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APPROACH TO CATEGORIES AGGREGATION IN INDUSTRIES STRUCTURE FORMATION

ABSTRACT:

This article focuses on contemporary problems of definition and delineations industries and industry aggregations. The research results point out that there are different industry structures which are covering tourism, accommodation and restaurant services sector. For these multifaceted industries the identifiable attributes that contribute to a formation of the industry structure are strong varied in their importance depending on an across national locations, product mix and target market segments. In the article the main conceptual principles of forming industry groups are analyzed and represented in the form of a data model (Methodological framework). Using of this model could better explain how conceptual principles can be used to forming industry groups or adapted for national purposes. The research results shows that the basis for grouping industries and inter-industry groups is the integration and agglomeration of production units by the nature of goods produced and services provided, taking into account the common features and relationships with sources of demand and markets for products. At the present stage of development the highest-level categories reflect the conceptual division of the economy into industries. The researches result shows that there is a change of the industries structure, through appearing new industries. It is suggested to provide the strictly and narrowly definition of new economic industries and industries agglomerations.

INTRODUCTION.

Services sector constitutes the engine of economic growth. The rise has occurred during the 20th century and today it is the key sector of the national economy in most developed and developing countries. Services account for 70 % of GDP and employment in most states [1; 2].

There are different approaches to represent an industry structure of services sector. According to the EU's Services Directive (0123/2006) services sector include: distributive trades, construction and crafts services, tourism, travel agents and leisure services, equipment installation, maintenance and information society services, accommodation and food services, training and

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education services, rental, leasing and real estate services, household support services et.al. [1; 2]. There are so strong links between some of them that they often conglomerate separate groups, which are been considered to be independent industries (in particular, tourism, hospitality et.al.). At the same time, the hotel and restaurant industry are treated both separate industries and components of tourism or hospitality.

International organizations recognize also a change of the industries structure, through appearing new industries. The new industries continue to come into being and this change continues to flow. So, the current structure of the classification of the service sector needs to be provided a relevance reflecting of the economic changes. According to the ISIC it is necessary to provide the strictly and narrowly definition of the economic industries [3].

Thus, scientists point out the problem of a formation of industry structure of services sector. This industry structure could be used to represents a standard format of detailed information about the state of an economy. This information is used increasingly for different purposes, such as in economic analysis, decision-taking and policy-making, for administrative purposes (in tax collection, issuing of business licenses etc).

Tourism is recognized as a link between different economic sectors (e.g. transport, accommodation, food and another service sectors). According to UN WTO Secretary-General Taleb Rifai (2017) "tourism is a major economic engine and employment generator, contributing to the improvement of livelihoods of millions of people around the world" [4]. According to the United Nations specialized agency – The World Tourism Organization (UNWTO) "international tourism (travel and passenger transport) accounts for 29% of the world's services exports and 7% of overall exports of goods and services"; "growth in tourism exports (+4%) was higher than growth in merchandise exports (+3%) in 2018" [5]. But despite the long history of study of tourism, many of the problems is still not resolved that is generated by the industry structure asymmetry and incomplete information.

The aim of this paper is to study and identify methodological approach to formation (definition and delineation) alternative industry aggregations of tourism, accommodation and restaurant services sector. This representation of detailed information provides new opportunities for economic development at world, country and enterprise level in the context of modern trends.

CONTEMPORARY SCIENTIFIC APPROACHES TO INDUSTRIES DELINEATION OF TOURISM, ACCOMMODATION AND RESTAURANT SERVICES SECTOR.

There are different academic approaches to definition and delineation of services sectors that cover tourism, accommodation and restaurant area. The accommodation industry is one of the most vigorous sectors of the tourism [4; 5]. According to H. Tsai, H. Song & Kevin K. F. Wong [6] the hotel industry benefits also from a destination's economic growth and entertainment facilities development, which draw both business and leisure travelers and help create demand for hotel rooms. The authors point out that the hotel industry's competitiveness is determined by many factors: input, process, output, and outcome [6]. In addition, "productivity is always a top priority for hotel operators" [6]. At the same time, the hotel industry is tried as a key element within the system of tourism [7].

Some of scientists consider the tourist industry as a set of different subjects of tourist activity (hotels, campsites, motels, boarding houses, catering enterprises, transport, cultural and sports institutions, etc.), that provide or promote recreational needs of a traveling person at regardless of their aim [8]. This complex of enterprises is formed by accommodation establishments, transport and tourist servicing sphere. So, the tourist industry is recognized as a system (Sakovska O.M. [8]). Tourist industry can be considered not only as a set of enterprises providing tourist services and producing tourist goods, but also as a branch of country's economy.

On the other hand, there are variety modern alliances among the segments providing tourist services. One of them is hospitality industry. It is considered also as a set of strategic alliances among the various enterprises (hotels, travel agents, card companies, cruise companies, etc. [6]) like tourism industry. There are many similar industries and industries aggregations, in particular, "meeting industry", "experience industry", "recreation industry" [6; 9; 10] et.al.

There are the growing number of both the new industries and the new segments of the services sector (the aggregations of the industries). Some of them make a substantial economic impact that is worldwide recognized. In particular, the Bureau of Economic Analysis (BEA) estimated the importance of a contribution of the outdoor recreation industry to the U.S. economy [11]. BEA recognized this industry structure changing, so it explores new information continually to provide a better understanding of the economy [11]. Some of the topics they are working on are divided according to Satellite Accounts. A part of them cover tourism, accommodation and restaurant sector. In particular, BEA

explores the industry that supports the new Outdoor Recreation Satellite Account. It represents economic contributions of boating and biking, camping and climbing, hunting and hiking and similar outdoor recreation activities. At the same time, BEA continues to measure the Travel and Tourism Satellite Account and the Arts and Cultural Production Satellite Account. The last measures the economic contributions of a wide range of arts and cultural activities (music groups, dance troupes, and theaters; natural parks, zoos, and all sorts of museums; interior design, graphic design, and photography; and much more). Thus, there are strong links between some parts of their activities [11]. BEA is digging deeper into the data on some of these activities to help understand the role of particular industry in the economy.

Different international organizations recognize a change of the industries structure, through appearing new industries that have emerged over the past 20 years [3]. This change continues to flow. The new industries continue to come into being. According to Mukhisa Kituyi Secretary-General of UNCTAD the changes in the economy and development depend on new types of activities and sectors [12]. The scientists hope that these new industries transform into a powerful force for economic development, education, and wellness.

In practice, the industry classification structure is used for providing a continuing flow of information that is indispensable for the monitoring, analysis and evaluation of the performance of an economy over time. It represents "a standard format to organize detailed information about the state of an economy according to economic principles and perceptions" [3]. But in multifaceted industries like tourism and hospitality, the identifiable attributes that contribute to a formation of the industry structure are strong varied in their importance depending on an across national locations, product mix and target market segments. As results, there are different industry classification structures which are covering this sector. Some researchers have attempted to assign "appropriate" validity to different attributes of industry definition and delineation based on differences in a geographical location, an economic evaluation, technologies and activities et.al. Nonetheless, it is noteworthy that there is still no universal industry structure of services sector which represents information carefully which would cover tourism, accommodation and restaurant services.

Moreover, in the study of economic phenomena, taking all elements into account simultaneously is not always possible. It is necessary that elements are chosen and grouped according to particular characteristics according to the certain purposes of analysis [3]. Thus, all economic phenomena require systematic classification. So, the current structure of the classification of the

service sector needs to be provided a relevance enhancing and better reflecting of the economic changes. For this purpose, we make a separate analyze of methodological base of industry structure of the set International classifications.

GENERAL APPROACH TO PRINCIPLES AND CRITERIA OF DEFINITION AND DELINEATION OF INDUSTRY CATEGORIES.

There are several classifications of economic activities which represent the industry structure. The key classification of this system is the International Standard Industrial Classification of All Economic Activities (ISIC) [3]. It consists of a coherent and consistent classification structure of economic activities. ISIC is a classification according to kind of productive activity and not a classification of goods and services [3], but the scope of ISIC in general covers productive activities, i.e., economic activities within the production boundary of the System of National Accounts (SNA) [3]. So, ISIC is increasingly used for the monitoring, analysis and evaluation of the performance of an economy, for administrative purposes, such as in tax collection, issuing of business licenses etc. [3]. Moreover, its use extends to data collection, tabulation, analysis and presentation for a variety of social and environmental applications, such as the link between the economy, education and health sectors and the environment at the national and international levels [3]. The information is increasingly used for providing conditions to forecasting of development of both industries and establishments. In Europe the statistics data collection is provided according to NACE (Statistical classification of economic activities in the European Community [13]) which is based on ISIC.

The classification structure of economic activities, which is represented ISIC, based on a set of internationally agreed concepts, definitions and principles [3]. The structure categories of ISIC are widely recognized at the different international and national levels [3]. The main ISIC aims are to present this set of activity categories in such a way that entities can be classified according to the economic activity they carry out. "Defining the categories of ISIC is as much as possible linked with the way the economic process is organized in units and the way in which this process is described in economic statistics "[3]. The units (such as establishments or enterprises) are grouped with the others to form industries according to the characteristic of the economic activity which is carried out by a unit (the type of production in which they mainly engages) [3].

The narrowly defined economic activities are referred to "industries" [3]. An industry is defined "as the set of all production units engaged primarily in the same or similar kinds of productive activity" [3]. But activity of units in tourism,



accommodation and restaurant sectors are different by input and output, process and technologies. Thus, the units of these all sectors can't form one industry.

We have studied carefully the main conceptual principles of forming industry groups which are represented in ISEC. A result (as Methodological framework) is presented in the form of a data model (Figure 1). The model is built using business modeling tools – Platform ARIS (ARchitecture of Integrated Information Systems). It describes the underlying principles that are used in constructing the classification. Using of this model could better explain how conceptual principles can be used to forming industry groups or adapted for national purposes.

Summarizing the results of the analysis of sectoral structure formation it should be noted the main principles and criteria that have been used to define and delineate the categories [3; 13]:

- the inputs of goods, services and factors of production;
- the process and technology of production;
- the characteristics of outputs;
- the use to which the outputs are put.

According to the methodology of ISEC “at the most detailed level of the classification, preference has been given to the process and technology of production to define individual classes, particularly in the classes related to services” [3]. At the same time, “at higher levels, characteristics of outputs and the use to which outputs are put become more important to create analytically useful aggregation categories” [3].

The higher-level categories have become an accepted way of subdividing the overall economy into useful coherent industries [3]. The data model “Methodological framework” (Figure 1) provides a set of principles which could help both define these alternative aggregations and determine their level in the structure.

CONCLUSION.

The above research results point out that there are different industry structures which are covering tourism, accommodation and restaurant services sector. For these multifaceted industries the identifiable attributes that contribute to a formation of the industry structure are strong varied in their importance depending on an across national locations, product mix and target market segments. Despite the long history of study of this sector (tourism, accommodation and restaurant services) many of the problems is still not

resolved that is generated by the industry structure asymmetry and incomplete information. So, the scientists point out the problem of a formation of industry structure of services sector.

The main conceptual principles of forming industry groups are analyzed and represented in the form of a data model (Methodological framework). Using of this model could better explain how conceptual principles can be used to forming industry groups or adapted for national purposes. The research results shows that the basis for grouping industries and inter-industry groups is the integration and agglomeration of production units by the nature of goods produced and services provided, taking into account the common features and relationships with sources of demand and markets for products. At the present stage of development the highest-level categories reflect the conceptual division of the economy into industries.

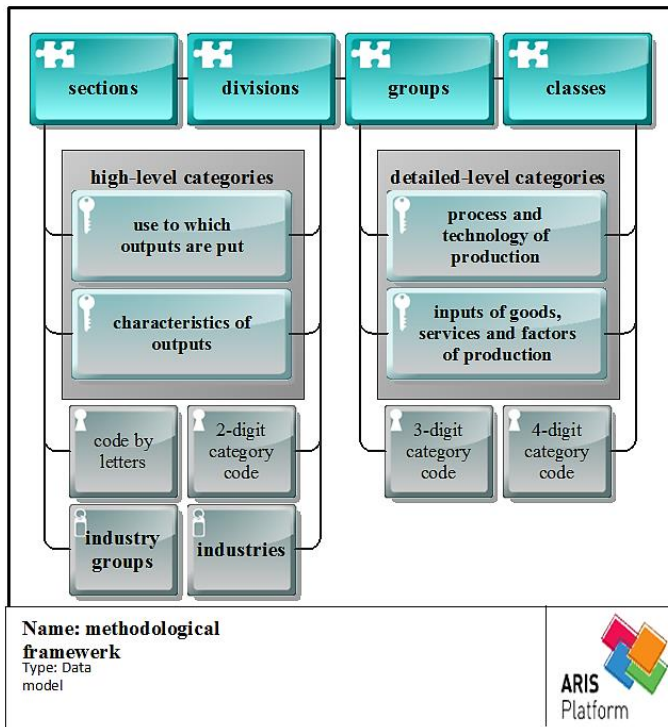


Fig. 1. Methodological framework of definition and delineation of structure categories

Source: elaboration based on ISIC [3] and NACE [13]

Because new groupings cannot be built into the existing standard structure, additional alternative aggregations can be created to serve special data needs and provide a standard way of presenting new information.

At the same time, it is necessary point out that a strict application of these criteria is not proven useful for some purposes. Because unambiguously applying of internationally accepted methodological principles, causes a loss of value for national capabilities. This is due to national differences in geographical and historical conditions, the level of industrial development and the organization of economic activity. A strict application of uniform rules reduces possibility to provide the basis for the competitiveness of national enterprises.

The researches result shows that there is a change of the industries structure, through appearing new industries. So, it is necessary to provide the strictly and narrowly definition of new economic industries and industries agglomerations. The current structure of the classification of the service sector needs to be provided a relevance reflecting of this change. The solution of this problem will provide the background to effective forecasting of the changing external conditions of the activities of the establishments in tourism, accommodation and restaurant services sector.

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