At the Origins of Neo-institutionalism: Ronald Coase

Rustem Nureev*

* Doctor of Economics, Financial University, Scientific Director of the Department of Economic Theory, Honorary Professor, Chief Researcher of the Institute of Economics of the Russian Academy of Sciences, Moscow, Russia nureev50@gmail.com

SPIN РИНЦ: 9366-0174; ORCID: 0000-0003-1407-2657; ResearcherID: P-9648-2015;

Scopus AuthorID: 35759212500

Abstract

The article contains the analysis of the views of the Nobel laureate in economics Ronald Coase (1910–2013) as the founder of neo-institutionalism. It provides a comparative description of the "old" and "new" institutionalism and shows the relationship and difference between neoclassicism and neo-institutionalism. I analysed in detail the most famous articles of Coase and, first of all, "The Nature of the Firm" and "The Problem of Social Costs". In these works, Coase showed that in the absence of transaction costs there is no economic novelty for the existence of a firm, in the second — that in the lack of transaction costs the legal system does not matter. With an exact specification of property rights, the market economy itself is able to cope with environmental pollution without resorting to government intervention, adjusting taxes and subsidies. The article shows the history of lighthouses in economic theory. Usually, the lighthouse is listed as a purely public good. Ronald Coase shows that even a public good — like lighthouses —was paid for by shipowners. The last part is devoted to essays on economics and economists.

Keywords: Institutionalism; neo-institutionalism; transaction costs; externalities; property rights; Coase's theorem JEL Classification: B15, B25, D23, L33

© Rustem Nureev, 2020

1. Comparative Characteristics of "Old" and "New" Institutionalism

Although institutionalism as a notable trend was formed at the beginning of the twentieth century, for a long time, it was on the periphery of economic thought. The explanation of the movement of economic benefits only by institutional factors did not find a large number of supporters. It was partly due to the vagueness of the very concept of "institution", by which some researchers understood mainly customs, others — trade unions, still others the state, fourth corporations etc., etc. Partly — with the fact that institutionalists tried in economics to use the methods of other social sciences: law, sociology, political science, etc. As a result, they lost the ability to speak the single language of economics, which was considered the language of graphs and formulas. There were, of course, other objective

reasons why this trend was not in demand by contemporaries.

The situation, however, changed radically in the 60s and 70s. To understand why it suffices to make at least a cursory comparison of the "old" and "new" institutionalism. There are at least three fundamental differences between the "old" institutionalists (such as T. Veblen, J. Commons, J. K. Galbraith) and neo-institutionalists (such as R. Coase, D. North, or J. Buchanan).

Firstly, the "old" institutionalists (for example, J. Commons in *The Legal Foundations of Capitalism*) moved to economics from law and politics, trying to study the problems of modern economic theory by methods of other sciences about society. However, neo-institutionalists follow the exact opposite path — they study political and legal issues using the methods of neoclassical economic theory, and above all, using the apparatus of modern microeconomics and game theory.

Table 1 Fundamental differences between "old" institutionalism and neo-institutionalism

SIGNS	OLD INSTITUTIONALISM	NEOINSTITUTIONALISM	
Movement	From law and politics to the economy	From economics to politics and law	
Methodology	Other humanities (law, political science, sociology, etc.)	Economic neoclassical (methods of microeconomics and game theory)	
Method	Inductive	Deductive	
Focus of attention	Collective action	Independent individual	
Analysis prerequisite	Holism	Methodological individualism	

Secondly, traditional institutionalism was based mainly on the inductive method, aspired to go from particular cases to generalisations, as a result of which a general institutional theory never took shape. Neo-institutionalism follows a deductive path — from the general principles of neoclassical economic theory to the explanation of specific phenomena of social life.

Thirdly, the "old" institutionalism, as a trend of radical economic thought, focused primarily on the actions of collectives (mainly trade unions and the government) to protect the interests of the individual. Neo-institutionalism puts an independent individual at the forefront, who, of his own free will and following his interests, decides which collectives are more profitable for him to be a member of (see Table 1).

In recent decades, there has been an increase in interest in institutional research. It is partly due to an attempt to overcome the limitations of several prerequisites characteristic existing in economics (axioms of complete rationality, absolute awareness, perfect competition, the establishment of equilibrium only through the price mechanism, etc.) and, also, to consider modern economic, social, and political processes more comprehensively and comprehensively; partly — with an attempt to analyse the phenomena that arose in the era of scientific and technological revolution, the application of traditional research methods to which does not yet give the desired result. Therefore, let us first show how the development of the premises of the neoclassical theory took place within it.

2. Neoclassicism and Neo-institutionalism: Unity and Differences

Familiar to all neo-institutionalists is the following: first, that social institution's matter,

and second, that they can be analysed using standard microeconomic tools. In the 60s 70s. a phenomenon called by G. Becker "economic imperialism" began. It was during this period that economic concepts: maximisation, equilibrium, efficiency, etc., began to be actively used in such areas related to the economy as education, family relations, health care, crime, politics, etc. It led to the fact that the fundamental economic categories of neoclassicism received more in-depth interpretation and broader application.

Each theory consists of a core and a protective layer. Neo-institutionalism is no exception. It, like neoclassicism as a whole, considers the following to be among the primary prerequisites:

- methodological individualism
- the concept of an economic person
- activity as an exchange.

However, in contrast to neoclassicism, these principles have become more consistent.

Methodological individualism. With limited resources, each of us is faced with the choice of one of the available alternatives. The methods of analysing the market behaviour of an individual are universal. They can be successfully applied to any of the areas where a person must make a choice.

The basic premise of the neo-institutional theory is that people act in any sphere in pursuit of their own personal interests and that there is no insurmountable line between business and the social sphere or politics.

Economic man concept. The second premise of neo-institutional choice theory is the concept of the "economic man" (*homo oeconomicus*). A person in a market economy identifies his preferences with a product. He seeks to make decisions that maximise the value of the utility function. His behaviour is rational.

The rationality of the individual has a universal meaning in this theory. It means that all people are guided in their activities primarily by the economic principle, that is, they compare marginal benefits and marginal costs (and, above all, benefits and costs associated with decision-making):

MB ≥ MC

Where

MB is a marginal benefit

MC is a marginal cost.

However, in contrast to neoclassicism, where mainly physical (scarcity of resources) and technological limitations (lack of knowledge, practical skills, etc.) are considered, in neo-institutional theory, transaction costs are also considered, i.e. costs associated with the exchange of property rights. It happened because any activity is viewed as an exchange.

Activity as an exchange. Proponents of the neo-institutional theory view any area by analogy with the commodity market. For example, the state, is an arena of competition between people for influence on decision-making, for access to the distribution of resources, for places in the hierarchical ladder. However, the state is a market of a special kind. Its members have unusual property rights: voters can elect representatives to the highest bodies of the state, deputies — to pass laws, officials — to monitor their implementation. Voters and politicians are treated as individuals exchanging votes and campaign promises.

It is important to emphasise that neo-institutionalists are more realistic about the features of this exchange, given that people have limited rationality, and decision-making is associated with risk and uncertainty. Plus, you do not always have to make the best decisions. Therefore, institutionalists compare the costs of decision-making not with a situation that is considered as etalon in microeconomics (perfect competition), but with those real alternatives that exist in practice. This approach can be complemented by an analysis of collective action, which involves the consideration of phenomena and processes from the point of view of the interaction of not one individual, but a whole group of people. People can be

Generalizing work is work Stevens J. [1993].

grouped according to social, property, religious, or party affiliation.²

At the same time, institutionalists can even deviate somewhat from the principle of methodological individualism, suggesting that the group can be considered as the final indivisible object of analysis, with its own utility function, limitations, etc. However, the approach to considering a group as a combination of several individuals with their own utility functions and interests seems to be more rational.³

Some institutionalists (R. Coase, O. Williamson, and others) characterise the above differences as a genuine revolution in economic theory. Without underestimating their contribution to the development of economic theory, other economists (R. Posner and others), however, consider their work to be a further development of the mainstream of economic thought. Indeed, now it is more and more difficult to imagine the mainstream without their work. They are more and more fully included in modern textbooks on Economics. However, not all directions are created equal. To be convinced of this, let's take a closer look at the structure of the modern institutional theory.

3. Ronald Harry Coase: Biography Pages

Ronald Harry Coase (1910–2013) became the pioneer of neo-institutional theory. After graduating from the London School of Economics (Bachelor of Commerce) in 1932, he worked until 1935 at the School of Economics and Commerce in Dundee, where he met Duncan Black, a scientist. The latter anticipated the creation of the foundations of public choice theory.

His first successes are associated with his work at the London School of Economics (1935–1951). It was during this period that his famous article *The Nature of the Firm* (1937) was published, which showed the role of transaction costs.

The firm is seen as a network of contracts, a way to reduce transactions. The variety of contracts determines the variety of firms. Their size increases with the improvement of control technology.

After moving to the United States in 1951, he works as a professor at the Universities of Buf-

² Common features and differences between the main approaches are analysed in detail by Reisman D. [1990].

³ For details, see Olson (1995), Olson (1998), Olson (2000).

falo (1951–1958), Virginia (1958–1964), Chicago (since 1964).

In 1960, his excellent article *The Problem of Social Costs* was published. Later, in his monograph The Firm, Market, and Law, Coase emphasised the unity and difference between the 1937 article on the nature of the firm and the problem of social costs: "In *The Nature of the Firm*, I showed that in the absence of transaction costs, there is no economic basis for the existence of a firm. [...] In *The Problem of Social Cost*, I showed that in the absence of transaction costs, the legal system does not matter."

In the 1950s, he publishes several articles on the analysis of natural monopolies: in 1950 he published his article British Broadcasting: A Study of Monopoly, in 1955 — Postal Monopoly in Great Britain: A Historical Review, in 1959 — Federal *Communications Commission*, in 1961 — *British* Postal Service and Courier Companies. Coase focused on the idea that state monopolies impose their own standards on society and infringe on press freedom. It has been particularly evident in British broadcasting, where the frequency band is not affected by the price mechanism. Central to Coase was the problem of externalities and the creation of an effective system of property rights. However, criticism of state monopolies did not pass without leaving a trace: under the influence of this criticism, criticism of the cumbersome mechanism for regulating natural monopolies begins. This cycle ends with the work *Lighthouse* in Economic Theory published in 1974.

1985 Coase was elected a Corresponding Member of the British Academy. And in 1991, he was awarded the Nobel Prize in Economics "for the discovery and clarification of transaction costs and property rights for the institutional structure and functioning of the economy."

From 2000 until the end of his life, he was the scientific director of the Institute that bears his name.

4. Legal Prerequisites for a Market Economy

Property Rights and Their Structure

In modern economic theory, property rights are understood as sanctioned behavioural norms. Property rights are a set of power rights, sanctioned behavioural relationships that develop

between people regarding their use of economic benefits. The current set of rights has evolved historically over a long time. In Roman law, the leading role was played by the rights of ownership, use, management and transfer of things by inheritance (or will).

With the rise of capitalism, it has been supplemented with such essential characteristics as, on the one hand, the right to the basis or "capital value" of a thing. On the other hand, the right to income arising from the use or management of the property. The nationalisations that took place in several countries during the XX century sharply raised the question of the time limits for the use of things (unlimited or with a limited period) and especially the right to security (guaranteeing against expropriation under one or another plausible pretext). Protection from the negative consequences of using a thing (negative external effects arising from the use of a thing) has become especially relevant with the aggravation of environmental problems. It made it necessary to prohibit the harmful use of things. These and other powers (for example, liability in the form of collecting a thing in payment of a debt, the so-called residual nature of unrecorded powers) now constitute a complete definition of ownership [Honoré, 1961, 112–128; Kapelyushnikov, 1994, 12–18]. In reality, their most diverse combinations are possible.

The Anglo-Saxon legal tradition (in contrast to the legal systems of continental Europe) considers property rights as a certain set of partial powers, which can be strengthened by adding to it (specification) more and more new rights or weakened by separating some powers from it — dilution (attenuation) property rights. The process of specification/dilution of property rights is associated with transaction costs.

Forms of Transaction Costs

Transaction costs are exchange costs associated with the transfer of ownership. The category of transaction costs was introduced into economics in the 30s. Ronald Coase and is now widespread. There are usually five main forms of transaction costs:

- 1) costs of information retrieval
- 2) costs of negotiating and concluding contracts
 - 3) measurement costs

- 4) costs of specification and protection of property rights
 - 5) the costs of opportunistic behaviour.

Information search costs are associated with its asymmetric distribution in the market: it takes time and money to find potential buyers or sellers. The incompleteness of the available information turns into additional costs associated with the purchase of goods at prices above equilibrium (or selling below equilibrium), with losses arising from the purchase of substitute goods.

Negotiating and contracting costs are also time and resource-intensive. The costs associated with negotiations on the terms of sale, legal execution of the transaction, often significantly increase the price of the item being sold.

A significant part of transaction costs is made up of measurement costs, which is associated not only with the direct costs of the measuring equipment and the measurement process itself but also with errors that inevitably arise in this process. Besides, for several goods and services, only an indirect or ambiguous measurement is allowed. How, for example, can you assess the qualifications of a hired employee or the quality of a purchased car? Particular savings are determined by the standardisation of products, as well as guarantees provided by the company (free warranty repair, the right to exchange defective products for good ones, etc.). However, these measures cannot completely eliminate the costs of measurement.

Exceptionally high are the costs of specification and protection of property rights. In a society where there is no reliable legal protection, there are frequent cases of constant violation of rights. The time and expense involved in rebuilding them can be extremely high. It should also include the cost of maintaining the judicial and state bodies that are on guard of law and order.

The costs of opportunistic behaviour are also associated with, though not limited to, information asymmetry. The point is that post-contract behaviour is very difficult to predict. Dishonest individuals will comply with the terms of the contract to a minimum or even evade their implementation (if no sanctions are provided). This moral hazard always exists. It is especially significant in the conditions of joint work — working as a team when the contribution of each cannot be strictly separated from the efforts of other team

members, especially if the potential of each is entirely unknown. So, opportunistic is the behaviour of an individual who evades the terms of the contract to make a profit at the expense of partners. It can take the form of extortion or blackmail when it becomes apparent the role of those team members who cannot be replaced by others. Taking advantage of their relative advantages, such team members can demand special work conditions or pay for themselves, blackmailing others with the threat of leaving the team.

Private, shared (communal), and state property

Thus, transaction costs arise before the exchange process (ex-ante), during the exchange process and after it (ex-post). The deepening division of labour and the development of specialisation contribute to the growth of transaction costs. Their value also depends on the dominant form of ownership in society. There are three main forms of ownership: private, general (communal) and state. Let's consider them from the point of view of the theory of transaction costs. In the conditions of private property, the individual has all the full rights. In situations of state ownership, decisions are made based on established rules and procedures that govern the interests of society as a whole.

In terms of common (communal) ownership, all members of the organisation (commune), owning such property, have a common right to use the good (before it is appropriated) and a private right to use it after it has been obtained (appropriated) for temporary or permanent ownership.

Since under state ownership an individual member of society does not own property directly (as in private property), but indirectly (through the system of rules and procedures established in society), then control over this property becomes more complicated. As a rule, it cannot be sold or transferred to another person. It is difficult to control those who directly manage it (i.e., the bureaucracy). The complexity of the decision-making procedure also weakens the functions of control and operational management of it. Therefore, in practice, there is no direct connection between the desires and aspirations

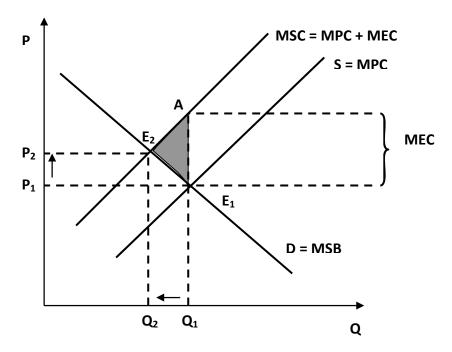


Figure 1. Negative externality

of co-owners of state property and the results of its actual use. Also, the wishes and aspirations of individual co-owners rarely coincide, and the reconciliation of interests turns into a big problem, the solution of which depends on the balance of political forces.

Common (communal) property arises when and where and when the costs of specifying and protecting private property rights are incredibly high. The benefits from the establishment of private property rights are either zero (if the good is abundant), or less than the costs associated with their establishment.

The main problem of common property is its overuse: each individual seeks to get ahead of the other in consuming what he gets for free. He is not interested in the fact that as a result of predatory exploitation, the consumption possibilities of other owners may be reduced. But, since everyone does this, the good that is in common ownership is quickly depleted. Therefore, common (communal) property turns out to be unstable, unstable and, over time, turns into either private or "state property."

5. External Effects. Coase's Theorem

External Effects

Externalities and externalities are costs or benefits from market transactions that are not reflected in prices. They are called "external", as

they relate not only to the economic agents participating in this operation but also to third parties. They arise as a result of both production and consumption of goods and services.

Externalities are divided into negative and positive. Negative effects are associated with costs, positive ones with benefits for third parties. Thus, externalities show the difference between social costs (benefits) and private costs (benefits).

$$MSC = MFC + MEC, \tag{1}$$

where

MSC— the marginal social cost

MFC— the marginal private cost

MEC— the marginal external cost.

A negative externality occurs when the activity of one economic agent causes the costs of others. Let's show this with an example. The pulp and paper mill discharges insufficiently well-treated water into the river. Let's assume that the wastewater discharge is proportional to the production volume. It means that as production grows, so does the volume of environmental pollution. Since the pulp and paper mill does not thoroughly purify the water, its marginal private costs are lower than the marginal social costs, since it does not include the costs of creating an additional treatment system. It leads to the fact that the number of products produced

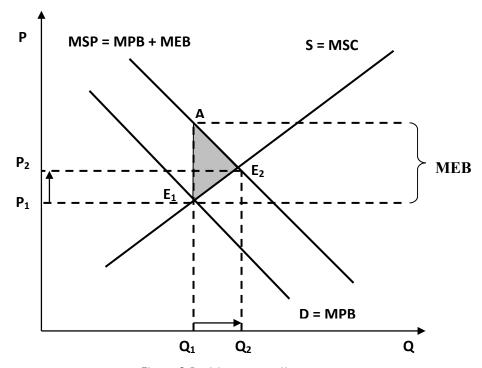


Figure 2. Positive externality

exceeds the effective volume of production (Fig. 1). Without treatment facilities, the number of products produced is Q1 tons of paper at a price of P1. Market equilibrium is established at point E 1, at which the supply equal to the marginal private cost of the MPC intersects with the demand curve equal to the marginal public benefit MSB, that is, MPC = MSB.

Meanwhile, marginal social costs are equal to the sum of marginal private costs plus marginal external costs. Therefore, if it were possible to turn external costs into internal ones, the effective volume of output would be reduced to Q_2 when the price rises to P_2 . At the point, E_2 marginal social benefits would equal marginal social costs MSB = MSC.

Let us pay attention to the fact that at point E 2 the consequences of environmental pollution are not entirely eliminated (after all, in our case, the release of wastewater is proportional to the volume of production, and the volume of production of a pulp and paper mill at point Q_2 is by no means zero). However, the damage from pollution is significantly reduced. Area of a triangle AE_1E_2 shows the loss of efficiency associated with the fact that the marginal private costs were lower than the marginal social costs. Thus, in the presence of a negative external effect, the economic good is sold and bought in a larger amount than the effective volume,

i.e., there is an overproduction of goods and services with negative external effects.

A positive externality occurs when the activity of one economic agent benefits others.

$$MSB = MPB + MEB,$$
 (2)

where

MSB— the marginal social benefit

MPB— the marginal private benefit

MEB— the marginal external benefit.

The development of education provides an excellent example of achieving positive externalities. In society, each of its members benefits from the fact that fellow citizens receive a good education. However, each of us hardly thinks about the benefits that society as a whole gets when we decide to receive an education. In making a decision, the rational consumer balances the costs of getting a good education and the benefits that can be obtained as a result. It is not surprising that investment in human capital may be lower than optimal for society (Fig. 2). Market equilibrium E is established at the point of intersection of marginal private benefits and marginal social costs: MRV = MSC.

Meanwhile, marginal social benefits are greater than marginal private benefits by the amount of marginal external benefits. Therefore, an effective equilibrium for society would be achieved at the point of intersection of the marginal social benefits and costs, that is, at the point E_2 Efficiency increases in the area of the triangle AE_1E_2 . Thus, in the presence of a positive external effect, the economic good is sold and bought in less than the effective volume, i.e., there is an underproduction of goods and services with positive external effects.

Adjustment Taxes and Subsidies

If we wish to reduce the overproduction of goods and services with negative external effects and make up for the underproduction of goods and services with positive external effects, it is necessary to transform external effects into internal ones. The transformation of external effects into internal (internalisation of an externality) can be achieved by approaching the marginal private costs (and, accordingly, benefits) to the marginal social costs (benefits). A. S. Pigou proposed to use corrective taxes and subsidies as a solution to this problem.

A corrective tax is a tax on the output of economic goods with negative externalities that raises marginal private costs to the level of marginal social costs. In our example with a pulp and paper mill, a tax (tax-T) equal to the marginal external cost T = MEC could bring the market equilibrium closer to effective:

MSB = MSC.

A corrective subsidy is a subsidy to producers or consumers of economic goods with positive externalities that bring marginal private benefits closer to marginal public ones.

In the case of teaching, an adjustment subsidy equal to the marginal external benefit (S = MEB) could be provided to students. It would increase their demand for educational services to a level where MSB = MSC.

Adjustment taxes and subsidies cannot completely solve the problems posed by externalities. First, in actual practice, it is difficult to quantify marginal costs and benefits accurately. Secondly, the extent of damage is determined in the course of legal and political discussions very roughly. Finally, the fact that the adjustment taxes paid by the producers of goods with negative externalities play an important role, by no means always achieve the set goal. All this predetermined criticism of corrective taxes and subsidies and attempts to find fundamentally new ways to solve

the problem. They are primarily associated with the works of R. Coase.

Coase's Theorem

R. Coase proceeds from the fact that the problem under consideration is double-edged, or, as he says, "mutually binding" in nature. "By avoiding damage to B, we incur damage to A. The real question that needs to be decided is whether A should be allowed to harm B or should B be allowed to cause damage to A? The problem is to avoid more serious damage.".4

The answer is by no means evident until it has been possible to determine the value of what we have acquired as a result and the value of what we had to sacrifice for this. Thus, the solution proposed by A.S. Pigou does not use the concept of opportunity costs and treats factors like material, and not legal, phenomena.

Analysis of the problem of social costs led Coase to a conclusion that J. Stigler [1966, p. 113] called the "Coase theorem". Its essence is that if the property rights of all parties are carefully defined, and the transaction costs are zero, the final result (maximising the value of production) does not depend on changes in the distribution of property rights (aside from the income effect). J. Stigler expressed the same idea as follows "... In conditions of perfect competition, private and social costs are equal."

Comparison of the pricing system, including liability for damage because of negative externalities, with the pricing system, when there is no such liability, led R. Coase to a seemingly paradoxical conclusion that if the participants can agree on their own. The costs of such negotiations are negligible (transaction costs are equal to zero), then in both cases, in conditions of perfect competition, the maximum possible result is achieved, maximising the value of production.

R. Coase gives the following example. There is an agricultural farm and a cattle ranch nearby: a farmer grows wheat, and a cattle breeder breeds livestock, which from time to time grasses crops on neighbouring lands. There is an external effect. However, as R. Coase shows, this problem can be successfully solved without the participation of the state.

⁴ Coase R. Firm, Market and Law. C. 85–86.

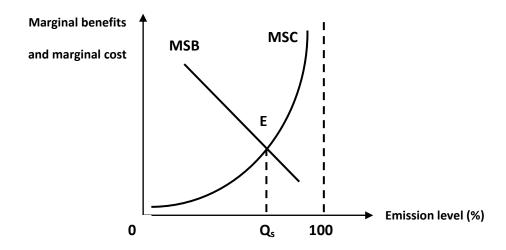


Figure 3. Determination of effective emission level

If the pastoralist is liable for the damage, there are two options. "Either the pastoralist pays the farmer for the uncultivated land, or he decides to rent the land himself, paying the farmer for the uncultivated land a little more than the farmer himself pays (if the farmer leases the farm himself), but the end result will be the same and will mean maximising the value of production." 5

If there is no liability for damage, resource allocation is the same as before. The only difference is that the farmer will now make the payments. However, "the end result (which maximises the value of production) does not depend on the legal position if it is assumed that the price system works without cost." With zero transaction costs, both the farmer and the pastoralist will have economic incentives to increase the value of production, as they each receive their share of the increase in income. However, when transaction costs are taken into account, the desired result may not be achieved. The fact is that the high cost of obtaining the necessary information, negotiating and litigation can exceed the possible benefits of a deal. Besides, when assessing the damage, significant differences in consumer preferences are not excluded (for example, one estimates the same damage much more than the other). A clause regarding the income effect was later introduced into the formulation of Coase's theorem to accommodate these differences.

Experimental studies have shown that Coase's theorem is valid for a limited number of participants in the transaction (two or three). With an increase in the number of participants, transac-

⁵ Coase R. Decree. op. P. 90.

tion costs increase sharply, and the assumption of their zero value ceases to be correct.

It is interesting to note that Coase's theorem proves the value of transaction costs "by contradiction." In reality, they play a huge role, and it is surprising that neoclassical economic theory, until recently, did not notice them at all.

Pollution Control

Coase's theorem helps to develop the right strategy in the fight against environmental pollution.

An effective pollution control policy is one that balances the marginal social benefits of control with the marginal social costs required to enforce it. The intersection of the marginal social benefit curve MSB with the marginal social cost curve MSC allows us to determine the level of harmful emissions that is effective for a given society (Fig. 3). The fact is that as the percentage of polluting emissions decreases, the marginal social costs rise sharply, so each additional percentage reduction costs more and more.

There are three main ways to reduce harmful emissions into the environment: 1) the establishment of norms or standards for harmful emissions; 2) introduction of payment for emissions; 3) sale of temporary emission permits.

Emissions standards are statutory limits for the concentration of hazardous substances in industrial waste.

Such standards are accepted in many countries. In the United States, for example, the Environmental Protection Agency monitors its implementation. Exceeding the standards set by gov-

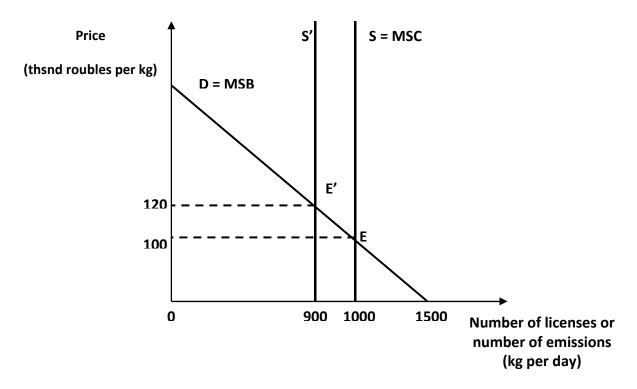


Figure 4. Pollution Rights: The Role of the Green Movement

ernment bodies carries a hefty fine or criminal penalty.

The practice of setting standards has, however, its apparent disadvantages. First of all, they allow, within certain limits, to dump harmful substances free of charge. When establishing uniform norms for the country, the different degrees of severity of environmental problems in different regions, as well as significant differences in the marginal private costs of individual firms, are not taken into account. Therefore, the costs associated with achieving a uniform level of pollution can lead to significant losses for individual firms and society as a whole, since the comparative advantages existing in the private sector are ignored. Finally, and most importantly, the standards do not provide incentives for manufacturers to reduce existing pollution levels.

Emission charges are more flexible. An emission fee is a fee charged to a firm for each unit of polluting emissions. Such a system helps to reduce the total volume of harmful emissions, as evidenced by the experience of its application in Germany. However, with such a system, there is no complete certainty that pollution standards will not be violated.

Recently, new methods of combating environmental pollution have been increasingly used. Among them is such a peculiar form as the sale

of rights to pollute the natural environment. The state determines the volume of harmful emissions allowed in this area and sells it in the form of licenses at auction. Suppose it wants to reduce the volume of harmful emissions from 1500 to 1000 kg, then the state sells not 1500 licenses, but 1000 licenses, each of which gives the right to emit 1 kg (Fig. 4). Since the supply is absolutely inelastic, equilibrium will be established at point E. In this case, the price of one license for the right to discharge 1 kg of pollutant per day will be equal to 100 thousand roubles. Suppose the local community of the environmentalist party ("green") decides to improve the environmental situation in the area. In that case, it can buy part of the licenses to withdraw them from circulation. If this part is 100 licenses, then the price of one license will rise to 120 thousand roubles. Thus, the sale of pollution rights is a flexible means in the struggle to improve the environmental situation in the country.

6. Political and Economic Significance of the Coase's Theorem

In his work *Firm, Market and Law* R. Coase noted that "If the rights to perform certain actions can be bought and sold, they will eventually be acquired by those who value the opportunities of production or entertainment they give them."

Table 2
The ownership structure of large and medium-sized privatised companies in Russia in the 1990s, %

	1994	1996	1998	2000
INSIDERS	60-65	55-60	50-55	30-35
OUTSIDERS	12-25	30-35	35-40	50-55
THE STATE	15-20	9-10	5-10	10-12

Source: Radygin A. Ownership and control of the Russian industry. OECD Roundtable on Corporate Governance, www.oecd.org/daf/corporate-affairs. 2000.

It happened in Russia in the 1990s. Over a short time, there has been a significant change in the ownership structure of large and medium-sized privatised companies (Table 2).

People working at enterprises (insiders) received the lion's share of state property, according to A. Radygin, 60–65 per cent, while those who did not work at these enterprises only 12–25 per cent. The situation changes dramatically by 2000. Insiders already own 30–35 per cent, while the share of outsiders rises to 50–55 per cent (Fig. 5). The very fact of such a significant redistribution suggests that the laws of the market have begun to operate in Russia, that is, the Coase theorem is being fulfilled.

7. Lighthouse in Economic Theory

In 1974, R. Coase published work *The Lighthouse in Economic Theory* in which he criticises the false understanding of the production of public goods. To this end, the author examines the British Lighthouse Service. It traditionally included three organisations — Trinity House, which performed this function for England and Wales; The Northern Lighthouse Commissioner for Scotland and the Irish Lighthouse Commission for Ireland.

According to the existing tradition, the expenses of these authorities are paid from the General Lighthouse Fund, the revenues of which consists of the lighthouse duty paid by shipowners. The receipt of funds is entrusted in the UK to the customs services of ports Payment for these services is carried out as follows: they take into account two factors — the volume of goods transported and the frequency of visits to ports in the UK. Duties are usually set per tonne of net cargo per voyage of any vessel that visits UK seaports. If ships transport goods between ports of the country, the monthly duty is levied only on the first ten voyages of the year, and if they

transport goods from abroad, then payments are limited to the early six trips of the year.

Until the 17th century, there were very few lighthouses on the British Isles. Their absence was partially compensated for by navigation signs, signal lights and buoys. The right to install them from 1566 was entrusted to Trinity House.

The construction of lighthouses began in the 17th century. This construction is carried out by both the state organisation (Trinity House) and private individuals. The latter is obliged to obtain a royal patent for the construction of a lighthouse and the collection of duties from owners of ships. Who can benefit from its existence? The collection of duties compensated for this construction. The presence of different lighthouses led to this. that ships paid for each beacon they passed in proportion to the size of the ship. To unify payments, Trinity House Corporation began to pursue a new policy that not only retained rights but also increased its income. The company filed a patent for the maintenance of the lighthouse. It gave it for a fee for temporary use to private individuals, most of whom often received not a ready-made lighthouse, but only the opportunity to build it with their own money with the subsequent operation. Only in 1836, an Act of Parliament passed all the lighthouses of England to Trinity House.

The evolution of the British lighthouse system clearly shows that the market economy and the system of private property have gradually solved even such a difficult task as the production of public goods. Therefore, the use of lighthouses as a purely public good is based only on an elementary ignorance of economic history.

8. Essays on Economics and Economists In 1994, R. Coase's second theoretical monograph, *Essays on Economic Science and Econo-*

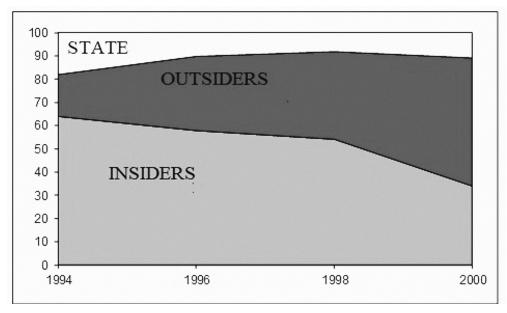


Figure 5. Dynamics of the ownership structure of large and medium-sized privatised companies in Russia in 1994–2000, %

Source: Compiled by Radygin A. (2000). Ownership and control of the Russian industry. OECD Roundtable on Corporate Governance. Available at www.oecd.org/daf/corporate-affairs.

mists, was published. It consists of 2 parts. The first part (chapters 1–7) is devoted to economics, the second part (8–15) — to economists. The monograph begins with R. Coase's Nobel lecture, in which he summarises his research. In the same part, Nobel laureate defines the tasks of economic science in conjunction with related disciplines. The last two chapters of the first part are devoted to the legacy of A. Smith. The author shows that there is no contradiction between *The Wealth of Nations* and *Theory of Moral Sentiments*.

In his youth, R. Coase dreamed of writing a lengthy monograph on A. Marshall. Some of the materials for it were published in the second part of the work. Coase tells in some detail about the

ancestors of A. Marshall, his father and mother. Coase considers the appointment of Pigou to replace Marshall a failure, which noticeably narrowed the scientific program formulated by A. Marshall. In this part, he also writes about his teacher — Arnold Plant, and friends — Duncan Black, whom he met while teaching at Dundee, George Stigler, with whom he worked at the University of Chicago. The last chapter is devoted to the London School of Economics in the 1930s, in which, at that time, worked a magnificent galaxy of economists. Despite the apparent diversity in the book, there is a certain inner unity. In fact, the central plot is classical liberalism in the history of economic science from A. Smith to J. Stigler.

References

Chavance, B. (2009). Institutional Economics. London and New York, Routledge.

Coase, R. G. (2007). Firm, Market and Law. Collected works. Transl. from English. Kapelyushnikov, R., (Ed.). Moscow: Novoye izdatelstvoDelo. (in Russian)

Coase, R. G. (2001). The nature of the firm; "The nature of the firm": origins; "The nature of the firm": interpretation; "The nature of the firm": influence; Nobel lecture "Institutional structure of production". In collection: The Nature of the Firm: To the 50th Anniversary of the Publication of R. Coase's Work "The Nature of the Firm". Transl. from English. V. G. Grebennikov, (Ed.). Moscow: Delo.

Eggertsson, T. (2001). Economic Behaviour and Institutions. Transl. from English. Moscow: BUSINESS. (in Russian).

Honoré, A. M. (1961). Ownership. Oxford essays in Jurisprudence. Guest A. W., (Ed.). Oxford.

Kapelyushnikov, R. (1994). What is a property right? How is it done? Financial, social and information technology. Research and development. Issue 3. Moscow. (in Russian).

Kapelyushnikov, R. (1990). The economic theory of property rights. Moscow: Nauka. (in Russian)

Menard, K. (1996). Economics of organisations. Moscow: Infra-M. (in Russian).

Nureev, R. M. (2009). Russia: features of institutional development. Moscow: Norma. (in Russian).

Nureev, R. M. (2010). Essays on the history of institutionalism. 2 ed. Moscow: Norma. (in Russian).

Olson, M. (2000). Power and Prosperity. Outgrowing Communistic and Capitalist Dictatorship. New York: Basic Books.

Olson, M. (1998). Rise and Decline of Nations. Economic growth, stagflation, social sclerosis. Novosibirsk. (in Russian).

Olson, M. (1995). The Logic of Collective Actions. Public goods and group theory. — M .: Fund for Economic Initiative IPPE,; (in Russian).

Radygin, A. (2000). Ownership and control of the Russian industry. OECD Roundtable on Corporate Governance. Available at https://www.oecd.org/daf/ca/corporategovernanceprinciples/1921367.pdf.

Reisman, D. (1990). Theories of Collective Action. Dowel. Olson and Hirsch. New York: St Martin's Press, Palgrave Macmillan UK. Doi: 10.1057/9780230389977

Stevens, J. (1993). The Economics of Collective Choice. Boulder, San Francisco. Westview Press.

Stigler, G. (1966). The Theory of Price. New York: Macmillian Co.

Shastitko, A. (1998). Neoinstitutional economic theory. Moscow: Faculty of Economics, Lomonosov Moscow State University, TEIS. (in Russian).

Williams, O. (1996). Economic institutions of capitalism: Firms, markets, "relational contracting". SPb. (in Russian).

У истоков неоинституционализма: Рональд Коуз

Рустем Махмутович Нуреев

Доктор экономических наук, Финансовый университет, научный руководитель Департамента экономической теории, почетный профессор, Главный научный сотрудник Института ээкономики, Российская академия наук, Москва, Россия, nureev50@gmail.com © Р.М. Нуреев, 2020

Аннотация. Статья посвящена анализу взглядов нобелевского лауреата по экономике Рональда Коуза (1910–2013) как основоположника неоинституционализма. В ней дается сравнительная характеристика «старого» и «нового» институционализма, показывается взаимосвязь и различие неоклассики и неоинституционализма. Подробно разбираются наиболее известные статьи Коуза и прежде всего «Природа фирмы» и «Проблема социальных издержек». В первой работе Коуз показал, что при отсутствии трансакционных издержек нет экономической основы для существования фирмы; во второй — что при отсутствии трансакционных издержек не имеет значения правовая система. В условиях четкой спецификации прав собственности рыночная экономика сама способна справиться с загрязнением окружающей среды, не прибегая к вмешательству государства, корректирующим налогам и субсидиям. В статье показана история маяков в экономической теории. Обычно маяк фигурирует как чисто общественное благо. Рональд Коуз показывает, что даже такое общественное благо, как работа налога, оплачивалось владельцами судов. Последняя часть посвящена очеркам Коуза по вопросам экономической науки и оценке экономистов.

Ключевые слова: институционализм; неоинституционализм; трансакционные издержки; экстерналии; права собственности; теорема Коуза