International Journal of Engineering & Technology, 7 (4.3) (2018) 497-501

International Journal of Engineering & Technology

Website: www.sciencepubco.com/index.php/IJET

Research paper

Modern Approaches to Ensuring the Competitiveness of Railway Transport in the Context of the European Integration

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Abstract

The article provides a comparative analysis of the place of Ukraine in the international rankings such as GCI, Doing business, IEF, SPI, CPI. The necessity of transformation and socio-economic features and indicators of development of the existing economic model of Ukraine are researched. The main reasons for the low level of management quality of the enterprises are identified and analyzed. The world experience of the structure of elements and implementation of organizational and economic mechanism of managing the competitiveness of enterprises of individual countries with the most successful indicators of economic development is researched. The main problems of the railway industry and the necessity of continuous improvement of the enterprise competitiveness management system are determined. The article outlines the main directions of increasing the competitiveness and development of rail transport.

Keywords: *Competitiveness; European integration; organizational and economic mechanism of enterprise competitiveness management; railway industry railway transport.*

1. Introduction

In a contradictory process of transformation of the structure of the world economy, Ukraine's priority is to ensure national competitiveness on the world markets due to dynamic integration processes at the macro and micro level, high competition in the struggle for world markets, increasing globalization tendencies, increasing uncertainty and information revolution and demands from the domestic enterprises the continuous improvement of the enterprise management system, the development of new progress these control mechanisms, introduction of modern innovative technologies as a major driver of economic development.
In such conditions, new requirements for the formation of a competitive enterprise management system are being put forward, the effectiveness of which must be ensured by continuous improvement of its internal components and the ability to adapt it to modern conditions of management.

2. Literature Survey

Theoretical and methodological aspects of managing the competitiveness of the enterprise and, in particular, the formation and implementation of the organizational and economic mechanism of competitiveness management are reflected in scientific researches of foreign and domestic researchers, such as I. Ansoff, V. Dykan, M. Gelvanovsky, N. Kalicheva, M. Porter, I. Posokhov, M. Tashuta.
In the scientific works of the mentioned authors the essence and structure of the organizational and economic mechanism for managing the competitiveness of the enterprise are determined, the methodology of its formation is developed.
In the monograph by V.L. Dikan "Ensuring the Competitiveness of the Enterprise" was investigated "ways of ensuring the competitiveness of the enterprise" [4].
In the monograph by V.L. Dikan "Improving the Efficiency of the Functioning of Natural Monopolies in Market Conditions (Based on Materials of Railway Transport)", the author investigates the main "directions of increasing the efficiency of functioning of natural monopolies in the market conditions by example of rail transport" [5].
N.E. Kalicheva in the publication "Improving Competitiveness of Railway Transport at the expense of streamlining the transportation process" investigates "the problems of rail transport and the issue of increasing the competitiveness of rail transport by streamlining the transportation process" [7].
I.M. Posokhov in the publication "Modern approaches to ensuring the competitiveness of rail transport in the conditions of European integration" states that “integration of Ukraine into the European Union requires the development of the transport system of Ukraine in accordance with the high requirements of the quality of the market of transport services of the EU" and analyzes "the main financial- the economic indicators of PJSC "Ukrzaliznytsya" for January-February 2018 "[15].
M.P. Tashuta and A. Braykovskaya in the article "Areas of increasing the competitiveness of railroad tank trucks" "substantiate the necessity of accelerating the process of reforming rail transport and offer a number of measures for increasing the competitiveness of domestic operator companies" [19].
However, in today's conditions, the strengthening of world competition processes for sales markets, the problem of improving the organizational and economic mechanism of managing the competitiveness of the enterprise, including that of the railway industry, becomes particularly relevant and requires further research.

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3. Main Part

The country's economic policy is effective and competitive only when it finds a balance between the needs of world markets and the social needs of its country, which are determined by the historically established system of values and traditions [1; 22].

Table 1 provides a comparative analysis of Ukraine's place in international rankings (The Global Competitiveness Index, Index of Economic Freedom, The Corruption Perceptions Index, Doing Business) that directly or indirectly assess the business climate, the extent of promoting business development, activity of business community, the level of development of the competitive environment, investment and innovation opportunities.

Table 1: Country Positions in Rankings GCI, Doing business, IEF, SPI, CPI

Country	Rank GCI, 2017/2018		Doing business 2018	GII, 2017	IEF, 2016	CPI, 2017
	GCI	Goods market efficiency				
Switzerland	1 (5.9)	6 (5.5)	33	1	4	3
USA	2 (5.9)	7 (5.47)	6	4	17	16
Singapore	3 (5.7)	1 (5.8)	2	7	2	6
Netherlands	4 (5.7)	5 (5.5)	32	3	15	8
Germany	5 (5.7)	11 (5.3)	20	9	26	12
Hong Kong	6 (5.5)	2 (5.74)	5	16	4	13
Sweden	7 (5.5)	14 (5.23)	10	2	19	6
United Kingdom	8 (5.5)	10 (5.29)	7	5	12	8
Japan	9 (5.5)	13 (5.24)	32	14	40	20
Finland	10 (5.5)	17 (5.2)	13	8	24	3
…..	…..					
Ukraine	**81 (4.11)**	**101 (4.04)**	**76**	**50**	**166**	**130**

Compiled by the authors on the basis of sources [22, 23; 24; 25; 26]

Ukraine ranks 81st out of 138 countries in the national competitiveness rating, rising by 4 positions in comparison with the rating of last year, and belongs to the group of transition countries from "extensive development - to effective". Despite the fact that such a state of the country determines the same degree of importance of the development of components of competitiveness as the sub-index "Basic Requirements" and the sub-index "Efficiency Driver", the growth of which depends on investments, but accelerated growth of competitiveness is ensured by the use of the latest world technologies at domestic enterprises [12; 15; 21; 22].

The insufficiently high positions of Ukraine in the vast majority of the world's ratings testify to the existence of a number of internal and external problems, the main of which are: unstable economic development; the conflict in eastern Ukraine, which led to aggravation of structural problems and imbalances; insufficiently effective macroeconomic policy; low level of use of modern financial mechanisms, and also insufficient level of state support for innovative business.

The current transitional socio-economic model of Ukraine is characterized by a combination of command-administrative and market-based methods of public administration.

The presence of elements of different models in the national economic model of a number of scientists [2; 14] are regarded as a positive characteristic, provided that these parts function as a single unit to achieve a common goal that is in the interests of the population. However, the constituent elements of the socio-economic model of Ukraine are developing in different directions, their institutional forms are characterized by imperfections and insufficient complementarity, which leads to institutional tension between elements of different models of competitiveness. This is confirmed by the crisis, the decline of Ukraine's competitiveness rank, reflected in the Global Competitiveness Rating (GCI) rating and other world rankings.

We will examine the need for transformation and socio-economic peculiarities and indicators of the development of the existing economic model of Ukraine:

- by 2018, the size of the state budget deficit stipulated by the legislation of Ukraine is 80.6 billion UAH. [3; 10];
- according to official data at December 31, 2012, the total amount of the state debt has increased by UAH 2 141 674.4 million, compared with 2016, with the critical amount of gross external debt increased by 10.9% to 1,374,995.5 million. UAH) [10];
- the contraction of the domestic market as a result of falling demand and consumption of goods is associated with a decrease in the welfare of the population, and with the reduction of the population of Ukraine from 52 million (1989-1990) to 42 million people as of 01.01.18 [8];
- in Ukraine there is a negative foreign trade balance (according to the data for 2017 - USD 2625.4 million) due to the insufficient level of competitiveness of Ukrainian goods, the dependence of the Ukrainian economy on imported gas and the need to purchase a currency for its payment; the urge to improve the conditions of foreign economic activity [9; 11];
- depreciation of the national currency in relation to freely convertible currencies (since 1996, the hryvnia depreciated by approximately 15 times from 1.75/$ at the time of its introduction (September 2, 1996) to $ 26.39/ $ 15.06.2018) that is one of the main criteria for the low efficiency of the modern economic model of the country [11];
- modern scientific and technological backwardness of industry and infrastructure. Thus, according to the Institute of Economics and Forecasting of the National Academy of Sciences of Ukraine, in the country about 95% of the industry is represented by enterprises of the third and fourth technological processes. The high level of depreciation of fixed assets of railways is threatening, which is almost 99% for certain types, which was confirmed by the State Property Fund of Ukraine [16].

On the basis of this it can be concluded that the modern socio-economic model of Ukraine has actually exhausted extensive developmental factors, does not always reflect the interests of medium and small businesses, which is unacceptable for the competitive development of the country in the context of Ukraine's integration into the European and world economies.

Modern domestic enterprises, mainly have a low level of competitiveness compared with foreign competitors. Among the main reasons we can distinguish: the use of non-up-to-date technologies that make production of low quality products; high level of depreciation of fixed assets, high energy intensity and high production costs; insufficient level of innovation activity of enterprises; not always effective management of enterprises.

We identified and analyzed the main causes of low quality management of domestic enterprises [6, 17]:

1) low quality management, connected with the ineffectiveness of organization of management process at the enterprise;
2) imperfection of management, due to the influence of macro-factors of the domestic system of management.

The first group of causes includes the following issues:

- inadequate understanding of modern processes in the field of enterprise management;
- formal introduction of integrated management systems in the enterprises that meet the world standards (ISO 9000 (quality), ISO 14000 (ecology), ISO 22000 (product safety), OHSAS 18000 (industrial safety), etc.);
- low level of business culture of organization and business perfection;
- imperfection of information technologies in system management;
- insufficient motivation of the personnel in the process of improving the overall organizational efficiency of the business.
- lack of a strategy for ensuring competitiveness in a large number of domestic enterprises.

The second group of problems of managing the competitiveness of the enterprise is associated with the negative impact of macro-factors in the business environment. The national business climate is most influenced by the effectiveness of business management.

In Ukraine, after independence, an aggressive business climate has emerged which does not contribute to the development of a competitive environment.

Also, a significant factor that negatively affects the competitiveness of domestic enterprises is the low level of competition development and inefficiency of the competitive environment. Thus, according to the Antimonopoly Committee of Ukraine, in 2017 there was a tendency to increase competition from foreign companies on the basis of reducing the influence of internal competition. The reduction of the role of internal competition in 2017 is due to the lack of business activity in many types of economic activity, the aggravation of consumer competition between enterprises that continued to develop in the market during the recession.

Creating a favorable business climate in Ukraine, while a systematic improvement of management at national enterprises is not providing, will aggravate the loss of the domestic market for Ukrainian enterprises due to the higher level of competitiveness of foreign companies' goods.

Each country, choosing a model of economic development, depends on the stage of its development, seeks to use its comparative and competitive advantages in various fields. The country's economic policy is effective and competitive only when it finds a balance between the requirements of world markets and the social needs of its own country, which are determined by the historically established system of values and traditions [4; 5; 13; 20].

Accelerating the processes of Ukraine's integration into the European and world economy requires the study and synthesis of the experience of highly developed countries - leaders of the world's competitiveness in shaping their own approaches to building effective national models and ensuring a high level of competitiveness in the global economy.

We carry out the research of foreign experience of management by the competitiveness of enterprises. Advanced foreign experience shows that the companies of the most developed countries of the world, in the competition for the consumer, are forced to continuously and systematically improve themself, so not to be pushed out of the market.

For example, Switzerland is recognized as the most competitive country in the world for 7 successive years due to its global leadership in such high-tech industries as pharmacology, chemistry, engineering, and financial services. Competitive advantages of Switzerland are: developed infrastructure, high level of technological innovation in the country, protection of intellectual property rights, high culture of doing business of business excellence, favorable institutional environment, efficient markets. Swiss companies spend a lot of money on research and development, business activity is based on quality institutions of power.

The main features of the organizational and economic mechanism for managing the competitiveness of enterprises in Switzerland are the follows: the focus on the production of the highest-quality products; the highest level of innovation in products and all components of the production process; orientation on the exclusivity of goods (such products are no longer produced by anyone); continuous system improvement of enterprise management; full coverage of a comprehensive system for managing the competitiveness of enterprises throughout the enterprise; the enterprise competitiveness management system is an element of the cluster's competitiveness management system. To current date, there are more than 20 large clusters in Switzerland, and almost every one represents a separate ha-lus (pharmacology, clock manufacturing, production of medical equipment and precision instruments, finance and trade, tourism, high-tech) [17].

The Swiss entrepreneurial culture is different from the entrepreneurial culture of the countries which surrounding Switzerland and is a symbiosis of the styles and management methods adopted in Western Europe.

The basic fundamental principles of the Swiss business culture are:

- a special cult of labor, the content of which is the realization of social and moral debt, far beyond the ultimate material and material value and outcome;
- a common vision of the development of the enterprise by labor cooperatives.

It is also desirable to note that the enterprises of Switzerland are characterized by dualism:

- the hierarchy of the vertical organizational structure, along with the broad powers and autonomy of their subsections;
- ignoring the formal participation process in making decisions and, at the same time, conducting preliminary consultations and seeking consensus at all stages of the decision-making process;
- availability of decision-making centers and, at the same time, decentralization of structural subdivisions;
- a combination of inflexible formal and flexible informal structures;
- waiting for initiatives from employees, loyalty to staff;
- low level of transparency and at the same time high level of trust to proven partners;
- conservatism and rapid reaction to changes.

The main principle of the activities of all components of the organizational and economic mechanism for managing the competitiveness of Swiss enterprises is the control of any risks (enterprises of Switzerland in obligatory order, defined by law, must have strategic reserves - reserve assets in the amount of 20% of expenses of the past period) .

The United States holds leading positions in the global ranking of competitiveness and confirms its status as one of the most competitive countries in the world. The success of the United States is primarily due to the fact that the country has a highly competitive business environment and efficient markets, a high susceptibility to technological innovation, based on the system of leading world universities and research centers, high labor mobility [6].

Competitiveness of industrial enterprises of the US economy is largely ensured by measures in the following areas: increasing the efficiency of production through the promotion of development and the widespread introduction of innovations; state support of strategically important enterprises; maximum support of national enterprises in foreign markets.

In the United States, the Presidential Commission on Industrial Competitiveness was founded in 1984, which considers the problem of increasing competitiveness at the micro and macro levels as a priority. In terms of managing enterprise competitiveness, the United States has also created a number of specialized programs to improve the competitiveness of enterprises, which form the corporate principles of managing competitiveness through the implementation of programs to increase the competitiveness of enterprise products and personal motivation in these workers; determination of the level of additional costs for increasing the competitiveness of products; growth of production, innovation and financial and economic potential of the enterprise.

The organizational and economic mechanism for managing the competitiveness of American enterprises is a rigidly organized electronic-formalized system, which was formed in the process of concentration and centralization under the influence of scientific and technological progress [6]. It should be noted that the control and analysis of competitiveness occurs at all stages of the product life cycle and is carried out by the divisions of the enterprise responsible for ensuring its competitiveness.

We can also note that the competitive advantages of American enterprises are quite diverse and the actions of the organizational and economic mechanism of management of the company are aimed at the synergistic effect of different types of competitive advantages. Thus, the resource advantages are combined with investment, taking into account the mobility of the industry capital, the life cycle of the product. An important role in the implementation of innovative competitive advantages is played by

the domestic market, creating opportunities for the formation and operation of international competitive advantages of a new type related to the movement of human resources. In addition we note that American companies are aiming to maximize profits unlike Swiss companies, where the main strategic goal is to minimize risks.

Integration of Ukraine into the European Union requires the development of the transport system of Ukraine in accordance with high requirements of the quality of the market of transport services of the EU. Rail transport is part of a transport system that stimulates economic growth and the development of international trade by providing transport and economic ties. Rail transport ranks first in terms of cargo turnover and passenger flows and is the main mode of transport that provides international relations and export potential of Ukraine. In our time, the implementation of measures for the demonopolization and reformation of rail transport (according to the EU directives) is extremely relevant, on which the effective development of the transport system of Ukraine depends.

In 2017 was elaborated a strategy for the development of PJSC "Ukrzaliznytsya" for 2017-2021, which identified the main problems of the industry: critical depreciation of fixed assets (27% of which are trunk lines with overdue capital repairs, 78% of which are road vehicles with over normative service life, 67 % is the wear of traction substations, 84% is the wear of the main electric locomotive park, 99% is the wear of the main locomotive park,> 90% is the depreciation of the freight wagon fleet and 87% of the passenger car fleet), insufficient motivation of staff and productive labor, shortage of suitable staff. The authors may add to the above problems insufficient level of financing and insufficient level of investment attractiveness of the industry, insufficient level of service, informatization, and use of non-modern technologies.

Financial and economic indicators of PJSC "Ukrzaliznytsya" in January-February 2018 continue to demonstrate the positive dynamics of the company's operations. According to the operational data, Ukrzaliznytsia received a profit of UAH 19.9 mln. Revenues from transportation amounted to 12 billion UAH, which is more than the corresponding last year's figure of 1.3 billion UAH. or 12.2%. In the 2 months of this year, cargo turnover increased by 1.6% from the planned indicator, and passenger turnover by 5.2% to the corresponding indicator of the last year. The positive dynamics of the financial performance of Ukrzaliznytsya in the first months of 2018 was achieved due to teamwork, constructive customer relations and government support for the industry. One of the strategic tasks for the industry is capital investment in the renewal of fixed assets. During 2 months of 2018, almost UAH 1.7 bln was absorbed at its own expense. of capital investments, which is 2.5 times more than in the corresponding period of 2017. In the three months of 2018 PJSC "Ukrzaliznitsa" has already built and purchased 1,230 freight wagons, of which 805 were built on their own capacities, and the rest - purchased from producers, exceeding 6 times the figure in 2017. It is planned by the end of 2018 – to add more than 7 thousand new freight wagons to the existing fleet of railways, build 3600 and purchase 3450, of which 3 thousand – for investors' money. [1; 15].

The article outlines the main directions of increasing the competitiveness and development of rail transport, namely: increasing the investment attractiveness of the railway industry for investors; the introduction of state-of-the-art rail technology management technologies using budgeting and key performance indicators (KPIs); introduction of risk management of PJSC "Ukrzaliznytsya", construction of a risk management system and creation of a department (department) for risk management; introduction of an innovative model of development of the railway industry, which will increase the investment attractiveness of the industry; increase in the level of motivation of PJSC "Ukrzaliznytsya" personnel; the development of international tandem corridors and further European integration of the domestic railway industry to the transport system of the EU countries; scientifically grounded tariff policy; introduction of international quality standards and unification of legislation with the countries of the European Union; development of high-speed railway system; use of favorable geographical position of Ukraine for the growth of transit traffic.

4. Conclusions

A comparative analysis of Ukraine's place in the international ratings of GCI, Doing business, IEF, SPI, CPI is conducted. The necessity of transformation and socio-economic features and indicators of development of the existing economic model of Ukraine are researched. The main reasons for the low quality of management of domestic enterprises are highlighted and analyzed. The world experience of the structure of the elements and the implementation of the organizational and economic mechanism of managing the competitiveness of enterprises of individual countries with the most successful indicators of economic development is explored. The main problems of the railway industry and the necessity of continuous improvement of the system of competitiveness management of the enterprise are determined. The main directions of increasing the competitiveness and development of rail transport are outlined.

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