, the asset here can be specific, for example, knowledge. It is important how the parties intend to use it and what the parameters of contracting are.

To compare, which type the bigger costs of contracting, that is, transaction costs, will correspond to, and which type – the smaller ones is difficult enough as these costs depend on the scale of contracting, the contract, on the share of firm's works, and on the way it influences the agents participating in contracting.

The contracting analysis becomes more sophisticated, if two or three positions from a set of seven basic characteristics act as the main signs of the contract. Then these or those properties of each of various contract types are manifested. The given classification differs from classification based on the force of legal registration: classical, neoclassical, implicit contracts (they are listed in the descending order of legal registration force). There is an incorrect attempt to compare the influence of specific assets in their application by the fact that it gives more value to the characteristic of contracting itself, rather than to assets specificity and legal registration format which is designated by available institutions in each economic system.

It seems to me that contrasting of planning, promises, competition and management mechanism within the limits of "private world" of the contract is incorrect, especially in the aspect of behavioural properties or prerequisites, namely, limited rationality and opportunism. The problem is not only in the fact that planning can assume promises, and promises contain some element of a plan, let alone management mechanisms, to which planning can be fairly referred to as one of the major functions of management¹². But the problem is also that opportunism can be both absolutely rational, and restrictedly rational. If assets specificity changes, then how these properties correlate with the given change, which in itself can change the type of the contract due to the purpose change, the functional content, the subject application of contracting efforts, costs, etc. Having introduced the degree of deviation from the purpose, necessary functional variety, subject domain and costs deviation, the

period of contract's action, its internal and external stability, it is possible to estimate the dysfunction degree of each type of contracting for this deviation. The more is the basic parameters deviation of the contract, the more is the probability that the contract will not be finished and the more is the dysfunction degree of contracting process. The deviation from the basic parameters can occur due to a number of different reasons, but deviation occurrence will mean the loss of a definite efficiency of the contract. Planning is inherent in any contracting, but it is the scale of this planning which is important. It is also impossible to assert, that zero limited rationality is characteristic for planning. Planning should really be connected with absolute rationality as all the actions are foreordained according to the plan and are designated. However, it is not the fact at all, that a situation develops according to the plan and that agents are determined by planned algorithm in their actions, that is, the plan does not mean the absence of limited rationality. By the way, it is this type of rationality that can find its reflection in the plan and in the procedures of planning itself. If we proceed from planning scale, it should be higher for the integral contract, for mechanistic one competition is higher and for the balanced contract the promise and management mechanism are higher, though all the features of the "private world", singled out by Williamson, are present for each type of the contract singled out by me. As we see, the validity is not considered here, as certain correlations and laws operate for formal contracts, which represent the area of formal institutionalism, and there are others for informal one. Management and promise mechanisms are just characteristic from the point of view of external and internal maintenance of contract stability.

Even if the contract is concluded, for example, for research and development performance, or for equipment delivery, manufacturing of sample quantity or finished article, the agents, concluding it, other things being equal, have a desire to get the biggest possible benefit, that is, to "wring" the greatest effect from the contract and the achieved agreements. They commensurate the benefits and losses from contract performance and from execution evasion, or inhaling the execution time, including presumable estimation of legal costs and arbitration prospects if the second party of the contract goes to the law, when there is such opportunistic behaviour. But in the case, when opportunism is game, that is, combinational, the agent cannot feel at all, that he is a participant of contracting opportunistic model up to a certain moment. This model is realized at inter-agents contracting in the example of feelings and family, when the agent makes a choice in favour of this or that agent: the former husband (wife) or the new representative for his (her) place. The similar situation is possible at contracting with two or more counterparts. If opportunism costs are low, even when the benefits it brings, are not great, the probability of the situation in which the opportunistic behaviour will be realized, is high. In our case with agents X, Y and Z, when agent X plays a combination with Y, who is unaware of the original plans, and Z who is partially informed, but far from being completely informed about the plans of X, there is a doubled opportunism of type O-X. Both agents will sustain a defeat, innocent agent Y showing feelings to the agent X suffering the great-

¹² Management is represented in the form of the following obligatory elements (functions) - planning, organization, motivation, control and coordination. – Author's comment.

est defeat. This altruistic binding allows using any model concerning agent Y till the certain moment, when agent Y's cup is filled by some rough actions of agent X. At the same time, it is due to the fact, that opportunism costs are low, agent X will not pay off in any way for lies and use of agent Y, and for lies to agent Z and his own relatives about the behaviour of agent Y with doubtful or non-existent material benefits. Nevertheless, it will be carried out just because the costs of such model are very small. Agent X will pay neither penalty, nor have any other consequences. Hence, it is important to compare not only the price of contract following or contract infringement, not only the benefits obtained at observance and non-observance of the contract, but also the amount of costs from application of any model. If this value is ideally zero, the agent will try to apply this model almost with absolute probability, as he loses nothing, and even at small probability of benefits, it is possible to try this variant. May be it will give a result. The most interesting fact is that at such contracting there is no concept of the market in general, it is a choice from a combination of several agents. Therefore, there are no good reasons here for comparison of internal management costs and costs of market management as, by the way, it is not lawful to apply the terms with reference to the analysis of legally obliging contracts of the firm concluded with other firms or organizations. The market is depersonalized, motivations are not peculiar to it, the tendency or orientation of the general movement vector embodying some reactions of agents is more peculiar to it. Motivation is peculiar to the agents, carrying out the actions within the limits of a certain contract. He can change this motivation in this or that way by its conditions, development of a contract situation, or leave it without changes. It is this stability that is the initial precondition for the balanced type of contracting (contract) singled out by me.

Contracts for creation of new technology and technological changes (working out and appearance of new technology) are contracts of special type. Besides their formal-legal side of the question at their conclusion, there is especially a technical aspect which is carried out on the basis of the functions, given to the projected system, to currently functioning technical system, assuming the working rules of both engineering staff and technical services. The legal side of the question provides transaction of one type, but the engineering party including the working out of obligatory engineering specifications and accompanying descriptions under regulations and certain algorithm, represents the second party of the transaction and the generated transaction costs which is necessary for considering at the analysis of both contracting processes, and at studying institutional changes and their influence on the development of technical systems and technological shifts.

Conclusion

Summing up the present article let's generalize the results:

1. Models of competitive agents' interaction are considered. "Paradox" of the lawyer is defined and the criterion of contract well-being is suggested.

2. Models of effective contracting on the basis of the ideas about "legal" efficiency of economic agents' behaviour are defined.

3. Modification of the O. Williamson's contract theory is carried out by types of contracts specification and pointing out the conditions (parameters) of their conclusion and performance.

Thus, it was possible to formulate the bases of a new theory (or primary elements of such theory) of agents' contracting in this article. Of course, it was done on the basis of known achievements in this area. The theory takes into account the competitive properties of agents, types of contracting, opportunism models, double opportunism, legal efficiency or inefficiency of economic system, and the change of contract well-being. All these factors are simultaneously the ones determining the choice of agents and decision-making. In a certain sense these factors can strongly affect the results of macroeconomic system functioning as a whole. But this theme makes a separate scientific problem which was not considered here.

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