The Sustainable Development of Competitive Enterprises through the Implementation of Innovative Development Strategy

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ABSTRACT

The purpose of this article is to develop methodological approaches to the production effectiveness’s evaluating and products competitiveness’s level estimation to identify risk groups according to the products and producers, to propose targeted measures manufacturers’ support, to activate innovative development and minimize potential social impacts. The leading method to study this problem is the method of constructing the matrix of the producers’ efficiency and the commodities’ competitiveness which allows implement a differentiated approach to the strategies’ development of production’s innovative development and social risks’ minimization. The article proposes a methodological approach to the products competitiveness’s level assessment based on the efficiency of production and external conditional factors and identifies the respective groups of competitive and non-competitive commodities and producers, as well as it defines the resource and innovation potential, with further strategy development. The study materials can be used in the management of manufacturing development, both at the level of the industrial enterprises’ services and government agencies, to assess the level of products’ competitiveness, to create strategies of innovation development, to develop targeted actions for the exports’ development.

Keywords: Commodities’ Competitiveness, Production Efficiency, Export Potential, Innovation Development

JEL Classifications: O31, O34, Q01

1. INTRODUCTION

In modern economic conditions the problem of Russian and Tatarstan producers’ competitiveness is particularly relevant. Competition’s strengthening in domestic and foreign markets requires domestic producers’ commodities’ high quality, productivity increasing and efficient use of production factors, which is especially important with the rapid increase in resources’ cost. In addition, the reduction of customs duties for the products’ import, restriction of state support for a number of industries in the framework of world trade organization rules may contribute to the growth of foreign commodities’ competitiveness (Ageev and Shagiakhmetov, 2012).

In the borders’ expansion process of international trade, economic potential and prospects will belong to those domestic goods and services that hold their positions in the market, have advantages in the competitive struggle. The economy’s resources should be focused on the innovations’ implementation in manufacture, competitive goods and services’ production of a new quality that will increase the industrial potential of the state. To a greater expense the more sensitive goods are produced in the manufacturing industries, where maximum competition with foreign producers takes place. Part of the industrial enterprises of Tatarstan has high export potential, ready to be efficient and competitive. Other manufacturers are at risk group, mostly have a highly dilapidated infrastructure, produce outdated products
that will not withstand competition with foreign counterparts (Kireenko, 2010).

In order to minimize possible negative consequences for certain industries and businesses a strategy of competitiveness is necessary which is based on competitive advantages - lower costs, attracting buyers by the commodities’ or services’ relatively low price compared with similar products of other, or specialization on high quality, attracting the most refined and demanding clients (Ulmasov, 2009; Shurkina et al., 2015).

In connection with the mentioned above there is a need to develop methodological approaches to evaluate the effectiveness of production and competitiveness of commodities with the aim to identify risk groups on commodities and producers, develop the targeted measures of manufacturers’ support, activate the innovative development and minimize potential social impacts. Moreover, the level of competitiveness of this or that product is dynamic in nature, it must be considered in relation to a particular moment of time taking into account constant changes in market conditions, largely determining the stability and sustainability of production.

2. MATERIALS AND METHODS

2.1. Methods of Study

In the process of methodological approaches and analysis’ study of products’ competitiveness’s level, production’s efficiency, foreign trade prospects’ development the following research methods were used: Analysis of normative documents, functional analysis, forecast, systematization and generalization of facts and concepts, marginal analysis, economic-mathematical modeling, design, method of images, method of expert estimations.

2.2. Object and Information Base of Research

The object of research is the Tatarstan industrial products’ producers’ commodities, namely food and non-food products, products of chemical industries and engineering.

In the framework of statistical reports information about the production’s volumes and dynamics, structure of production costs and sales, their effectiveness, the producers’ prices for goods sold in the domestic market and in export areas are formed. The study of geography of foreign economic relations and prospects of trade expansion is based on official data of statistical services and materials of international online publications.

2.3. Stages of the Study

The study includes the following stages:

- Development of methodological approaches to evaluate the production’s effectiveness and products’ competitiveness to identify risk groups according to the products and producers, develop targeted measures to support manufacturers, activate innovative development, minimize potential social consequences.
- Determining the products’ competitiveness’s level and manufacturing productions’ efficiency by the matrix’s construction method, allowing to implement a differentiated approach to the strategies’ development of productions’ innovative development and social risks’ minimization; assessing of producers’ internal capabilities based on resource and innovation capacity.
- Study of external factors and commodities’ markets’ development prospects in order to develop strategic solutions to optimize marketing activities; identification of possible reasons of inefficient trade, identifying of promising points of foreign economic relations’ expansion.

3. RESULTS

3.1. Development of Methodological Approaches

In this study, competitiveness is considered as the producers’ ability to create a steadily increasing volume of the added value on the basis of efficiency increase of production’s factors’ use, the business’s investment attractiveness ensuring, new markets’ development or establishment (Kandilov and Malysheva, 2013). The main factors of competitiveness:

- Positioning in domestic and world markets
- Producers’ achieved technological level
- Structure of corporate
- Availability of raw materials base
- The development of cooperative relations.

Products’ competitiveness is influenced by external environment conditions and internal factors, depending on producers. These are the phenomena and processes of production and economic activity of the enterprise and socio-economic life of society, which cause the change of absolute and relative values of production costs, and as a result the change in the level of producer’s competitiveness (Figure 1).

External factors determine the market relations, allowing the company to create and sell products, which according their price

Figure 1: External and internal factors of competitiveness, used for research purposes

<table>
<thead>
<tr>
<th>External factors</th>
<th>The competitiveness of products and manufacturers</th>
</tr>
</thead>
<tbody>
<tr>
<td>The demand (income)</td>
<td>Price competitiveness (the producer’s price, the cost of production)</td>
</tr>
<tr>
<td>Import dynamics</td>
<td>Non-price competitiveness (import)</td>
</tr>
<tr>
<td>Change of customs duties</td>
<td>Production’s efficiency</td>
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<tr>
<td>Consumer prices on the market</td>
<td>Labor efficiency</td>
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<td></td>
<td>Social parameters</td>
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<td></td>
<td>Investments in basic capital</td>
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<td></td>
<td>Innovative activity</td>
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<td>Business activity</td>
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and non-price characteristics are more attractive. Internal factors show the producers’ ability to ensure their own competitiveness (Yarmukhametov, 2014).

For the study purposes a definition is adopted that competitive one is that manufacturer whose product in terms of price and quality allows them to compete successfully, show high efficiency and profitability, expand market share.

Thus, the basis of determining the products’ competitiveness’s level from the point of view of production’s efficiency and the manufacturer’s policy consists of production dynamics, productivity and cost characteristics (cost and price). The assessment of the quality and demand for production of the Tatarstan producers is the availability of a wide network of external sales markets: Regions of the Russian Federation, countries of near and far abroad.

The analysis of the products’ and manufacturers’ competitiveness is implemented through a set of efficiency indicators, production dynamics and price characteristics. The most common approach is to associate the competitiveness to production productivity indicators such as labor productivity, capital productivity, efficiency of tangible and intangible resources’ use etc. Analysis of indicators’ mutual correlation excludes unnecessary non-informational elements and allows operate only statistically significant ones (Malysheva et al., 2015).

The sequence of research stages of production efficiency and commodities’ competitiveness is summarized in Table 1. Characteristics of production efficiency and labor productivity are estimated on the basis of the added value. The added value as a measure of the organization’s contribution in the result, without the cost of others labor, has independent value in assessing the management effectiveness. As additional characteristics of the commodities’ competitiveness the production efficiency (the share of the added value in output) and labor productivity (the added value output per worker) are given. To assess these indicators their change or rate growth over time is accepted, since the difference of indicators by types of activities is largely determined by sector specialization and depends on the type and range of products and services, which, in turn, vary by the limit content of the added value.

### 3.2. The Study of Products’ Competitiveness's Level

The markets’ structure to some extent influences the indicators of production efficiency. A positive impact on the efficiency and competitiveness indicators belongs to the fact of exports, particularly for such activities as, petrochemicals and engineering. In the Russian market many enterprises have big share of products marketed in the same region, i.e. regional distribution orientation take place. Regionally closed businesses operate in niche markets, without participating thus in competition with Russian and foreign manufacturers (Gonchar and Kuznetsova, 2008).

The investigated Tatarstan producers’ products, in their majority, are not regionally closed ones. A significant portion of manufacturing enterprises is focused on both domestic and foreign markets. Exception by their nature is food products, where on average 60% of manufactured foods are within the Republic. On the Republican market more than 50% of poultry meat, meat products, soft drinks, flour, cereals, milk and dairy products, fish, cheese and vodka of production’s volume are sold (Figure 2). This is due, perhaps, to any institutional barriers that allow companies to “hide” from competition in the regional market, as well as the objective economic reasons in the form of, for example, transport costs or the allowable timeframes of realization (Federal Service of State Statistics, 2015).

In addition, the regional insularity of marketing can be combined with regional isolation of supply. However, food self-sufficiency is one of the most important directions of the state policy in Tatarstan, factor to maintain the quality of citizens’ life by guaranteeing them high standards of life support. To ensure food independence we need a sustained domestic food production and the adherence to threshold values of specific weight in commodity resources of the domestic market. The national market for domestic consumption on average about 85% of the food produced in Tatarstan receives. Up to 65% of sugar, vegetable oils, beer of local production is

| Table 1: Linear scheme of research of production efficiency and products’ competitiveness |
|---------------------------------|---------------------------------|
| **Step 1** | **Commodities’ choice** | **Socially significant goods** |
|            | **The definition of**       | **Export-oriented goods** |
|            | **manufacturers’ scope**    | **The contribution of the manufacturer in goods’ production volume in the region** |
|            | **The analysis of price**   | **The share of product in total production** |
|            | **competitiveness**         | **The markets for goods (exports and supplies to the regions of the Russian Federation)** |
|            | **of each producer**        | **Social significance of the enterprise for the region** |
| **Step 4** | **Diagnostics of activity** | **Change of production costs per unit of output** |
|            | **of each producer**        | **Change in producer prices for goods** |
|            | **Dynamics of goods’ production** | **The ratio of producer price and market price** |
|            | **Production efficiency**   | **Determining of risk group by product and manufacturer** |
|            | **Labor productivity**      | **Dynamics of investments into fixed capital** |
|            | **The number of employees and wages** | **Innovative activity** |
| **Step 5** | **Prospects of production** | **Business activity of manufacturers** |
|            | **development**             | **dynamics** |
realized in the regions of the Russian Federation. About 5% oil and 15% of national production’s beer is exported to CIS countries.

Manufacturing productions’ goods, including and the budget forming enterprises of the automotive and petrochemical complexes of Tatarstan with high export capacity, will largely determine the scope and importance of the Republic in world trade. More than 70% of chemical products - synthetic rubbers, plastics, nitrogen fertilizers, soaps and detergents - manufactured in Tatarstan is sent for export or sold in the regions of Russia. Polymeric materials have markets on the territory of the Russian Federation. More than half of the Republican tires are made for CIS countries and far abroad.

Industrial goods are represented by products of enterprises of manufacturing industries’ various activities: Transportation vehicles (automobiles and tractors), construction materials (construction brick and ceramic tile) and steel pipes, refrigerators, shoes and hosiery production. These goods and their manufacturers are as potential exporters, so manufacturers of socially significant products. The high proportion of foreign consumption of the products is admitted in almost all of the presented product, with the exception of relatively “young” for Republic production of ceramic bricks and cars. Meeting the high domestic demand of the Republic in building materials, more than 60% of produced in Tatarstan brick is made in the regions of the Russian Federation.

Thus, despite the fact that the majority of Republican manufacturing enterprises are imposed in varying degrees by competitive pressures, mostly orientation on the export and regional markets of Russian Federation entities is intensified. The last, probably, is connected with the progress in the field of marketing, development of logistics infrastructure, as well as with the growth of networks in wholesale and retail trade. Export orientation, in turn, positively affects the profitability of production and innovative activity.

To assess the level of products’ competitiveness with the aim of risk groups’ identifying on products and producers and to develop strategies aimed at improving the activities of these industries, a diagnosis using the matrix method is fulfilled. As the matrix format the concept is selected, proposed by the Boston consulting group. In accordance with the proposed method on the axes the change in producer’s prices are denoted in percentage terms. The size of the matrix is divided into four

quadrants. The boundaries of the quadrant are defined as the level of the base period (100%), the coordinates on the axes of abscissa and ordinate - the intensity of indicators’ growth (decline). The matrix is universal for the diagnosis of products’ competitiveness’s level of various kinds of economic activity (Figure 3).

Each quadrant of the matrix has its own characteristics that depend on internal (company policy) and external factors (market conditions). The X-axis displays the costly policies of an enterprise and the Y-axis - the pricing. The combination of these parameters in different quadrants of the matrix taking into account the index of industrial production allows us to interpret the situation, to identify possible reasons for existing problems.

In the first quadrant (upper left corner) there are the most successful goods and their manufacturers. The parameters of their development over the last four years are relatively favorable: On the background of rising prices of manufacturers a decrease of production costs can be observed. The manufacturers of these goods have the possibility to increase the prices due to the demand for products, high external prices. The production’s costs’ efficiency increasing is achieved, perhaps at the expense of the companies’ targeted cost policy, or other external factors. The concern in this group is called by the goods, where there is a decrease in production volumes, which requires additional diagnosis.

The second group of products, which includes mainly food, is located in the 2nd quadrant (upper right corner). This group of products can be characterized as being at risk. The increase in costs of production contributes to the growth of prices for products. The negative trend of decrease in the efficiency of resource use requires specific targeted actions on improvement of the enterprises’ activity. Among the products of this group there are reserves for positions where the rise in prices outstrips the growth of production costs. Despite the fact that the demand for the products of this commodity group is sustainable, inefficient use of resources can lead to inflation and reduce of the products’ competitiveness.

The third quadrant (lower left corner) includes goods which are unfavorable by market conditions. This group of products also can be characterized as being at risk group. The market of goods, included in this group, is saturated with imports. To maintain position in the foreign market companies need innovative strategy of production’s development, effective marketing. In spite of
the existing variety of products on the market and the level of the external price the domestic producers’ competitiveness’s increasing is possible due to the products’ quality improving and innovative technologies’ introduction in manufacture.

In the fourth quadrant - the fourth crisis group of products. Rising costs of production amid high competition and decrease in prices result in an unfavorable prognosis for the goods of this group.

Thus, the situation in the production of the main socially important and export-oriented products in the Republic of Tatarstan is characterized by taking into account price and non-price competitiveness (export of goods), production efficiency, labor productivity, and social parameters. Undoubtedly internal factors of competitiveness depending on companies, work under the influence of the external environment - market conditions. With the competitive pressure increase, the proliferation of products to the republic of large holding structures’ and foreign companies’ and enterprises’ products with low production efficiency, labor productivity, primarily focused on the domestic market, are likely to become candidates for “takeover,” restructuring or displacement from the market.

3.3. Definition of Prospects of Commodity Markets’ Development

The development of foreign economic relations is the need to meet the requirements of world trade, integration of national producers in international value chains. Products’ competitiveness’s improving is possible only with the adoption of measures to stimulate technical re-equipment of regional oriented enterprises and exporters, increase investment and innovative activity.

In connection with the above mentioned there is a need to implement a differentiated approach to the measures’ development for each group of commodities directed to the support and development of Tatarstan manufacturers. Previous stages in the development of targeted events should be devoted to a detailed diagnosis of the producers’ activity in order to identify objective factors that reduce the competitiveness of commodities (Malysheva and Ganeeva, 2014).

Evaluation of products’ competitiveness, the internal capacity of Tatarstan manufacturers is the primary element in the strategies’ development of foreign economic activities of Tatarstan. In the basis of the prospects’ determining for the development of commodity markets’ network research methods of market conditions’ factors are used. The ratio of demand, supply and price dynamics of the commodities enable to determine the external environment for strategic decision-making of marketing activity, to reveal possible reasons of inefficient trade, to identify forward-looking points in terms of expansion of foreign economic relations. The proposed analytical tool implements a mathematical model to calculate the balance of trade flows, including the volume of production, import and export from the territory of the republic, imports and exports from other countries, the available stocks, forming, thus, the domestic consumption. This analyzes the price movements, favorable and unfavorable changes in the pricing environment are measured.

To analyze the use of consumer goods and products for industrial purposes in the markets of the countries and regions algorithms are developed, including economic indicators of production, producer prices and consumer prices, sales volume and customs statistics. Depending on the presence of this or that phenomenon in the market of the country or region in the program seven options algorithmic structures are laid down (Figure 4).

For example, the first algorithm describes a presence in the country or region of all economic factors, namely the availability of their own production of goods, as well as its purchase from other regions and (or) import and sale in the entities of the Federation and (or) export. The next stage of the analysis involves the study of the volume and dynamics of trade relations with the identification of partners and separately with the Republic of Tatarstan, as well as a comparison of producer prices’ level.

General block diagram of the study is a sequence of logically justified actions, which are based on a comparative analysis of the products’ competitiveness in the markets of countries or regions (Figure 5). Assessment of competitive position is based on balance of supply and demand, key parameters of which are the presence of own production, the scale of foreign trade and the price situation.

The analysis final stage involves three scenarios for the development of foreign trade:
1. The expansion of trade is possible due to producers’ higher prices in the country (region), domestic production of goods in small volumes or its absence.
2. The reduction of trade is possible due to the lower prices of producers in the country (region) or the presence of its own production in large volumes.
3. A new market is possible because of the lack of commodities’ production in the country (region) or the its availability in small volumes and higher producer prices.

This approach takes into account only the economic factors of market environment. The next stage in the development of foreign economic strategy should be devoted to a detailed diagnosis of the external markets on generated scenario options, taking into account the competitiveness of the goods.

Figure 4: Algorithmic designs’ options for marketing and market analysis and assessment of the foreign trade’s prospects

<table>
<thead>
<tr>
<th>Algorithm</th>
<th>Availability of production</th>
<th>Import</th>
<th>Export</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td></td>
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<td>7</td>
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</table>
At present, Russian regions do not fully meet the needs of manufacture in the production and it makes necessary the development of inter-regional trade. Often regions are specialized in the manufacture of certain commodities. However, the Russian market has large proportion of businesses selling products within their region. Expansion of domestic trade and exports of industrial products is one of the priority tasks of the entire national economy, since it is a path of development which can largely ensure the continued effective functioning and growth.

Research of prospects for the development of foreign markets demonstrates the trade ties of Tatarstan with regions of the Russian Federation, the UIS countries, EU countries. Commercial activity of Tatarstan enterprises in the regions of the Volga Federal District is deployed much. However, there is potential for its expansion, development of new markets. In some regions, the situation is such that the promotion of our products on the objective circumstances cannot always be effective (Kandilov and Malysheva, 2013).

Study of economic environment factors shows significant potential for increased trade in the UIS countries. At this point of time there is significant number of countries - potential consumers of Tatarstan commodities. Slight production on certain commodities’ positions and the price advantage of Tatarstan manufacturers offer the possibility to develop new markets.

With regard to trade relations with the EU countries the study of economic environment factors enabled to determine the areas where there is a threat of further development of foreign economic relations. The reason is the lower price on EU countries markets for individual commodity items exported by manufacturers of Tatarstan. In this case, there is a priority need for the adoption of possible measures to strengthen export positions by other competitive advantages (Statistical Service of the European Union).

Study of economic environment factors of foreign economic relations on specific commodity items allows determining of the prospects for the development of certain export directions, predetermines the possibility of establishing a framework for targeted action for the development of foreign trade. Thus, the proposed solution can be used as by enterprises and organizations, so by supervising government agencies for the management of products’ sale, including the study of markets and assessing of foreign trade’s prospects.

**4. DISCUSSION**


However, the applied scientific works’ quantity devoted to the research methodology of products’ competitiveness’s level, prospects of foreign markets’ development is extremely small, and the existing works has merely theoretical discussion nature. The studied aspect in earlier studies was not considered.

**5. CONCLUSION**

The problem of commodities’ competitiveness’s raising, markets’ expand requires of Tatarstan, primarily, elaboration of measures to protect the domestic market. The current financial, economic and social well-being of producers is the starting point, which

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**Figure 5:** The research general block diagram of the foreign trade development’s prospects

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
<th>Options</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 stage</td>
<td>Production of goods in the country (region)</td>
<td>Smaller than average</td>
<td>more than average</td>
</tr>
<tr>
<td>2 stage</td>
<td>The volume of trade (exports) with RT</td>
<td>Smaller than average</td>
<td>more than average</td>
</tr>
<tr>
<td>3 stage</td>
<td>The volume of trade (exports) with other regions (countries)</td>
<td>Smaller than average</td>
<td>more than average</td>
</tr>
<tr>
<td>4 stage</td>
<td>Price ratio on the market</td>
<td>Less RT price</td>
<td>More RT price</td>
</tr>
<tr>
<td>Result</td>
<td>Parameter ratio</td>
<td>new market</td>
<td>Expanding of trade</td>
</tr>
</tbody>
</table>
determines the potential of the company in an increasingly competitive environment.

This article presents the methodological approaches to evaluating the production’s effectiveness and products’ competitiveness in order to identify risk groups for goods and manufacturers, to propose targeted measures to support producers, to activate the innovative development, to minimize the possible social consequences. The proposed approach to production’s effectiveness’s and commodities’ competitiveness’s evaluating allows select a group of products and manufacturers by their internal potential, to identify the most vulnerable ones, which need special attention and support from the state.

A study of the commodities’ competitiveness and the manufacturing sectors’ efficiency level is fulfilled by matrix constructing method, allowing implement a differentiated approach to the development of innovative development’s strategies of production and social risks’ minimization. Manufacturers’ internal capacity on the basis of resource and innovation potential are evaluated. Previous stage in the development of targeted events should be devoted to a detailed analysis of the producers in order to identify objective reasons which lead to lowering of goods’ competitiveness’s level.

The study of economic environment factors of foreign economic relations on specific commodity items allows determining of the prospects for the development of certain export directions, predetermines the possibility of establishing a framework for targeted actions for foreign trade’s development. Results of the analysis contribute to the development of strategic solutions to optimize marketing activities, to reveal possible reasons of inefficient trade and to identify promising points for foreign economic relations’ expansion.

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