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# THE INFLUENCE OF PRODUCT QUALITY COMPARATIVE TESTING RESULTS ON THE MARKET

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*The main purpose of this article has been to prove the influence of product quality comparative testing results on the market, to demonstrate the importance of comparative testing of consumer products as a means of consumer information and consultation, to analyse its methodology and impact on market structures as well as on the behaviour of companies and consumers, and to determine possibilities for the practical application of comparative testing in Lithuania. The key objectives have been to analyse the framework of Lithuanian governmental institutions and public organisations responsible for the formulation and implementation of consumer policies, and their capabilities to perform product testing. In addition, peculiarities of the consumer market as well as the need for product information, which are both important factors for product testing, have been overviewed.*

*Utilising comparative product testing methodology and research on how test results could be applied, it can be said that the formation of an independent, well-informed consumer base able to make calculated decisions requires planned and concentrated governmental efforts. Comparative product testing is one of the tools available for consumer education and information. Its significance and effectiveness in creating a consumer society such as this cannot be denied.*

*When creating a comparative product testing system in Lithuania we need to take into account the experience of other Western countries in this field, as well as the potentiality of Lithuanian institutions to prepare and conduct testing of certain products. Research shows that at present in Lithuania it is food products which lend themselves most readily to product testing, while services fare worst. From the technological and economic viewpoints, co-operation among the Baltic States and any prior specialisation in this area would be useful when conducting product quality comparative testing.*

***Key words:*** *tests, comparative testing, quality, market, marketing, commodities, eco-labelling*

## 1. Introduction

The rapid growth of Lithuania's economy has increased the extent of consumerism in this country, the number of retail-chains as well as the supply of end consumer products. Intense competition has forced businesses to look for different ways of surviving in the market. Aside from other management strategies, businesses are investing in product development, their distribution and marketing. A result of all of this is a marked growth in the range of products available and a large amount of varied information about products in the market. The consumer is faced with problems when it comes to deciding

which product will be best to meet his needs. It is often the marketing strategy behind a product which is the main factor influencing consumer choices, that is why businesses take part in these advertising wars. However, are these the best conditions for effective consumer decision-making and advancements in production?

The first state-funded organisations which started providing consumers with unbiased information about products on the market and helped resolve consumer-related issues appeared in Western countries in the middle of the 20th century. They achieved their aims using methods of product research and testing, which helped these organisations present consumers with realistic and objective accounts of the quality of products available on the market. This became quite an important and effective way of informing consumers and significantly influenced not only consumer behaviour, but also business decisions. This has encouraged research in test methodology, test use and publication of test results. The nature of this research is as technical as it is social, which is why the results depend on the particular market being studied.

Only lately attention has been given to consumer education and information, as consumer rights remain a priority. It was only as recently as 2003 that consumer education and information programs began when the Lithuanian National Consumer Education Program was approved. As a member of the European Union, it will be easier for Lithuania to utilise the experience of Western nations. Technical and financial opportunities for creating and implementing large scale projects, such as a system for educating and informing Lithuanian consumers, are starting to open themselves up to Lithuanian organisations.

The European Commission's communiqué "EU Consumer Policy Strategy" pays particular attention to the education and process of informing consumers (Consumer..., 2002). The consumer's need for objective information is constantly being highlighted (Roopa, 1999; Dai, 2002). *The European consumer is seen as an informed individual who is able to select goods and services objectively, and is concerned with their quality of life* (Consumers..., 2000; Lungershausen, 2001).

The Preliminary Program of the European Economic Community for Consumer Protection and Information Policy clearly accentuates the need to support organised comparative testing; it emphasises the need for financing as well as the specifications of such organisations (Preliminary..., 1975). The EU expansion in 2004 meant that countries like Lithuania can now have the same objectives and provisions as older member nations. Lithuania will now be able to pursue consumer policies and stage consumer education and information projects thanks to a considerable financial and technical assistance from the EU.

***Scientific problem.*** Comparative testing of product quality is part of quality management subsystems (Ruzevicius et al., 2004, Ruževičius, 2005; 2005). The theoretical aspects of comparative testing are not presented in scientific publications in Lithuania. When drafting a system for comparative testing in Lithuania it is important to assess the experiences of other countries and to use their current knowledge. Equally relevant is the prediction of possible market variations, the actions of market participants, potential dangers and new directions or opportunities for the business concerned. It is important to evaluate the potentiality of a comparative testing system as a tool of consumer education policy. ***The Subject of the study*** is comparative testing typologies, test results, Lithuanian institutions of consumer policies. The ***main purpose*** of this research is to sum-

marise the typology of the testing of product quality, to prove the influence of test results on the market and to determine the possibilities for the practical application of comparative testing in Lithuania. ***Methodology***. The article is based on scientific, normative and legal literature and a logical analysis of economic activity and generalisations encompassing theoretical propositions and the systemisation of business practices. The authors surveyed Lithuanian governmental institutions and public organisations responsible for the formulation and implementation of consumer policies in the nation, as well as other experts. The results of the research were processed using statistical methods.

The introduction of a system for the comparative testing of products would be beneficial from a political perspective as it would be a means of regulating supply and demand when introducing and defending consumer's rights. This is all the more crucial in an age when consumer competency, resistance to manipulation by product labels, misleading information and other sales practices are being noticed the world over ( Pittle, 2000; Consumers Union, 2000; Ruzevicius, 2004; Ruzevicius, 2005).

## 2. Results

### *2.1. Test types and their development*

The range of products available to consumers these days is undeniably wide, especially as the market is full of businesses offering similar products. When certain aspects of the market are further liberalised, the variety they can offer grows larger still (e.g., the telecommunications or personal liability insurance markets). With such an abundance of products on offer, where product and service quality indicators and costs vary greatly, it becomes difficult to make the right decision when choosing between one or another product or service. Consumers face many difficulties trying to rationally evaluate a product by themselves, and often their final decisions are not the best. In addition, products are often advertised in such a way that even "rational" products such as white goods or mobile phone services are given an emotional twist. This is why consumers need unbiased expert advice when deciding to make a purchase (Gersbach, 2001)

A classical approach to this situation involves what is commonly known as "product tests". These tests, as an integral part of consumer information, help to foster understanding about the products on offer and consequently help the consumer make a rational decision. Consumers usually place great value on reports from neutral institutions when selecting a particular product. The product quality indicators tested by a third party are often very different from those used in advertising, which is why consumers trust these more than they do the information supplied by the manufacturer. A positive test result is the best type of advertising a product can hope for. Manufacturers and traders alike can expect the demand for these products to raise, at the same time the image of unsatisfactorily evaluated products will fall, as will their sales figures. Firstly, when tests are conducted, attention is given not only to the product or service on its own, but also to maintenance and other issues related to production, e.g., whether update packages are offered for software, or the promise of warranties and guaranteed repairs on other products.

*When carrying out tests and publicising results market participants are comprehensively and honestly informed of the product quality indicators under comparison* (Gersbach, 2001).

Designated parties involved in testing:

*Suppliers*: product manufacturers and / or traders, and service providers of the product under scrutiny.

*Test users*: dependent on the product undergoing tests, end users, clients. Individuals whom the tests results are directed towards.

*Test organisers* (usually consumer organisations): responsible for organising and financing the necessary tests.

*Test institutions* (e.g., laboratories, trial stations, etc.): where the technical aspect of testing occurs. Sometimes tests are carried out by the test conductors themselves (not at a technical level, but comparing factors such as cost, guaranteed service); in this case the test conductors themselves determine how the test will proceed.

*Organisations responsible for the publication of test results*: preliminary test results are often publicised by the test conductors themselves. Later they are used by other institutions, commonly in independent specialised periodicals or in advertising (Gersbach, 2001).

Test types:

*Comparative testing of products*. Comparative testing involves the selection and qualitative comparison of certain products that have similar characteristics. When testing these products it is not necessary to examine what may essentially be the same product but from a competing manufacturer. The product can be compared with certain alternatives. The same can be applied to systems testing. In this case the consumer is shown how one or another system, which may be technically different, can be utilised as an alternative. These tests are often the fundamental part of testing, but they may also be carried out as an independent test, for example, the cost efficiency of car, bus and train travel where three essentially qualitatively different systems are compared in terms of cost.

*Single product tests*. These tests check the quality indicators of a particular product, e.g., a car model. Although, even in the cases where the main features are often standardised to a certain degree, a comparative element may still arise, but perhaps not as part of the same test.

*Contingent and pseudo-tests*. When a product is selected at random, the results may be subjective and not comprehensive using random inessential criteria. The results of these pseudo-tests may come from consumer surveys, testing or quite simply an individual's opinion. Other examples are café reviews in city guides or questionnaires. In these cases the assessment is totally subjective and variable, but sometimes these results may be publicised as official tests and thus give rise to conflicting opinions (Gersbach, 2001; Andresen, 2003).

The opportunity to compare the features of products first arose when the market could supply identical or very similar products. From this moment on the consumer was in a position to compare the quality and cost of the products on offer. The determinant factor behind the growth in supply of identical products was increased consumer mobility, that is, they began making selections from a constantly growing circle of traders and products. This was first noted in the 15th century by the Italian trader Giovanni di Antonio da Uzzano. In his referential text "La Practica della mercatura" he writes on the prices of various products and observes items "from metal and metal goods, spices, medicinal products, paints and perfumes to textiles and furs" in different cities, such as Damascus and Alexandria, and in this way presents the reader with the first ever quality and comparative testing. Even so, Giovanni di Antonio da Uzzano conducted this research for his own interest and did not seek to inform other consumers of the intricacies of the market. His cost and quality comparisons were at that time intended only for other merchants, because all goods were transported from where they originated. It was only much later when labour division grew that industriali-

sed countries began to systematically conduct product quality comparisons (Gersbach, 2001).

The publication of the results of product comparative testing in many countries began only when the economy had developed to a certain stage, when product supply had grown and there was an abundance of information on consumer products. The first round of comparative testing was conducted in the United States in 1929 by Consumers' Research, Inc. Following the example set by the Americans, the first tests to be conducted in Europe were after the Second World War: Great Britain and Holland in 1957, Sweden in 1958, Norway and Germany in 1959, and Denmark, Belgium, France and Austria in 1960 (Andresen, 2003). Product testing in other West European countries began in the late 1970s, whereas in some of these and in the majority of Central and East European countries testing does not occur to this day.

In 1960, in the Hague, five national consumer organisations created the International Office of Consumer Unions (IOCU), which did not conduct any tests itself, but was operative in co-ordinating the activities of all the organisations that belonged to it. In 1962, in Brussels, consumers' unions from the countries of the European Community founded the Office of European Consumers' Unions (Bureau Européen des Unions de Consommateurs, BEUC). Unlike the IOCU, from 1964 this organisation, in co-operation with national consumer unions through its subdivision Eurotest-Committee", independently conducted product testing. Test results were publicised in the national organisation's publications of member states under the Euro-Test heading. The fact that these tests are conducted on an international scale is relatively significant, as products are becoming more and more standardised and manufactured for a much wider market, especially with EU expansion and growing EU integration.

The German Stiftung Warentest Fund and its publication of the same title have in its 40 years of existence gained the most experience and produced the most effective product testing in its field. The results of comparative testing publicised by this organisation carry a lot of weight with consumers, more than any commercial advertising agency can offer. Test results, through their effect on consumer behaviour, influence the decisions of both manufacturers and traders and offer an opportunity to change the market in a way that favours society and the environment.

***2.2. Test results' influence on the market.*** Research conducted overseas shows that tests have a significant effect on industry and trade, in this way increasing market transparency and the mobility of demand. The tests also affect supply in the market. Consumer surveys confirmed that tests conducted by Stiftung Warentest are very widespread and are of considerable significance when consumers make product selections. Up to 41 per cent of consumers relied on their test results when purchasing one or another product (Andresen, 2003; Silberer, 1984). According to findings by the journal "Öko-test", in 2001 in Germany a total of about 44.6 million people, or about 70 per cent of the population, showed interest in these tests (Öko-test, 2003). This illustrates the huge prevalence and popularity these tests have reached in the last 25 to 40 years since they first appeared. From the figures in Table 1 we can see that the tests have great implications for market transparency and fluctuation of demand, which is one of the aims of comparative testing.

As one can see in Table 1, the figures for those who use tests are markedly different from those who do not. The research also distinguished between short-term use products (e.g., food, household cleaning products) and long-term use products (e.g., televisions, stereos). Thus, we come

*Table 1. **Influence of test results on market transparency and mobility of demand** (Silberer, 1984)*

| | | Test users | No use of tests |
|---|---|---|---|
| I. | MARKET TRANSPARENCY | | |
| 1. | Knowledge of product alternatives prior to purchasing | 3.6 | 2.9 |
| 2. | Rating (1 to 4: I= no knowledge, 4 = very good knowledge) | | |
| | a) long-term use products (LTP):- quality – differences in quality – cost – difference in cost | 3.0<br>2.6–3.0–2.9 | 2.7<br>2.3–2.9–2.6 |
| | b) short-term use products (STP):- quality – differences in quality<br>- cost – differences in cost | 3.2<br>2,7<br>3.0–2.8 | 3.1<br>2,5<br>2.8–2.4 |
| II. | MOBILITY OF DEMAND | | |
| 1. | Percentage of consumers who are loyal to certain brands LTP – STP | 27% – 59% | 37% – 65% |
| 2. | Percentage of consumers who are impulsive buyers | | |
| 2. | LTP – STP | 18% – 51% | 32% – 54% |

to the conclusion that the greater the number of consumers interested in test results, the greater the degree of market transparency and fluctuation of demand: consumers are not much attached to certain brands, they are aware of the alternatives on offer and tend to select products based on objective quality indicators more often.

The organisations that conduct these tests have a direct influence on the afore-mentioned processes, as the many forms of media available today allow consumers to more effectively and more rapidly access the results of comparative testing as well as other information. The test market in Western Europe is close to reaching the saturation point, as almost all available modes of information distribution have been utilised and new forms, such as the Internet, are being drawn in too. Meanwhile, in Lithuania, where comparative testing is not systematically conducted, and where the test results from Western countries are not easily accessible for ordinary consumers, it is mainly the actions of manufacturers, distributors and marketing teams that form customer opinions and build product loyalty. This results in low market transparency and fluctuation of demand. We come to the conclusion that the more familiar the consumer is with the market and the more mobile the demand is, the less is the value of costly marketing campaigns. In this case, businesses can direct more attention and more funding to improving the quality of their goods and, from a public viewpoint, spend less on clearly unproductive advertising.

This conclusion can be discussed further using consumer behaviour theory (Hoyer, 2001). There are two types of consumer groups, those who are interested in certain products and those who, at a particular moment of time, are not interested in certain products or services. The marketing strategies used by businesses on these two groups differ accordingly. Here, we are more concerned with the interested group, or involved consumers who intend to purchase a certain product. These consumers are most interested in hearing objective arguments when choosing one or another product. It is also hoped that they require independent information, such as that

offered by comparative product testing. However, advertising campaigns orientated towards the involved consumers that do not feature a product's technical indicators often rely on emotive tactics which have a tendency to grow out of proportion. We can note that the money spent on this type of advertising does not offer good returns, that is, the advertising is unproductive and tests are much better at providing objective information. So, a company operating in a market greatly influenced by tests should be more interested in improving its product quality and service than in advertising. The other consumer group which at a particular moment in time is not interested in a certain product is more affected by emotional advertising (Hoyer, 2001). We can presume that these consumers will be less interested in test results. However, they will also indirectly benefit from tests when funding that was otherwise meant for advertising is redirected to improving product quality and service and will raise the general level of quality in the market. All the same, advertising remains effective and necessary when raising the levels of product brand recognition, as well as for products and services whose use does not primarily depend on technical or objective quality indicators but on fashion or an emotional impulse (e.g., art objects, teen fashions, etc.). Research has shown that tests influence not only consumer behaviour, but also affect actions taken by manufacturers and traders and depending on test results they alter their range in stock accordingly. Research results showed that 57 per cent of retailers surveyed were inclined to add positively evaluated goods to their stock lists, and 50 per cent were unlikely to re-order goods that had been negatively evaluated in product testing (Andresen, 2003; Silberer, 1984).

Similar results were found when researching the electrical goods market (Piepenbrock, 1986). The unambiguous influence of tests on the mobility of demand was proven: 49 per cent of retailers and 64 per cent of wholesalers in electrical goods added products that had been positively evaluated in tests to their stock range, and 33 per cent of retailers and a surprising 92 per cent of wholesalers declined negatively evaluated products; 53 and 75 per cent respectively retracted their orders for negatively evaluated products. Research also showed that tests influenced demand in sales (Table 2).

The figures in this table once again illustrate the effect of tests on the mobility of consumer and sales demand due to variations in production and sales turnover. Positive test results led to 46 per cent of retailers increasing their sales figures for these products by almost one fifth over four months, while negative test results led to 27 per cent of retailers reducing their turnover of these products by about 14 per cent. Turnover indicators fell at an even greater rate for wholesalers and larger retailers.

Test results affected manufacturers somewhat differently than traders, because here negative test results influenced turnover more than did positive results. In industry, positively evaluated production growth was noticed in 66 per cent of businesses, and the average period before effects were felt was longer – around half a year. A drop in sales of negatively evaluated products was noticed in 71 per cent of businesses and lasted the longest – 7 months. We come to the conclusion that in manufacture, test results produce a *negative asymmetrical effect* on turnover variation, while in sales, on the contrary, there is a *positive asymmetrical effect*. It is easier to reduce risks from negative evaluations in product testing in sales than in manufacture by returning goods to suppliers, changing stock ranges, etc. Similarly, positive test results can be exploited sooner. However, this is much more difficult to achieve in ma-

*Table 2. **Influence of test results on commodity turnover (Silberer, 1984)***

| | Manufacturers of tested products | Retailers | Retail chains and wholesalers |
|---|---|---|---|
| Percentage of those who noticed an increase in product sales as a result of positive tests | 66% | 46% | 91% |
| – average period of growth in sales (months) | 6 | 4 | 3 |
| – average sales growth coverage | 23% | 18% | 69% |
| Percentage of those who noticed a decrease in product sales as a result of negative tests | 71% | 27% | 82% |
| – average period of decrease in sales (months) | 7 | 3 | 3 |
| – average sales decrease coverage | 35% | 14% | 21% |

nufacturing. Thus, *sales companies are more flexible and can sooner and more effectively than manufacturers utilise test results.*

On the whole, product testing increases the mobility of demand and, depending on product evaluation, can induce a redistribution of demand from one manufacturer or retailer to another. We can expect that tests can significantly increase competition, however, certain limitations to competition growth arise when using tests. This is why the situation in various market segments needs to be examined so that increased mobility of demand does not validate market monopolisation. Unchecked market transparency and mobility of demand may result in market distortion.

An important condition for functional competition, disregarding the mobility of demand and market transparency, is the number of participants in market supply. This figure is also affected by tests, because the organisations that conduct them often test only products available nationally, as they want to cover as much of the market as possible. This means that small and medium-sized businesses miss out as their products are left, in a sense, "unnoticed". Larger businesses are also helped by the fact that their production distribution throughout the whole country is indirectly supported, which means that smaller companies face greater competition. Small and medium-scale manufacturers would only experience losses if they did not submit their products to testing and these products were to be positively evaluated, resulting in a rise in sales (see Table 2). On the other hand, if these products were to be negatively evaluated, companies whose products are not submitted for testing avoid the risk of reduced turnover. While conducting this research it was found that the advantages and disadvantages of not submitting products to be tested even each other out. It was also found that the tests have a different effect

*Table 3. Consumer satisfaction index for services in Lithuania, Germany and the European Union (Vartotojų..., 2003; Consumer's..., 2002)*

| | Lithuania | | Germany | | EU | |
|---|---|---|---|---|---|---|
| | satisfied | unsatisfied | satisfied | unsatisfied | satisfied | unsatisfied |
| Mobile telecommunications | 78 | 15 | 64 | 18 | 70 | 20 |
| Fixed line telecommunications | 60 | 33 | 76 | 17 | 72 | 21 |
| Electricity providers | 78 | 16 | 73 | 16 | 75 | 17 |
| Gas providers | 81 | 12 | 59 | 15 | 65 | 12 |
| Water providers | 71 | 22 | 69 | 18 | 74 | 15 |
| Postal services | 74 | 10 | 69 | 20 | 78 | 13 |
| Public transport | 62 | 21 | 56 | 25 | 63 | 20 |
| Railways | 61 | 14 | 50 | 29 | 58 | 20 |
| **Average** | **71** | **18** | **65** | **20** | **69** | **17** |

not only on small, medium and large scale industrial businesses, but also on foreign companies who operate within the home market. Research conducted over a five-year period, from 1976 to 1981, based on results from *Test Magazine* (published for six years) showed that products from foreign companies were on average appraised worse than products from local competitors. In addition, foreign manufacturers found that their increase in turnover from positive test results was not as great as the fall in turnover resulting from negative evaluations. From this we can draw a conclusion that foreign companies only face additional barriers to entering a market when participating in tests, and can experience greater losses than local producers in terms of test results influencing their turnover (Piepenbrock, 1986).

### *2.3. Research on the potentiality of establishing a testing system in Lithuania*

There are many factors to affect the levels of general consumer satisfaction with products and services. In addition to product quality, information and cost, there is also service quality, contract and guarantee conditions, and others. Table 3 shows how Lithuania compares with other European countries on this point. Consumer satisfaction indicators in Lithuania are a little higher on the scale than those in the European Union and six percentage points higher than Germany. This can be explained by the fact that Lithuanian consumers are less critical and less informed when it comes to product quality and other indicators.

In order to evaluate the potentiality of Lithuanian institutions' ability to create and implement a system for comparative product testing, 26 experts from various Lithuanian state institutions and public organisations responsible for the formation and implementation of consumer policies were surveyed. Representatives from the National Consumer Rights Protection Board, the State Food and Veterinary Service, the State Non-food Products Inspectorate, specialists from accredited experimental laboratories and public consumer organisations took part in the research. The survey consisted of 24 questions per-

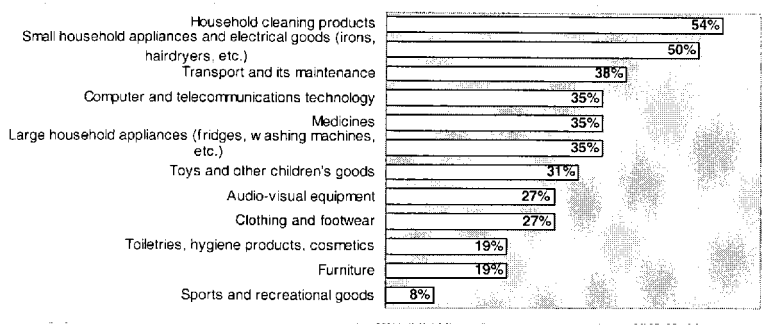


*Figure 1.* ***Lack of information about non-food products (Percentage of experts who nominated a particular product category)***

taining to the peculiarities of Lithuanian consumers' behaviour, specifications of the products and services markets, levels of consumer information, the possibilities of testing products from different categories as well as whether state institutions were prepared to implement a system of product comparative testing. The survey results were supplemented with other references and findings from other countries to make generalisations and proposals for product testing. Justinas Adomaitis, MBA in quality management of Vilnius University, assisted in this survey. The results were processed using statistical methods.

The research revealed the products Lithuanian consumers are least informed about (Figs. 1 and 2). This assessment was made using the following product parameters: quality, safety, conditions for service and maintenance, terms of use and cost. We should emphasise that a total of 73 per cent of the experts agreed that consumers needed more information about the products.

Experts found that consumers were least informed about household chemical products and small household appliances and electrical goods (Fig. 1, 54 and 50 per cent, respectively). Around a third of experts nominated personal and commercial means of transport and their maintenance, computer and telecommunications technology, medicines, large household appliances and toys as categories needing most information.

The authors of this article have conducted research and found that Lithuanian consumers are also particularly ill-informed about a product's environmental quality (Ruževičius, 2003). The results of this investigation have confirmed that it is necessary to develop consumer's quality and eco-education in our country, because only every tenth consumer pays attention to eco-friendliness, and eco-labels are recognized by only 2 per cent of the respondents; only 7 per cent of the people questioned said they would set priority to the eco-friendly product which would be 1 per cent more expensive. As one can see in Fig. 2, most experts agree that fruits and vegetables have the least information about them available (58 per cent). Around a third of experts nominated ready-to-cook and canned food as well as meat and meat products (31 and 27 per cent, respectively). Somewhat fewer selected fish

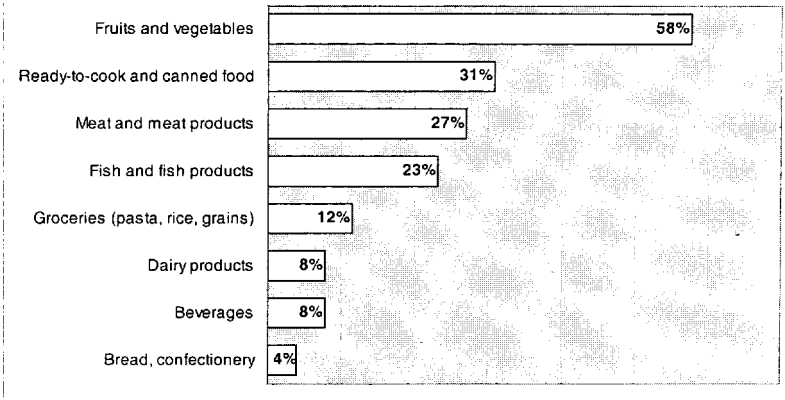


*Figure 2. Lack of information on food products (percentage of experts who nominated a particular product category)*

and fish products (23 per cent). Judging by the remainder of results, it has been found that there is enough information about the other categories (groceries, dairy products, beverages, bread products). The experts' opinions about consumer information evaluated the following product parameters: quality, safety, cost, terms of use and after-sales service (Fig. 3).

Two thirds of the experts have stated that consumers are least aware of product quality, safety and after-sales service; 35 per cent nominated terms of use as the parameter consumers were least informed about, and a little less than a quarter said cost. According to these experts' findings, when informing consumers attention should be focused on product quality and safety, as well as on issues concerning product use.

A consumer's requirements for quality, as mentioned above, depend on the scope, clarity and objectivity of the information available about a product. It is when consumers receive detailed and objective information that they can best make an informed decision which would then also encourage businesses to try harder to improve their quality standards. Growth in demands for quality would help justify the prices we as consumers must pay, based on the premise that consumer satisfaction as such would not change. It would, however, benefit society as a whole, especially in the areas of efficient resource use, environmental protection and the competitive ability of businesses.

When analysing the prerequisites for creating a system for comparative testing, we did an expert assessment of the potentiality of testing specific product groups (Figs. 4 and 5). They were asked about the possibilities of testing various product types. Testing is understood to focus predominantly on quality, thus, it is important to evaluate not only the technical aspects of product testing, but also the ability to select and rate various product parameters.

As can be seen in Fig. 4, in Lithuania furniture is currently the product type most open to

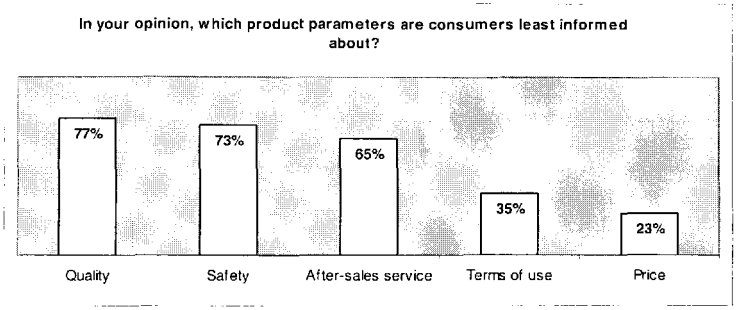


*Figure 3. Consumers' information about particular product parameters (percentage of experts that nominated a particular parameter)*

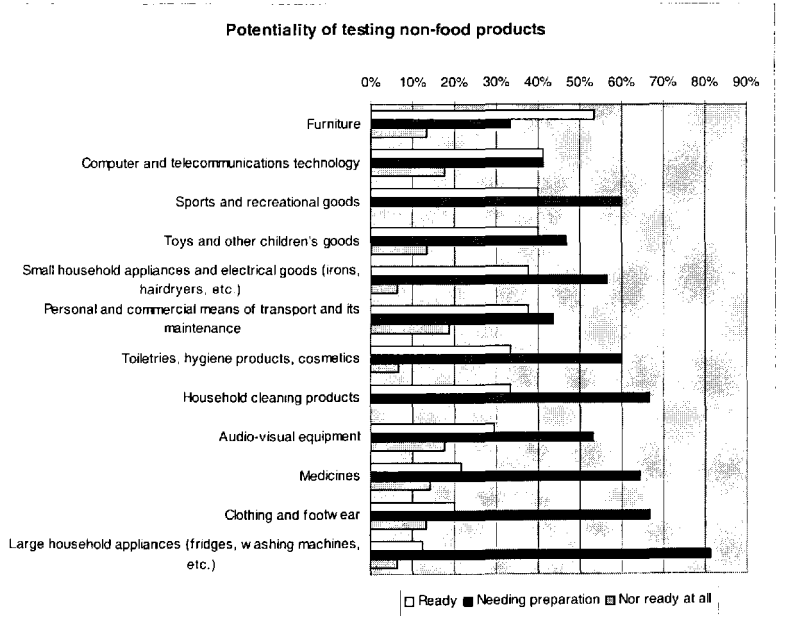


*Figure 4. Experts' opinions on the potentiality of testing non-food products*

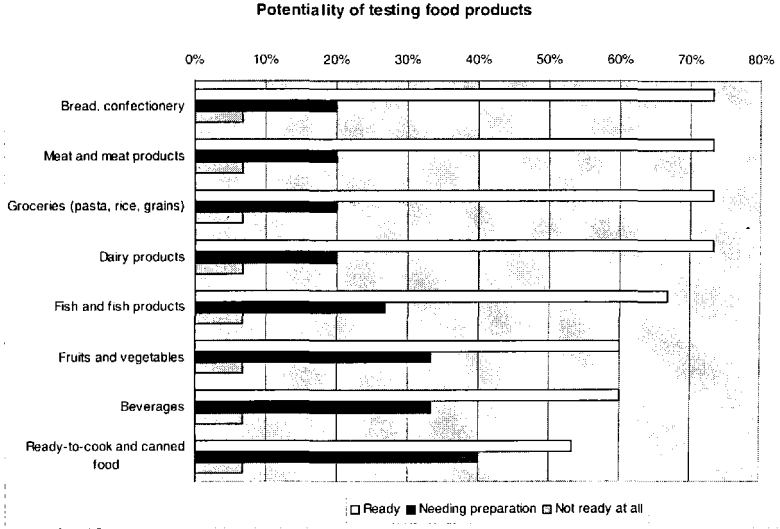


*Figure 5. **Assessment of the potentiality of testing food products***

product testing. Several experts indicated that institutions were ready to commence testing of computer and telecommunications technology, recreational and sports goods, small household appliances, personal and commercial means of transport and its maintenance. Medicines, clothing and footwear and larger household appliances were found to require most attention before testing could commence.

On the whole, when evaluating non-food products, on average 33 per cent of the experts stated that this category of products was ready for testing, 56 per cent said that more preparation was needed, and 11 per cent thought that institutions were not prepared at all.

Seventy-three per cent of experts noted that specialists were best prepared to commence testing bread products, meat, groceries and dairy products (Fig. 5). More preparation was needed before the testing of fruits and vegetables, beverages and ready-to-cook products could begin.

The potentiality of testing food products was found to be much more likely than that of testing non-food products. On average, 67 per cent of the experts agreed that institutions were prepared to commence testing of food products, 27 per cent said that more preparation was required, and only 7 per cent thought that these institutions were not at all ready. The potentiality of testing services, however, was evaluated worst of all – a total of 80 per cent of experts were sceptical about the potential for testing services in Lithuania.

When creating a system for the comparative testing of products in Lithuania, the experience of Western countries should be taken into ac-

count, as should the potentiality of Lithuanian institutions' ability to prepare for and conduct the testing of certain products. From the technological and economic viewpoints, co-operation among all three Baltic States and any prior specialisation in this area would be useful when conducting product quality comparative testing.

## Conclusions

Utilising the methodology of comparative product testing and research on how test results could be applied, we can say that the formation of an independent, well-informed consumer base able of making calculated decisions requires planned and concentrated governmental efforts. Comparative product testing is one of the tools available for consumer education and information, its significance and effectiveness in creating an informed and educated society cannot be denied. Consumers are the market's strongest driving force, they have an enormous economic power. The purpose of consumer organisations is to provide information and consult consumers so that they may utilise that power effectively. Comparative testing is a powerful means of information and a persuasive argument for consumers. Organisations that are involved in the implementation and publication of tests need to uphold the principles of objectivity, impartiality and precision. Only testing that is beyond reproach, whose results cannot be contested by manufacturers or traders, will have enough influence over consumers and will therefore secure business success.

Even though Lithuania's market is several times smaller than Germany's, in the context of world economic globalisation, continuing European integration and dwindling differences among European nations, products are becoming more standardised, and consumers' requirements more alike. This creates conditions for a closer cooperation among consumer organisations and facilitates the sharing of technical, material and other knowledge.

Test results have a marked influence on the marketing strategies of businesses. They can be used to make comparisons, because they are a convenient way of collecting information about competitors' production. Even the companies whose goods have not undergone testing observe the market and take test results into account when improving their own products. So, testing ensures that there is a stream of information to the market, encouraging businesses to be adaptable and flexible and raise their production quality standards.

Lithuanian consumers feel a distinct lack of information about products. This desire for information is felt most strongly by young, educated people receiving comparatively high salaries. It is this social and economic demographic in particular which, in Germany, makes up the majority of test users (customers, subscribers). A well-informed consumer is more demanding in terms of product quality and is more inclined to pay a higher price for a better quality product or service. This is why, when educating consumers we can influence their perception of quality. Lithuanian consumers place the highest priority on low prices for services and pay little attention to quality. This only encourages businesses to reduce their manufacturing expenditure at the expense of quality. Cost is still the most important factor for consumers in Germany and the EU, nevertheless their greater quality expectations have an effect on the actions of businesses.

Experts have found that Lithuanian consumers are least informed about product quality, safety and additional conditions, while the product parameters that rate lowest are price legitimacy, product quality and after-sales service. Comparing these results we can state that the

degree of consumer information affects the evaluation of a product's quality parameters. When creating a system for the comparative testing of products in Lithuania, the experience of Western countries should be taken into account, as does the potentiality of Lithuanian institutions' readiness and ability to conduct the testing of certain products. The research showed that at present food products are most open to testing, while services fared worst. Co-operation and the specialisation of the Baltic States would be most useful from the technical and economic perspective when conducting product quality comparative testing.

Utilising a comparative product testing methodology and research on how test results could be applied, we can say that the formation of an independent, well-informed consumer able of making calculated decisions requires planned and concentrated governmental efforts. Comparative product testing is one of the tools available for consumer education and information, and its significance and effectiveness in creating a knowledge society cannot be denied.

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## PRODUKTŲ KOKYBĖS LYGINAMŲJŲ TESTŲ REZULTATŲ ĮTAKA RINKAI

**Juozas Ruževičius**

Santrauka

Sparčiai augant Lietuvos ekonomikai, didėja ir vartojimo mastas, plečiasi mažmeninės prekybos tinklai, didėja galutinio vartojimo produktų pasiūla. Intensyvi konkurencija verčia įmones ieškoti būdų, kaip išsilaikyti rinkoje. Be kitų vadybos sprendimų, įmonės investuoja į produktų tobulinimą, jų paskirstymą ir rinkotvarką. Viso to padarinys yra didžiulis pasirinkimas, labai daug ir įvairios informacijos apie produktų pasiūlą rinkoje. Todėl vartotojui iškyla daug problemų pasirenkant geriausiai jo poreikius tenkinantį produktą. Dažnai marketingo informacija tampa pagrindinis pasirinkimą lemiantis veiksnys, todėl įmonės įsitraukia į šias reklamos lenktynes. Tačiau tai ne visada sudaro efektyvaus vartotojų apsisprendimo ir gaminių kokybės gerėjimo prielaidas.

Lietuvoje tik pastaruoju metu atkreiptas dėmesys į vartotojų ugdymą ir informavimą. Visi dirbama daugiau teisinėje srityje. Tik 2003 metais pradėti pirmieji vartotojų švietimo ir informavimo darbai – priimta ir patvirtinta Lietuvos nacionalinė vartotojų švietimo programa. Europos Komisijos komunikate „Europos Sąjungos vartotojų politikos strategija" ypatingas dėmesys skiriamas vartotojų švietimui ir informavimui. Nuolat pabrėžiamas vartotojų poreikis objektyviai informacijai. Europos vartotojas įvardijamas kaip informuotas, galintis objektyviai rinktis prekes ir paslaugas, besirūpinantis savo gyvenimo kokybe žmogus. Europos Sąjungos preliminarioje vartotojų teisių apsaugos ir politikos programoje aiškiai išskirtas lyginamųjų testų organizavimo rėmimas, tokių organizacijų finansavimas bei reikalavimai joms. 2004 m. Lietuvai įstojus į ES, šių tikslų ir nuostatų veikimo laukas išsiplėtė ir į Lietuvą. Vykdant vartotojų politiką Lietuvoje, rengiant vartotojų švietimo ir informavimo projektus, bus gaunama svari finansinė ir techninė ES parama. Projektuojant lyginamųjų produktų testų sistemą Lietuvoje, svarbu įvertinti kitų šalių patirtį, pasinaudoti turimomis žiniomis. Aktualu numatyti galimus rinkos pokyčius, jos dalyvių veiksmus, pavojus jų veiklai ir jos galimybes. Svarbu įvertinti lyginamųjų testų sistemos, kaip vartotojų švietimo politikos įrankio, galimybes Lietuvoje.

*Mokslinė problema.* Produktų kokybės lyginamieji testai yra vienas iš kokybės vadybos posistemio elementų. Jų teoriniai aspektai dar nebuvo nagrinėti Lietuvos mokslinėje literatūroje. Projektuojant lyginamųjų produktų testų sistemą Lietuvoje, taip pat svarbu įvertinti kitų šalių patirtį, numatyti galimus rinkos pokyčius, jos dalyvių veiksmus, pavojus bei galimybes. Aktualu įvertinti lyginamųjų testų sistemos, kaip vartotojų švietimo politikos įrankio, galimybes Lietuvoje. *Tyrimo tikslas* – apibendrinti produktų kokybės testų raidą ir tipologiją, išryškinti jų rezultatų įtaką rinkai bei nustatyti produktų lyginamųjų testų sistemos formavimo Lietuvoje prielaidas. *Tyrimo metodologija*: straipsnis parengtas naudojant mokslinės, normatyvinės ir teisinės literatūros bei ekonominės veiklos loginę analizę ir apibendrinimus, apimančius teorinių teiginių ir verslo praktikos veiksmų sisteminimą, ir autoriaus atlikta Lietuvos valstybinių institucijų ir visuomeninių organizacijų, formuojančių ir įgyvendinančių šalies vartotojų politiką, 26 ekspertų apklausa. Ekspertai buvo atrinkti iš Lietuvos valstybinių institucijų ir visuomeninių organizacijų, formuojančių ir įgyvendinančių šalies vartotojų politiką. Tyrime dalyvavo Nacionalinės vartotojų teisių apsaugos tarybos, Valstybinės maisto ir veterinarijos tarnybos, Valstybinės ne maisto produktų inspekcijos, akredituotų bandymų laboratorijų specialistai ir visuomeninių vartotojų organizacijų atstovai. Tyrimo anketoje buvo pateikti 24 klausimai, kuriais siekta įvertinti Lietuvos vartotojų elgsenos ypatumus, prekių ir paslaugų rinkos specifiką, vartotojų informuo-

tumo lygį, atskirų prekių grupių testavimo aktualumą ir šalies institucinės sistemos techninį pasirengimą įdiegti prekių lyginamojo testavimo sistemą. Tyrimo rezultatai apdoroti matematinės statistikos metodais.

Tyrimas parodė, kad produktų kokybės lyginamųjų testų rezultatai smarkiai paveikia įmonių marketingo veiksmus. Kaip patogus informacijos apie konkurentų produkciją rinkimo būdas testų rezultatai gali būti panaudoti sugretinimui atlikti. Kaip rodo atlikti tyrimai, net ir tos įmonės, kurių gaminiai nebuvo testuoti, stebi rinką ir atsižvelgia į testų rezultatus tobulindamos savo produktus. Taigi testų rezultatai yra reikšmingas informacijos tėkmės kanalas rinkoje ir skatina įmones prisitaikyti ir veikti lanksčiai bei kelti savo produkcijos kokybės lygį.

Lietuvos vartotojai pasigenda informacijos apie produktus. Tokį informacijos poreikį labiausiai junta jauni, išsilavinę, palyginti dideles pajamas gaunantys žmonės. Būtent tokios socialinės ir ekonominės padėties gyventojai sudaro daugumą testų vartotojų (pirkėjų, prenumeratorių) Vokietijoje. Labiau informuoti vartotojai yra reiklesni produktų kokybei ir linkę mokėti daugiau už geresnės kokybės prekes ir paslaugas. Todėl ugdant, informuojant vartotojus galima paveikti jų kokybės suvokimą. Lietuvos vartotojų svarbiausias prioritetas yra mažos paslaugų kainos ir gana menkas dėmesys jų kokybei. Tai gali skatinti įmones mažinti savo gamybos sąnaudas kokybės sąskaita. Nors ES ir Vokietijoje vartotojams svarbiausias dalykas taip pat yra paslaugų kainos, didesnis reiklumas kokybei gali keisti įmonių veiksmus. Ekspertų nuomone, Lietuvos vartotojai yra mažiausiai informuoti apie produktų kokybę, saugumą ir papildomas sąlygas, o silpniausios, ekspertų vertinimu, vartojimo produktų sritys yra kainos pagrįstumas, produktų kokybė ir papildomos sąlygos. Lyginant šiuos rezultatus galima teigti, kad vartotojų informuotumas turi įtakos produktų kokybės parametrų vertinimui. Kuriant produktų lyginamojo testavimo sistemą Lietuvoje, reikėtų atsižvelgti į Vakarų šalių patirtį šioje srityje bei Lietuvos institucijų galimybes pasiruošti ir atlikti tam tikrų produktų testus. Tyrimai parodė, kad šiuo metu Lietuvoje yra geriausios galimybės testuoti maisto produktus, o prasčiausios – paslaugas. Atliekant produktų kokybės lyginamuosius testus techniškai ir ekonomiškai būtų pravarti Baltijos valstybių kooperacija ir specializacija.

Apibendrinus produktų kokybės lyginamųjų testų taikymo metodikų ir testų rezultatų pritaikymo galimybių tyrimo duomenis galima teigti, kad savarankiškų, gerai informuotų, sugebančių priimti apgalvotus sprendimus vartotojų visuomenei formuoti reikia sutelktų ir planuojamų valstybės pastangų. Produktų lyginamųjų testų rezultatai ir jų sklaida, kaip viena iš vartotojų švietimo ir informavimo priemonių, yra reikšmingi ir efektyvūs kuriant žinių visuomenę.

**Pagrindiniai žodžiai:** kokybė, testai, kokybės lyginamasis testavimas, rinka, rinkotvarka, prekė, aplinkosauginis ženklinimas.

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