

## THE INVESTMENT MODEL FORMATION OF RAILWAY INDUSTRY DEVELOPMENT IN UKRAINE IN THE CONDITIONS OF EUROINTEGRATION

*The authors have studied the contemporary system and features of the railway industry reform in Ukraine and the preconditions for its development in the context of European integration. The main paper objective is to form strategic directions of an investment model for the railway industry development in the context of European integration processes in order to increase the competitiveness of the Ukrainian railway industry and to achieve an increase in its investment attractiveness. The conducted analysis of rail transport productivity with the use of international methods has proved the limited number of indicators of its assessment for Ukraine, which prevents the reliable assessment of the industry investment potential for foreign and domestic investors. The study of the investment attractiveness of the railway industry in the infrastructure section has determined that the development of Ukraine's rail infrastructure nowadays does not correspond to the best indicators of EU leaders and has weak dynamics, which has allowed to assert the low industry investment attractiveness. The authors have proposed the main elements of the investment model for the railway industry development in the conditions of European integration, which will lead to effective integration of the national rail transport system into the world transport space, improve the industry investment attractiveness and competitiveness, and increase the Ukrainian railway infrastructure productivity.*

*JEL: O12; O19; L92; R42*

### Introduction

The advancement of the country's social and economic development and its competitiveness is conditioned by the main and infrastructural sectors' efficient functioning, which is based on investment transformations in compliance with global trends.

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European integration is one of the main priorities of Ukrainian state policy. Ukraine declared its readiness to make every effort to modernize its transport system by signing and ratifying a number of relevant international conventions, as well as being a member of some international organizations, harmonizing domestic norms and standards for the domestic transport operation. Nowadays, there is a number of existing commitments of Ukraine, as well as political and economic initiatives that make it necessary to establish the transport system functioning parameters in compliance with European norms and standards. However, the country transport system, including the railway industry, still does not meet the standards, directives, regulations, norms and requirements of the European Union (EU); there is significant underdevelopment in the legislative and regulatory framework, infrastructure, traction rolling stock, equipment, spectrum and the quality of service.

The current state policy course to achieve economy sustainable development requires the formation of an investment development model, the main subjects of which ought to be active sectors of the economy, one of which is the railway industry in Ukraine.

### **Recent research and publications analysis**

The financial instrument analysis for investing in the sustainable development of the economic sectors and the investment prerequisites for the national economic development are studied in the works of Britchenko, Sitnik, Styopochkina (Sytnyk, 2017; Stepochkyn, 2017). Different aspects of the rail transport investment potential development such as: state regulation of the railway industry, strategic directions for the Ukrainian rail transport development, the railway industry modernization in the context of its reform, are considered by Kirdina (2012), Kucherina (2013), Reiter (2015), Kulikova, Matvienko (2016), Ejtutis, Karpova, Nikiforuk (Ejtutis, 2014; Ejtutis, 2015), Nikolova (2017), Fitzová (2017), Canots Sánchez, Pastor, Serrano (2012). Taking into account the issues of the Ukrainian railway industry development, the unsatisfactory competitiveness level and transportation market industry attractiveness for investment, uncertainty in methodological approaches to assess the railway industry investment, the matter of an investment model formation for the railway industry development is relevant in the research and practical aspects. Today, there is a need to identify key elements of the investment model for the Ukrainian railway industry development in order to ensure the domestic railway industry competitiveness in terms of European integration.

**The purpose** of the article is to formulate the investment model strategic directions for the railway industry development in the context of European integration processes in order to increase the competitiveness of the Ukrainian railway industry development so as to achieve an increase in its investment attractiveness.

## Results

The reform of rail transport in Ukraine is carried out in accordance with the State target programme for rail transport reform for 2010-2019, which was approved by the Cabinet of Ministers of Ukraine in 2009, as well as amenable plans for the implementation of certain EU legislation in the field of rail transport. The main objective of rail transport reform is to develop competition in the railway transport market and increase the industry efficiency.

The implementation of the state policy on the Ukrainian railway industry development is regulated by the Strategic Plan for the Rail Transport Development for the period up to 2020 (Ministry of Infrastructure of Ukraine, 2015), where the basic principles, strategic directions, goals and objectives of the railway industry development, terms of their implementation, ways and means of goals achievement together with task fulfillment indicators have been formulated.

The railway industry reform is under the influence of European integration processes, which were reflected in the following legislative acts:

- the transport strategy of Ukraine for the period up to 2020, which corresponds to the provisions of the White Paper on Transport by the European Union "Roadmap to a single European transport area-Towards a competitive and resource-efficient transport system" (Railway Transport of Ukraine, 2016);
- the State target program for rail transport reform for 2010-2019 and the Concept of rail transport reform;
- the Strategy for Sustainable Development "Ukraine 2020", approved by the Decree of the President of Ukraine dated January 12<sup>th</sup>, 2015, No. 5/2015, envisaging the implementation of transport infrastructure reform and Ukraine's participation in trans-European networks (Verkhovna Rada of Ukraine, 2015);
- the action plan to the implementation of the Association Agreement for 2014-2017 approved by the Government of Ukraine (Cabinet of Ministers of Ukraine, 2014).

The analysis of the legal system regulating the rail transport operation and related infrastructure, construction, energy, resource, environmental and other issues for their compliance with EU legislation, encourages its implementation so that during the formation and implementation of the state policy development strategy it could be possible to incorporate necessary changes for the industry's effective development and guaranteed investment attraction.

European instruments open new opportunities for Ukraine by offering a large number of ways to achieve the goals and fulfill the commitments undertaken by Ukraine in accordance with the Association Agreement between Ukraine on the one hand, and the European Union, the European Atomic Energy Community and their member states on the other hand. In January 2016, the technical assistance project of the European Union "Support to the Implementation of the Association Agreement and of the National Strategy in the Transport Sector in Ukraine" was launched. The aim of the project is to promote the integration and modernization of the transport sector in Ukraine and certain sub-sectors of

the transport sector in accordance with the obligations under the Association Agreement between Ukraine and the EU, as well as the updating the National Transport Strategy of Ukraine in accordance with EU legislation, standards and requirements, and assistance in its further implementation.

In the first phase of railroad reform (2015-2017), a public joint stock company "Ukrainian Railways" was founded in Ukraine, 100% of which was set in state ownership, as well as enterprises, establishments and organizations of general rail transport, which were reorganized during merger. At the time, there were some procedures as for the public administration redistribution.

The purpose of industry reforming is the formation of organizational and legal and economic conditions for: attracting private and international investment and conducting industry technical and technological modernization; meeting the demand for rail transport services and ensure a significant improvement in the transport services quality for the economy and population; use the transit potential of Ukraine at its full capacity; economy of the nation-wide expenses on rail transportation; acceleration of the Ukraine's transport system integration into European and world transport systems, implementation of the Association Agreement and the World Trade Organization requirements in the state's international transport and economic relations (Ministry of Infrastructures of Ukraine, 2017a).

The key tool for the railway industry reforming is the problem of investing into the country's railway infrastructure, identifying areas for improving the management of railway companies' investment activities, offering conditions for creating favorable industry's investment attractiveness, encouraging investments and ensuring their efficient use. The solution of these issues will allow forming an effective investment model for the railway industry development in the context of the European integration process.

The high level of competition in the railway transport market and increase of the industry infrastructure efficiency are an integral part of the rail industry reform. The activation of cross-border cooperation is proportional to the existing infrastructure, which ought to ensure the widest range of marketing services, consulting and logistics. The process of the railway transport system development is to include innovative methods that provide competitive logistics and transportation, reduce the aggregate costs of the national economy in the interests of society and the state, as well as the effective integration of the national rail transport system into the world transport space (Kucheryna, 2013; Rejter, 2015).

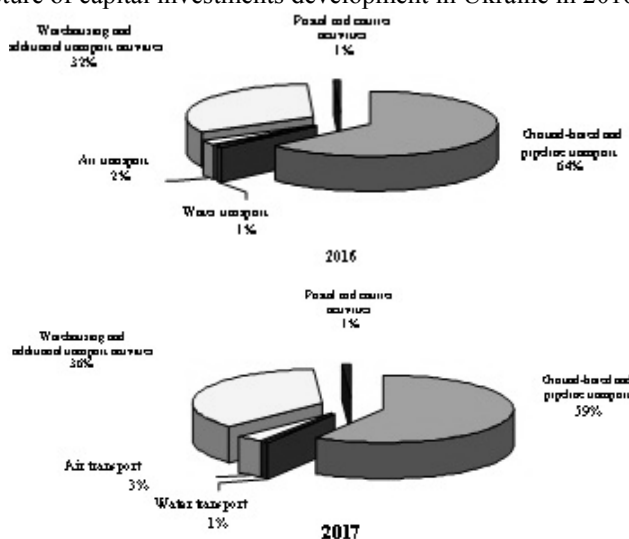
Rail transport occupies a leading position in transport infrastructure; it ought to meet the economy and Ukrainian population's needs in transportation; it is an important factor in ensuring social and economic growth and strengthening the state defense capabilities and foreign economic relations development. According to the size and transportation load the Ukrainian railways rank fourth in Europe after Germany, Poland and France.

The investment activity effectiveness is largely determined by the investment performance level of investment objects, therefore the railway industry investment attractiveness assessment becomes of particular importance.

In the Ukrainian economy, one of the leading industries is rail transport, which serves long-distance and mass transportation of almost all types of products and goods (Figure 1).

Figure 1

Structure of capital investments development in Ukraine in 2016-2017



Source: State Statistics Committee of Ukraine, 2017.

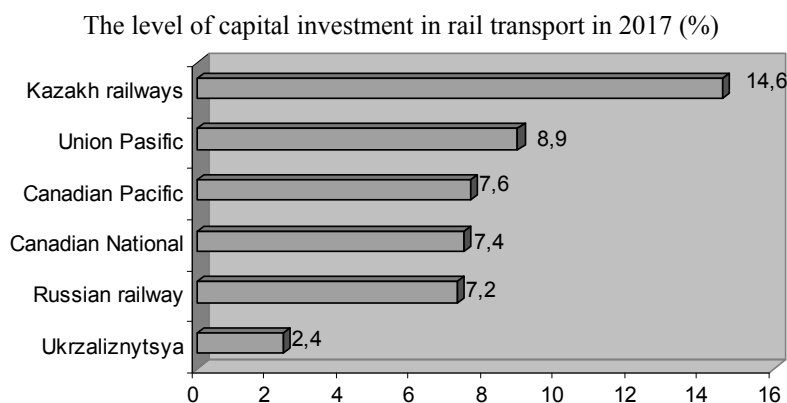
The largest amount of investments among the sectors of the Ukrainian transport system in 2016-2017 is typical for rail transport (64 and 59% respectively). The importance of rail transport lies in the fact that Ukraine is trying to reach to the rapidly developing countries level in Europe and Asia. Rail transport has such advantages as low tariffs, relative safety and regularity of transportation.

In comparison with other railway operators, the level of capital investments is 4 times lower and the required level of capital investments in Ukraine is 27 billion UAH.

The existing problems of domestic railways (wear and tear and obsolescence of traction rolling stock and infrastructure, mismatch of their technical and economic characteristics to modern requirements) prove the need to implement measures in order to increase the Ukrainian railway's productivity.

During the years of Ukraine's independence, the use of available assets without significant upgrading has been carried out on rail public transport, which allowed restraining the transportation tariffs growth and increasing the profitability of the economic sectors, usually the private ones. In recent decades, the renewal of fixed assets has been mainly provided at the expense of own railways funds ("Ukrzaliznytsia" meets the need for capital investments at own expense by only 5-6%) (Ejtutis, 2015).

Figure 2



Source: Ukrzaliznytsya, 2017a.

The priority direction of investment activity is the railway rolling stock renewal (acquisition of new one, modernization and major repairs of the existing rail-park). Long-distance trunk lines with overdue capital repairs in Ukraine amount to 27% of the total length, track equipment with over normative service life comprises 78% of the total (Ukrzaliznytsya, 2017a).

Due to the catastrophic depreciation of rolling stock, exhausted reserves of wagging capacity, low productivity of passenger rolling stock, there is a threat of insecurity of the industrial sectors needs of the economy in the transport of goods, lowering the indicators of country economic development. Accelerating the renovation of the production potential of the railway enterprises in Ukraine on an investment basis will ensure their investment attractiveness, competitive functioning and sustainable development (Ministry of Infrastructure of Ukraine, 2017b).

Currently in Ukraine, the investment appeal of investment objects or industry as a whole is based on the EBITDA (Earnings before Interest, Taxes, Depreciation and Amortization), which shows the company's financial result, excluding the effect of the capital structure (i.e. interest paid on borrowed funds), tax rates and organization depreciation policy. Investors are guided by EBITDA as an indicator of the expected return on their investments, based on their investment returns. The profitability of PJSC "Ukrzaliznitsa" according to EBITDA in 2016 amounted to 31%, in 2017 – 27% (Table 1).

Thus it can be noted that the performance of rail transport activity is gradually decreasing. The determined financial indicators used in Ukraine in order to determine the investment attractiveness of the industry do not allow recreating the real picture of the industry investment potential for foreign and domestic investors.

Table 1

Financial performance of PJSC "Ukrzaliznytsia" according to EBITDA (%)

Financial indexes	2016	2017
Growth of net income (% to the corresponding period of the last year)	(-11)	0.15
EBITDA margin	31	27
Gross profitability	10.6	8.91
Return on equity	0.03	0.05
Return on assets	0.02	0.04
Profitability	0.1	0.15

Source: compiled by authors on the basis of Ukrzaliznytsya, 2017b, Ukrzaliznytsya, 2018a, Ukrzaliznytsya, 2017c.

Therefore, the use of European experience in assessing the industry investment attractiveness and its implementation remains a prerequisite for the investment model formation for the railway industry development in Ukraine.

The rail transport infrastructure, as a natural monopoly type of activity, is the most widely covered object by state regulation. The state, as an economic entity, is interested in increasing the efficiency of the railway infrastructure use. The infrastructure component analysis of the railway industry investment attractiveness provides a general view of the investor on the investment opportunities of the railway industry and the prospects for its development.

The Global Infrastructure Investment Index (GIII) helps analyze countries in terms of investor's attractiveness to infrastructure in the long run (over 5 years). This estimation is based on national statistics and data such as demand for infrastructure, easing while doing business and investment risk. The Global Infrastructure Index analysis identifies the most attractive markets for investors with the strongest growth potential, the safest business environment, well-established legislative and regulatory systems, and stable political conditions which are Singapore, Qatar, the United Arab Emirates, Canada, and Malaysia (Arcadis – Design & Consultancy for natural and built assets, 2016). There is no Calculation of the Global Infrastructure Index for Ukraine.

For a better overall picture of the potential for investing in the country's infrastructure, the main investment risks have been identified: currency devaluation, unstable raw material prices, loss of credit, and global slowdown in economic growth. The four risks of investing in the infrastructure are the most influential in business and the most important ones for securing the business environment. According to Arcadis-Design & Consultancy, the countries with the highest risk of investing in the infrastructure are Arab Emirates, Canada, Malaysia, Norway, and Medium – Qatar; with the lowest Singapore, Sweden, USA (Arcadis – Design & Consultancy for natural and built assets, 2016).

Competitiveness Index (The Global Competitiveness Index – GCI) shows, to date, progress in building an enabling environment for innovation remains the advantage of economies. The Competitiveness Index is based on 12 indicators: institutions, infrastructure, environment, education and training, goods market efficiency, labor market efficiency, financial market development, technological readiness, business, innovation, etc. GCI

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defines competitiveness as the set of institutions, policies, and factors that determine the level of productivity of an economy, which in turn sets the level of prosperity that the country can achieve (World Economic Forum, 2017).

Extensive and efficient infrastructure is critical for ensuring the effective functioning of the economy. Effective modes of transport – Including high-quality roads, railroads, ports, and air transport – enable entrepreneurs to get their goods and services to market in a secure and timely manner and facilitate the movement of workers to the most suitable jobs.

The transport infrastructure efficiency is determined on the basis of overall infrastructure quality, road quality, rail infrastructure quality, port infrastructure quality, air transport infrastructure quality indicators (Table 2).

Table 2

Global Competitiveness Index: Infrastructure dimension 2016-2017

Rating	Country	The general infrastructure quality	The roads quality	The railway infrastructure quality	The port infrastructure quality	The air transport quality
1	Hong Kong SAR	3	3	3	4	3
2	Singapore	2	2	5	2	1
3	Netherlands	5	4	7	1	4
4	United Arab Emirates	4	1	-	3	2
5	Japan	6	5	1	22	24
6	Switzerland	1	7	2	56	8
7	France	8	6	4	23	13
8	Germany	13	16	11	11	12
9	United Kingdom	24	27	19	12	18
10	Korea, Rep.	14	14	9	27	21
...	...	...	...	...	...	...
75	Ukraine	80	134	34	96	103

Source: compiled by authors on the basis of World Economic Forum, 2017.

European countries remain among the most stable, mature and attractive investment markets. Strong deals and long-term experience with foreign direct investment mean that investors have the necessary confidence in these markets, in particular in the countries of Northern Europe, Great Britain, France, Germany and the Netherlands.

According to the general index of infrastructure Ukraine ranks 75<sup>th</sup> place among the countries of the world. Among all the components of Ukraine's infrastructure, the railway industry is the most competitive, despite the worsening competitiveness of Ukraine's rail infrastructure.

The operational network of Ukrainian railways is about 21 thousand km, of which 47.6% are electrified. Over 18,900 man-made structures are used on the network, of which: 7,600



are bridges (267 units are large and 34 units are extracurricular); 96 are road overpasses; 38 are railway tunnels (Ministry of Infrastructure of Ukraine, 2017b).

There are 1,510 separate sections with track development, 46 locomotive and 53 railroad depots, 103 distances, 66 signaling and communication distances, and 42 power supply districts on the railways. At the same time, the crossing capacity of individual sections and railroads is at a critical point and needs technical re-equipment and modernization (Ministry of Infrastructure of Ukraine, 2017b).

Due to limited funding and reduced volumes of planned repairs and modernization: 2186 km of trains and 1143 roundabouts were closed for trains; with overdue repairs, 7082.7 km of track are operated; over 40 years of operation 7.3 thousand kilometers of electrified tracks (70.8% of the total operational length) and 220 traction substations (71.7% of the total); defective 15 railway tunnels and 1500 railway bridges were recognized; 54 93.8% has reached the level of fixed assets deterioration in the alarm and communication system (Ministry of Infrastructure of Ukraine, 2017b).

The main infrastructure indicators of Ukrzaliznytsya's activity suggest that the productivity of using Ukraine's rail infrastructure is currently not in line with the best indicators of EU leaders and has weak dynamics. This financing condition cannot enhance the operation efficiency increase of the railway infrastructure.

The investment model formation for the railway industry development in the context of European integration in compliance with the aspects of national security, which can vary in different countries, ought to be taken into account. Firstly, countries use different concepts of national security that extend the scope of the investments approval in the life support infrastructure and strategic industries or the national interests' interpretation. Secondly, countries adopt different approaches in limiting foreign investment for the national security reasons. Thirdly, the control procedures may differ significantly in terms of their disclosure requirements by foreign investors. In most developing countries and countries with transition economies, the foreign direct investment outflow declined over the past year. It was due to a combination of problems, including lower prices on raw materials and depreciation of the national currency, as well as geopolitical risks. Europe became the world's largest investor region in 2015, with outflows of foreign direct investment of \$ 576 billion (National Bank of Ukraine, 2017).

The credit rating of "Ukrzaliznytsya", which was assigned to it by major international rating agencies such as Standard & Poor's and Fitch, is included in the significant risk group C (in 2014 it was CCC +, in 2017 it was the SS level), indicating high investment risks for railway companies and ineffective mechanisms of using investment resources. However, foreign markets may become the main source of long-term borrowings for "Ukrzaliznytsya".

During 2014-2016, access to global debt markets was closed for Ukrainian public stock companies. The war and the economic crisis have led to a significant drop in prices and, consequently, a rise in the yield of government Eurobonds. As a result, Ukrainian corporations did not attract new external debt; instead they were engaged in restructuring the existing debt portfolio. Most public companies managed to restructure Eurobonds and

transfer the peak repayment from 2018 to 2021 and beyond (National Bank of Ukraine, 2017).

In 2018 PJSC "Ukrainian Railways" carried out a refinancing of bonds worth 500 million USD with a yield of 9.5% and redemption time in 2018 issued by Shortline plc (Ukrzaliznytsya, 2018b).

The infrastructure bonds mechanism application will promote the active construction and manufacturing infrastructure modernization, the public investments replacement by private ones, the mutually beneficial schemes of cooperation between the state and private business entities implementation. It will also enable large-scale attraction of conservative investors. Due to the investments of PJSC "Ukrzaliznytsya", the cars' production has continued to grow, but loads in absolute measurement are extremely low, about 15% from the figures in 2014. However, this sector can get an additional impetus if Russia intends to withdraw its own fleet of cars from Ukraine (Orlova, 2017).

The uncertainty and contradiction in the Ukrainian tax legislation application lead to an increase in the risk that significant additional amounts of taxes, fines and penalties may be charged. Those requirements, if applied, can have a significant effect on the financial situation of the railway industry, the results of operations and cash flows. Therefore, it is necessary to implement an effective risk management policy (Table 3).

Table 3

Risk Management Policy of PJSC "Ukrzaliznytsya"

Type	Risks	Factors of risk decrease
Economic risks	The risk of reducing freight traffic as a result of economic conditions deteriorating	Support of the investment program flexibility Measures to reduce costs and increase productivity to ensure growth in profitability Diversification of the rail-park in accordance with the clients' needs in order to increase users' service diversification
Essential investment needs	Relatively high level of infrastructure and rolling stock deterioration	Continued work on upgrading, modernizing and expanding the infrastructure, locomotive and cars park State support for the strategically significant infrastructure projects financing Diversification of funding sources
Personnel expenses	The high proportion of personnel expenses has a significant impact on financial results	Measures to increase productivity and optimize staff Professional retraining of employees in order to increase productivity
Currency risk	Part of expenses and liabilities are denominated in the foreign currency	"Natural hedge" of exporters: the weakening of the hryvnia rate increases the goods competitiveness produced within the country Part of the transit revenue is denominated in USD Treasury monitors the size of market risks
Refinancing risk and interest rate risk	The risk of refinancing short-term borrowings	Continuation of the debt obligations redemption time (including Eurobonds) Develop a sustainable funding and refinancing strategy

Source: Ukrzaliznytsya, 2018c.

Nowadays, the minimum required amount of investment in the PJSC "Ukrzaliznytsya" development for the period until 2025 is projected to comprise 40 billion UAH per year using the following basic sources:

- 1) increase the level of depreciation charges up to 24 billion UAH;
- 2) the introduction of an investment component in the tariff structure of the regulated services – 6 billion UAH;
- 3) state support and private investments – 15 billion UAH. (Ejtutis, 2015).

In today's economic conditions of Ukraine, the infrastructure facilities financing is a deterrent to the economic growth of the rail industry.

In the European integration context, Ukraine has the relevant experience of EU countries in the rail transport development, the main factors of which are infrastructure management issues, guaranteeing non-discriminatory access to railway networks, liberalization of freight transport, licensing of railway enterprises, and active involvement of private carriers in financing infrastructure development. The EU countries have not only upgraded the railway's technical equipment, but have also developed a standardized set of tools for managing the transport system and transition from a monopoly industry to a competitive one. As the main principles of rail transport reform in the European Union, the following have been distinguished: state control of the sector; decentralization of activities' management; the distinguishing between infrastructure and transportation; losses compensation from local and regional passenger transportations to corporate carrier by transferring part of the regional level budget funds; the introduction of universal technical standards in connection with the national markets emergence (Verkhovna Rada of Ukraine, 2015).

National investment projects involve the financial resources investment in priority sectors of the economy, business objects, targeted programs that provide the basic life-supporting industries, social sphere and industries of special state significance development. Ukraine has implemented a project approach for key investment projects, among which:

- a rolling stock renewal project in cooperation with General Electric – the acquisition of 30 diesel locomotives; the total cost is \$ 1 billion; source of financing is financial leasing;
- electrification of the Dolinsky-Nikolaev-Kolosivka site – optimizing costs due to electrification and increasing the crossing capacity of one of the main routes for the transportation of grain to the seaport of Nikolaev. The total cost is UAH 7.5 billion, the source of financing: EBRD – 150 million Euros, EIB – 150 million Euros;
- renewal of the freight wagon fleet in cooperation with the EBRD. The total cost is 260 million USD; the source of funding: EBRD – EUR 150 million, own resources (Ukrzaliznytsya, 2017b).

Increasing the trains crossing capacity on the "Baltic-Black Sea" corridor, transfer of cheaper fuels to freight, passenger and suburban transport, saving fuel and energy resources and operating costs, increasing the train speed of all categories at this section will ensure

the realization of the national investment project "New construction of railway infrastructure with electrification of the Goskordon-Ovruch-Korosten-Zhytomyr-Berdichev section (total cost of the project is 3,970.0 million UAH). Investment project "Reconstruction of the 1435 km railway track at Kovel-Yagodin-Goskordon (with Poland) with further electrification" will provide an increase in passenger and freight transportation volumes between Ukraine and the states of the European Union. Total cost of the project is UAH 1.03 billion (or EUR 35.73 million). The deepening of social and economic relations between Ukraine and its neighbors, conditions creation for strengthening the international economic cooperation with the European Union will provide the "Traction substation equipment located on the Pan-European transport corridors III and IX ("Cretan"), means of reactive electricity compensation" project with the total cost of 206.7 million UAH (or € 7.2 million) (Ministry of Infrastructure of Ukraine, 2018).

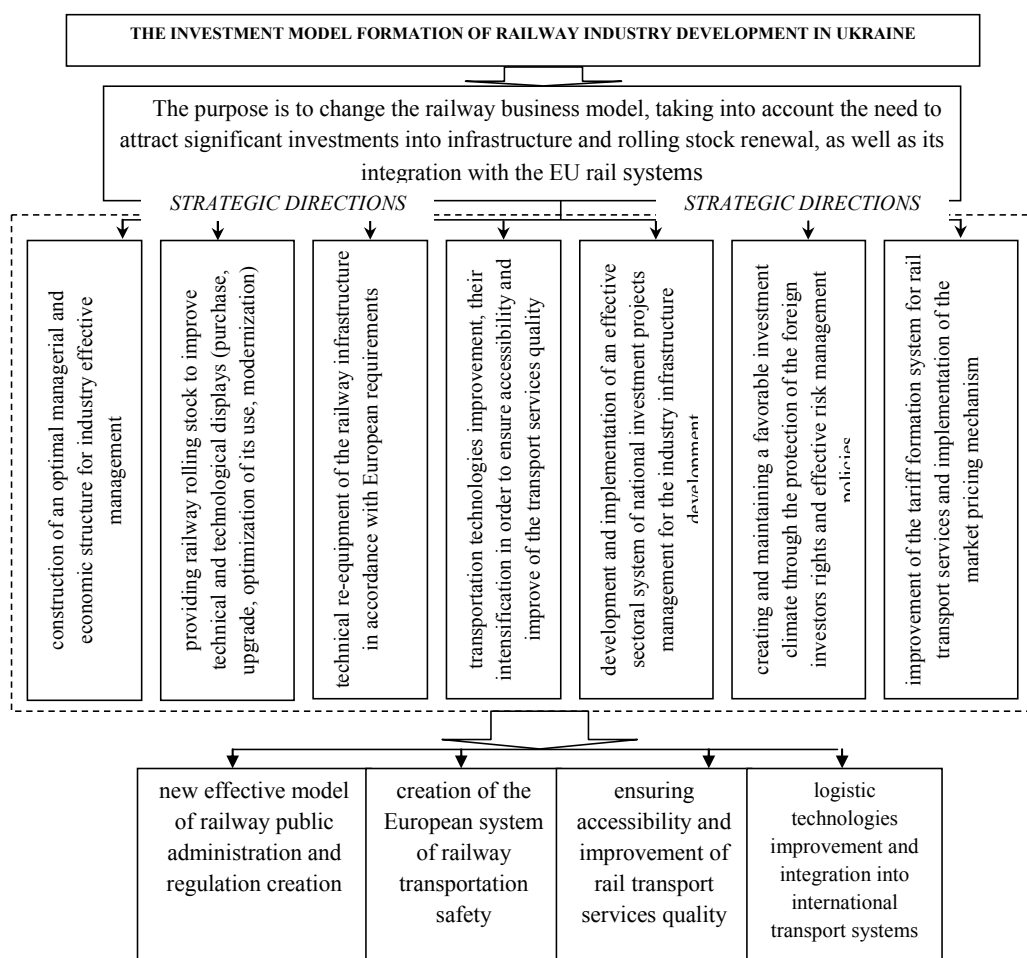
Based on the above-stated information, it is obvious that the source of resources for the national projects implementation ought to be a combination of budget funds direct spending and funds from private domestic and foreign investors attraction.

At this point the potential of Euroregional cooperation and the potential of trans-boundary regions are not sufficiently used in Ukraine; mechanisms for financing cross-border cooperation projects are considerably regulated which reduces the activity of the Ukrainian cross-border projects implementation and attracts financial support from the EU structural funds. So, most cross-border projects on the EU initiative need to attract own funding sources at least at 10%. One of the reasons for the impossibility to adhere to this parameter is the low level of local self-government bodies' authority, in particular with regard to budget support for regional development, which complicates the search for their own funding sources (Shevchenko, 2015). All these factors negatively affect the investment attractiveness of the railway industry in Ukraine.

Defining the key factors and prerequisites for increasing the investment of the Ukrainian railway industry attractiveness, the authors have proposed the main elements of the railway industry development investment model under the conditions of European integration, which ensure the implementation of strategic directions of the railway industry development in Ukraine (Figure 3).

Implementation of investment model of the railway industry development will allow effective integration of the national railway transport system into the world transport sector, the industry investment attractiveness improvement and its competitiveness, and increase the Ukrainian railway infrastructure productivity.

Figure 3  
Investment model of the Ukrainian railway industry development in conditions of European integration



### Conclusions

On the basis of the study of the Ukrainian railway industry development peculiarities it has been proved that it is in a difficult technological and economic condition and the most negative factors influencing the development of the railway industry have been highlighted.

The structure of the capital investment development shows that the largest amount of capital investment is directed specifically to the railway industry, but the investment is 4 times lower in comparison with foreign investment experience in this means of transport.

The use of European experience remains a prerequisite for the efficient and attractive development model formation of the railway industry in Ukraine in the following areas:

- construction of an optimal managerial and economic structure for the industry effective management
- providing railway rolling stock in order to improve technical and technological displays (purchase, upgrade, optimization of its use, modernization)
- technical re-equipment of railway infrastructure objects in accordance with European requirements
- improvement of transportation technologies, their intensification in order to ensure accessibility and improve the transport services quality
- development and implementation of an effective sectoral system of national investment projects management for the industry infrastructure development
- creating and maintaining a favorable investment climate through the protection of the foreign investors rights and effective risk management policies
- improvement of the tariff formation system for rail transport services and the introduction of a market pricing mechanism.

It has to be noted that the Ukraine's transition to the investment vector of the railway industry development is at an initial stage due to the European integration processes that began in 2015. System development of the investment model components of the railway industry development in Ukraine proposed by the authors will allow the rail industry to compete during the next few years and become a prerequisite for improving its investment attractiveness in the international transport system.

In order to implement the investment model of railway industry development, the state ought to give priority to the Ukrainian legislative acts improvement; their approximation to the relevant legislative acts of the European Union will contribute to the legal measures protection for the market relations formation, the competitive environment and favorable investment climate generation, the modern market infrastructure creation, entrepreneurial activity in priority sectors of the economy development, as well as the national technical regulations and standards development harmonized in accordance with European and international ones.

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