

The problem of deteriorating (unfavorable) selection as a new barrier to the sustainable development economics

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Abstract. This article is devoted to the problem of a consistent reduction in the quality of goods under the conditions of the “development of capitalism” raised in the work of I. V. Rozmainsky. Also, it analyzes its impact on the sustainable development of various markets in the modern economy. The article discusses the causes of a negative impact of consumers’ information constraints on the sustainable development of the economy, describes how the growth of uncertainty contributes to the transformation of degrading selection into a certain general pattern of markets, becoming a serious barrier to the economy of sustainable development. The authors concluded that the growing influence of the institutional environment on the efficiency of modern markets and proposed the creation of international institutional mechanisms for quality assurance of bona fide suppliers and manufacturers.

Keywords: adverse selection, sustainable development, deteriorating selection, economy

1. Introduction

In 1987, the term sustainable development was first published in the report “Our Common Future” at the conclusion of the work of the United Nations International Commission on Environment and Development, which made the concept of sustainable development available to the general public. In this report, sustainable development is defined as “development that helps meet the needs of the current generation without reducing the ability of future generations to meet their needs” [1].

In his work in 2011 [2], I. V. Rozmainsky raised an important problem that poses a challenge to the economy of sustainable development in the context of the above definition. This is the problem of consistently reducing the quality of goods and services in the context of the “development of capitalism.” His hypothesis was that the development of a modern market economy is accompanied by a deterioration in the properties of a product. I. V. Rozmainsky finds the empirical data necessary to confirm his hypothesis not only in Russia, but also in the developed foreign countries.

In her work in 2014, M. Yu. Malkina also supported this hypothesis [3]. In particular, the author points out that “a decline in the quality of goods and services can be explained as a universal (i.e. extending to many markets) manifestation of the so-called “adverse selection,” considered in neoinstitutionalism as a type of pre-contractual opportunism.”

In this article, we are trying to empirically confirm this hypothesis, showing an increase in the number of markets covered by the problem of worsening selection and explaining in detail the reasons that form the global trend of consistently lowering the quality of goods (on the basis of published scientific studies).

2. Materials and Methods

Most of the transactions present in the real economy are characterized by the asymmetry of information between participants. Rothschild and Stiglitz [4], as well as Spence [5], showed that fundamental difficulties can arise when we try to spread the traditional notions of market equilibrium to economies in which suppliers have personal information inaccessible to their trading partners. As a result of this, manifestations of opportunism arise, i.e. the desire of agents to resort to deception or concealment of information in order to increase their own benefit.

The theory of contracts deals with the analysis of the problem of deteriorating (unfavorable) selection, and in particular, such a section of it as the theory of agency relations, which studies the problems of opportunism of economic agents that do not allow for the conclusion of effective agreements. Opportunism that arises before and during the conclusion of a contract is usually designated as pre-contractual. It is expressed in the concealment by the agent of information about his type, which may be, for example, the quality of the goods he sells. Further, the hidden information raises the problem of adverse selection (crowding out the best agents from the market by the worst agents). In 1970, D. Akerlof first noted the difficulties arising at the pre-contracting stage and related to the asymmetry of information [6]. He described the problem of adverse selection in the market for used cars in the US, which can completely destroy the market.

In terms of asymmetric information, as a rule, the suppliers of high-quality products suffer losses, because potential buyers are not able to distinguish the quality of products before their purchase and consumption. As a result, high-quality products are “washed out” from the market and replaced by low-quality products, i.e. the adverse selection occurs. As a result, this may provoke the complete disappearance of products from the market due to the fact that a unifying equilibrium may arise, i.e. the conditions under which agents of different types receive equal remuneration. That is, the principal overpays the bad agent and underpays the good one. The consequence of this is a general tendency to oust the “good” agents on the markets by “bad” agents: if the “good” agents leave, their share decreases, which in turn causes a reduction in the price of the products. The price reduction, in turn, again stimulates the fact that the “good” agents leave, up to the extent that only the “bad” agents would remain on the market.

The inherent conditions of a deteriorating selection are the initial heterogeneity of goods in quality, as well as pre-contractual information asymmetry, i.e. the presence of private hidden information in the form of unobservable characteristics of a good known only to one of the parties. At the same time, the main reasons for deteriorating selection are limiting the number of observable characteristics of the offered goods (services) due to the impossibility or inexpediency (high cost) of obtaining complete information, or shifting the costs of measuring the qualities of the good to a third party [7].

3. Results

In recent years, the list of markets with considered cases of degrading selection has begun to expand rapidly. In addition to the traditionally studied in the scientific literature in the context of the problem of degrading selection, the markets for used cars (“lemons”), insurance services, labor markets and credit, many other studies have appeared. These studies indicate the existence of similar problems in other markets: an online trading market [8], an online auction market [9], a banking services market [10], a book market [11], a computer technology market [12], a collateral market [13], a housing and real estate market [14], a construction market [15], a market for securities and IPO [16], a service market [17], an exchange trading market [18], NPF [19], a wood market [20], a tourist services market [21], an agricultural products markets [22], an educational services market [23], a durable goods markets [24], markets for trust goods [25], government procurement markets [26], etc.

Thus, one may conclude that the problem of deteriorating selection has become characteristic of almost all world markets in recent years. And this explains the reasons shaping the global trend of consistently lowering the quality of goods as a new barrier to the economy of sustainable development.

4. Discussion

The problem of adverse selection in contract theory is addressed through the problem of principal-agent relations: if there are several types of agents that differ in their quality, and the principal cannot ex ante determine the type of a specific agent, then “good” agents can be replaced by “bad” ones. As a result of an unfavorable selection, the principal, limited in the information on the types of agents, and a conscientious agent who knows that he has a high type (for example, good quality of the goods) but cannot report his type to the principal, have losses. As a result, addressing the problem of adverse selection can increase the welfare of both the principal and good agents. In the world scientific literature, the following strategies for dealing with the problem of degrading selection stand out:

- Signaling, first seen in Spence’s work [5] (a high type agent gives the principal a special “signal” allowing the principal to identify the type of agent. For example, reputation, guarantees, a diploma of higher education, advertising, etc. may be signals);
- Screening, first considered in the work of Rothschild and Stiglitz [4] (the principal creates a special contract design that allows for “screening” agents);
- Self-selection, which, according to Spence, belongs to the category of strategies of the previous group (the principal creates such a contract design in which agents “filter” themselves) [8];
- Rationing (additional requirements are imposed on the agent, not directly related to the principal’s profit: state secrets, travel restrictions, shift schedules, etc.). For example, Guasch and Weiss [9] highlight the strategy in which participants are required to pay for their testing for compliance with the requirements of the principal. According to the authors, such a strategy leads to self-screening of those participants who are not sure of passing the exam;
- Standardization, regulation, and legal restrictions. In particular, Akerlof [6] points out that numerous institutions are emerging to counteract the effects of quality uncertainty – warranties, brands, and trademarks, standardized technological processes, licenses, certification.

Milgrom and Roberts, in their work, point out that many economists analyzed the work of private institutes of product quality assurance and showed that private institutions were often more effective than legal ones [29]. For example, Kreps [30] points out, as a way to prevent the problem of degrading selection, the creation of a corporate culture as a set of principles and procedures that fix common expectations for participants in a relationship. Thus, Holmström and Tirol complement that “a corporate culture acts as a language to explain how ‘everything is done and how it should be done’” [31]. Such networks as KFC, Burger King, McDonalds are a prime example. Their products are as standardized as possible: the same ingredients are used regardless of their location. As a result, a client is confident in a certain quality of products and services.

With this in mind, the current conditions conducive to adverse selection are the reduction of government regulatory burden: vagueness of standards, lack of differentiation and insecurity of consumer rights. Therefore, one of the ways to solve the problem of degrading selection is the self-regulation of markets through standardization and voluntary certification, guarantees of consumer rights, independent assessment.

Currently, in foreign countries, many institutions exist that mitigate the problems of trust. For example, for the USA, Klein lists such organizations in his work [32]: Consumer Union, Underwriters Laboratories, Better Business Bureau, and Consumer Health Services. These organizations transmit quality information to consumers to reduce the consequences of the adverse selection problems. For example, the Better Business Bureau informs the public about complaints to local merchants and artisans. Consumer agencies report survey results on various issues, such as customer satisfaction. Similarly, a number of credit bureaus provide information on past loans and whether they have been properly repaid. All these organizations contribute to strengthening the reputation system by providing the necessary information to people who need it [29].

In Russia, such services are also actively developing. For example, various sites that focus consumer reviews on the quality of hotel, travel or banking services, the quality of certain types of goods. As a vivid example of bilateral cooperation, we can point out the portal <banki.ru>, where the Russian banks actively

resolve any consumer complaints. Thus, banks eliminate the problem of deteriorating consumer selection of initially more profitable offers from small regional banks. Subsequently, these proposals are accompanied by poor customer services and high risks for customers to receive losses as a result of such services.

Large retail chains are also actively introducing service standards in Russia. At the same time, we note the lack and underdevelopment in Russia of inter-territorial branding of products (for example, the “Altai Products” regional brand). Taking into account the environmental specifics of Altai, this brand has prerequisites for its cross-border development in order to overcome the problem of adverse selection at the international level, including through the formation of universal marks of product quality in the territory of the Big Altai.

5. Conclusion

The existence of private information may hinder the effective functioning of ordinary markets in cases where the costs of providing services depend on those characteristics of a buyer that are known only to him, or the profitability of the purchase depends on similar characteristics. In many cases, losses from adverse selection, losses associated with the asymmetry of information can be borne by a party that has more information. This happens if it cannot convey information about its characteristics to the less informed side, to the principal. In other words, bona fide agents or those agents that possess better than average market characteristics can also suffer losses from adverse selection. In this paper, we tried to show the following. The problem of deteriorating selection has become characteristic of almost all world markets in recent years and forms the global trend of consistently lowering the quality of goods as a new barrier to the economy of sustainable development.

Institutions that provide mechanisms to combat adverse selection can be generated by various parties. And in real markets, special institutions often help to solve the problem of adverse selection, such as associations and unions of suppliers and manufacturers, guaranteeing the quality of the products supplied or services rendered. It should be noted that the regional specificity of the Altai creates favorable prerequisites for the development of cross-border cooperation in order to overcome the problem of adverse selection at the international level, forming universal marks of product quality in the territory of the Big Altai.

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