A METHODOLOGICAL APPROACH TO ASSESSING THE EFFICIENCY OF THE ECONOMIC MECHANISM FOR FORMATION AND DEVELOPMENT OF INTERSECTORAL LINKAGES

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ABSTRACT

Intersectoral linkages represent the economic and organizational interaction between industries, characterizing the relationship to ensure the production process, as well as the production and sale of products in the industry based on exchanging equivalent costs and ensuring the same level of production profitability. Due to the need to develop branches of the national economy, the authors suggest a methodological approach to assessing the efficiency of the economic mechanism for establishing and developing intersectoral linkages.

Keyword: intersectoral linkages, economic mechanism, effect, efficiency, production.
1. INTRODUCTION

Today the economists pay considerable attention to the development and formation of intersectoral linkages, but the main focus is on the practical application of new methods of interaction between industries in the structure of intersectoral formations, the development of intersectoral linkages in market segments, the development of appropriate marketing programs, the creation of new products and introduction of innovative technologies of intersectoral interaction [1-2]. Much less attention is paid to the serious problem of reforming, restructuring and reorganizing intersectoral formations. The lack of a comprehensive study of commodity producers’ interaction and the restructuring of intersectoral productions are the major shortcomings that have negative economic consequences.

The economic mechanism for formation and development of Intersectoral linkages allows accounting for development factors of the national economic sectors based on detail elaboration of each stage, as well as the inputs and outputs in each process, and identifying those responsible for the final result [3-5]. The process approach allows establishing total control over the quality not only of the final product, reaching the consumer from each of the national economy sectors, but also assessing the efficiency of each process, stage, link in the production chain based on the balanced indicators. The intersectoral balance model allows assessing the efficiency of aggregate product distribution in all branches of the national economy [11-16]. This allows regulating the production development and macroeconomic and structural changes in reproduction processes in the system [6].

2. METHODOLOGY

At present, the enterprises operate in the conditions of economic and financial independence, requiring the continuous development of business, which entails the solution of problems with self-financing, lending, marketing. When planning production volumes and product range, it is necessary to consider the demand and resources for its production [17-22]. In this regard, serious attention should be paid to strategic planning aimed at the formation and development of intersectoral linkages.

The substantiation of objectives for the development of the national economy sectors, as well as the definition of the system of measures required for their implementation in the long term, determine the essence of strategic planning for intersectoral linkages. Depending on the level – federal or regional – the objectives can be as follows: ensuring food security, providing the population with food in accordance with medically sound standards in conditions of preserving purchasing power, producing environmentally friendly products in the industry, promoting price parity and its maintenance, producing domestic products that can create competitive advantages compared with the imported analogues, environmental protection, etc. At the level of each individual enterprise, a strategic goal may be to maximize profits at minimum costs through the sale of products and raw materials [23-25]. The formation of a sustainable development strategy for an enterprise is one of the most important problems, which can be addressed only with the use of specific methodological approaches, including the methodological approach to the formation of an economic mechanism of intersectoral linkages.
A Methodological Approach to Assessing the Efficiency of the Economic Mechanism for Formation and Development of Intersectoral Linkages

and the assessment of its efficiency. The chosen strategy should focus on creating optimal conditions, with the balance reached between the development of production resources and the economic-financial parameters. The methodological approach to assessing the efficiency of the economic mechanism for the development of intersectoral linkages accounts for two interrelated aspects: the construction of a set of indicators characterizing the efficiency of economic mechanism for the development of Intersectoral linkages and the development of an integral indicator of efficiency of the economic mechanism in sectors of the national economy. In this regard, when developing a system of indicators aimed at assessing the efficiency of the economic mechanism for the development of intersectoral linkages, the authors used elements accounting for the industry performance. The methodological approach to the selection of indicators to assess the efficiency of the economic mechanism for the development of branches of the national economy is based on the following principles: [6]

1. a principle of comprehensiveness and consistency, allowing to consider the efficiency indicators from the standpoint of the general characteristics of the industry with due account for its multifunctionality, as well as a combination of social and economic factors;
2. a principle of goal-setting, i.e. a system of indicators aimed at achieving the ultimate goal of economic development as a whole – the achievement of sustainable development;
3. a principle of informativeness and timeliness, i.e. a system of indicators that allow to fully reflect the state of the industry and make a forecast for the future;
4. a principle of qualitative homogeneity and quantitative comparability, i.e. when calculating the indicators of efficiency of the economic mechanism for formation and development of intersectoral linkages in sectors of the national economy, all indicators used for calculation should be in units of measurement.

To assess the efficiency of the economic mechanism for formation and development of intersectoral linkages in branches of the national economy [7-8], the authors propose using the concept of "economic rationality" as a generalized qualitative assessment of efficiency of activities aimed at achieving the objective with the existing restrictions and resources, which includes several indicators (including the calculation of production potential) and ends with the calculation of the integral assessment of the socio-economic efficiency of enterprises, which is the comprehensive assessment of the calculated indicators: [9]

\[ Ic = Ed + Ebd + Ec + Eq \]

where: Ed is an integral estimate of the efficiency of economic development;
Ebd is an integral estimate of the efficiency of business development;
Ec is an integral estimate of production competitiveness;
Eq is an integral estimate of the quality of products (goods).

To assess the efficiency of the economic mechanism for the development of intersectoral linkages in the branches of the national economy, the calculation has been made in several stages.
Table 1 – Assessment of the efficiency of the economic mechanism for the development of intersectoral linkages (on the example of the agribusiness industry)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>Growth rate, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>The share of investment in the agribusiness industry in total investment, %</td>
<td>2.1</td>
<td>2.2</td>
<td>1.6</td>
<td>1.9</td>
<td>-0.2 pp</td>
</tr>
<tr>
<td>The coefficient of the tax burden of agricultural producers</td>
<td>3.2</td>
<td>3.3</td>
<td>3.3</td>
<td>3.5</td>
<td>109.38</td>
</tr>
<tr>
<td>Consolidated budget expenditures on agriculture per 1 ruble of agricultural output, rubles</td>
<td>0.157</td>
<td>0.131</td>
<td>0.137</td>
<td>0.135</td>
<td>85.99</td>
</tr>
<tr>
<td>An increase in the volume of production in an enterprise resulting from the use of the economic mechanism tools, %</td>
<td>2.3</td>
<td>2.2</td>
<td>2.1</td>
<td>2.1</td>
<td>-0.2 pp</td>
</tr>
<tr>
<td>The result of production activities (RPA) in the form of the number of new types of products resulting from the use of tools of the economic mechanism</td>
<td>11</td>
<td>10</td>
<td>10</td>
<td>5</td>
<td>45.45</td>
</tr>
<tr>
<td>Cost efficiency (E) on the implementation of measures of the economic mechanism</td>
<td>0.37</td>
<td>0.33</td>
<td>0.30</td>
<td>0.31</td>
<td>83.78</td>
</tr>
</tbody>
</table>

Thus, the established intersectoral linkages in the agribusiness industry are ineffective. This is evidenced by the negative dynamics of indicators assessing the efficiency of the economic mechanism for the development of intersectoral linkages in the industry: a decrease in the result of production activities in the form of the number of new types of products resulting from the use of tools of the economic mechanism by 45.45%; as well as the decrease in cost efficiency of implementing the measures of the economic mechanism by 16.22%.

3. RESULTS

Thus, intersectoral linkages emerge and develop as a consequence of the need to promote mutual interests in the branches of the national economy both on the part of a primary producer, who needs a stable sales channel, on the part of processing enterprises that are interested in full capacity utilization, and on the part of the market that is interested in the uninterrupted supply of finished products of the required quality. The basis of Intersectoral linkages is the equivalence of exchange, the criterion of which is the exchange of equivalent values and ensuring the same level of production profitability.

During the study, the authors concluded that it is impossible to form an economic mechanism for the development of intersectoral linkages isolated from the intersectoral balance methodology. In this regard, the necessity of developing a methodology for the formation of intersectoral balance in the branches of the national economy as a whole and in the agribusiness industry – in particular, which accounts for both the statistical information of the national accounts system and the existing system of direct cost coefficients. The conclusion is made based on the results obtained in the study of the efficiency of intersectoral linkages and the efficiency of their development mechanism. The data of intersectoral balance do not allow identifying food and non-food parts in final industrial products of each specific sub-complex. Therefore, for the purpose of an intersectoral analysis, the authors chose final products of the industry as an object of study. The validity of applying the Intersectoral balance methodology is explained by the fact that only in the agribusiness industry an indicator of net output adequately reflects the full cost created in a particular industry. It should be noted that the application of the intersectoral balance methodology requires accounting for the amount of value added (its increment) to the product cost which comes from other sectors of the industry.
complex. The methodological approach to the use of intersectoral balance as a tool for analyzing the intersectoral interaction in the structure of the sub-complex allowed to present the calculation of intersectoral indicators for the branches of the agribusiness industry that are absent in official statistical data. The disadvantage is the impossibility of accurate forecasting and specification of such elements as the final consumption since these data are not available in the national accounts system.

4. CONCLUSION
Thus, the equivalence of intersectoral exchange is ensured by setting a price based on the law of value, justified by A. Smith, who believed that the cost of products should be determined by the average level of labor input. In this regard, it should be noted that one of the forms of equivalence of intersectoral exchange is price parity in the branches of the national economy, which means the equality of price relations of production with its partners. The formation of economical prices for equipment and industrial raw materials is a necessary condition for ensuring stable development of the intersectoral exchange.

As a result of the study, the authors concluded that it is necessary to form a unified methodological approach to assessing the economic mechanism for formation and development of the intersectoral linkages that would account for the interests of all market participants – from machinery and equipment manufacturers to logistics and distribution of finished products. The presented methodological approach to assessing the efficiency of the economic mechanism for formation and development of the intersectoral linkages is based not only on the principles of formation of intersectoral linkages but also on the criteria and indicators of assessing their efficiency. Besides, this methodological approach is inextricably linked with the intersectoral balance methodology, which makes allows for more accurate and specific evaluation of the final product of each branch of the national economy, as well as to consider all factors affecting the possibility of expanding intersectoral linkages.

REFERENCES


