

Planning and Accounting as a Factor of Economic Growth of Railway Industry Enterprises

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Abstract—Over the past few years the system of economic relations in Russia had been in a very difficult situation which was due to the foreign economic and political situation of the state on the world stage and had a negative impact on the development of various spheres and sectors of the economy. The impact of the economic and political events has led to structural changes in legislation and regulations and the corresponding restructuring, and often the adjustment of existing systems of governance and regulation to the prevailing conditions.

Keywords—railway industry, planning, accounting, strategic accounting, process of digitalization

I. INTRODUCTION

Nowadays the development of the transport industry is taking place against the background of growth of the main macroeconomic indicators and improvement of the situation in the world economy which led to the expansion of domestic and external demand for transportation

External and domestic demand's factors and their growth are important for the recovery of the Russian economy. Thus, the investment and consumer domestic demands were the most important in 2017. Investments in fixed assets increased by 4.4% compared to 2016 (0.2%), the share of exports increased by 25.3% after a decrease in 2016 by 17.4% - which made it possible to restore the degree of Russia's participation in global trade and led to an increase in the share of rail transport compared to air, sea and other modes of transport.

II. MATERIALS AND RESULTS OF THE RESEARCH

The railway industry is the core for the Russian economy, it is a tool to stimulate the development of the state and strengthen its territorial integrity and defense [1].

Today railways of Russia sell more than 87.1% of cargo turnover which is more by 0.6 points above the level of 2016 and is 3304.8 billion tons/km and sell more than 40% of passenger turnover (129.4 billion passengers/km) – data for 2018. At the same time, the cargo turnover increased by 4% (3175.2 billion tons/km in 2017) and passenger turnover increased by 5.2% (122.8 billion passengers/km in 2017) [12].

TABLE I FREIGHT TURNOVER BY TYPES OF TRANSPORT IN 2017 [12]

Mode of transport	2017		Share of transport's modes in total freight turnover, %	
	Billion tons/km	+/- % 2016	2016	2017
Freight turnover	5479.3	+5.4	100.0	100.0
including:				
railway transport	2493.4	+6.4	45.1	45.5
including the JSC «Russian Railways» infrastructure	2491.9	+6.4	45.1	45.5
motor transport	253.0	+2.1	4.8	4.6
sea transport	45.9	+6.4	0.8	0.8
internal water transport	64.5	-4.0	1.3	1.2
air transport (transport aviation)	7.6	+15.4	0.1	0.1
pipeline transport	2.614.9	+5.1	47.9	47.8
REFERENCE INFORMATION: For railway transport, excluding pipeline transport			86.5	87.1

Taking into account the data presented in the table, it can be seen that the main share of freight turnover falls on the railway including the infrastructure of JSC «Russian Railways»

Since 2001 within the framework of the program approved by the Government of the Russian Federation, structural reform of the railway transport has begun. Within the framework of the program the following goals were defined:

- the improving the sustainability of rail transport, ensuring its availability and safety, as well as the quality of services provided;
- the formation of a single coherent transport system;
- the reducing of the total costs;
- the ensuring of the growing demand for transport services

In order to implement the objectives of the Program it was first necessary to work out and regulate the regulatory framework – the laws "On railway transport in the Russian

Federation", "the Charter of railway transport of the Russian Federation" and a number of other documents were passed at distinguishing the functions of state regulation and management of economic activities, as well as the formation of conditions aimed at improving the level of competitiveness.

During the reform period 85 subsidiaries and dependent companies were allocated from the structure of JSC "Russian Railways" and this in turn contributed to the improvement of financial and economic efficiency of the railway industry and attracting investments.

For example, through the sale of shares of the established subsidiaries a stable and profitable source of investment aimed at the implementation of various investment programs was formed.

In addition, during the reform and establishment of JSC "Russian Railways" the industrial enterprises, the construction and agricultural organizations, the research institutes were merged into a single system of accounting. As a result, the company's activities include a sufficiently large number of operating segments which entails an increase in responsibility and the emergence of various difficulties and risks.

After analyzing the current state of the railway industry a number of difficulties can be identified:

- the non-compliance of quality and range of services with modern requirements including international requirements;
- the high level of costs associated with current repairs and depreciation of fixed assets;
- the growth of investment needs in order to resolve current problems and long-range modernization;
- the low wages for certain categories of workers.

The main obstacle to solving these difficulties is often illiterate planning and accounting in the transport system, as well as insufficient financial transparency, limited investment opportunities and financing of loss-making industries at the expense of profitable ones which leads to a decrease in the level of financial indicators and an increase in costs in the field of taxation [2].

Another problem that leads to the reduction in the volume of profits is the delimitation of powers, in particular the withdrawal of suburban passenger companies to certain organizations and the low level of subsidies of subjects which leads to a reduction in the number of suburban trains and routes.

In order to solve the difficulties and problems, it is necessary to have a competent economic management, the implementation of which is associated with the implementation of a number of functions:

- the planning at the level of financial and economic activity of the enterprise including the taxation;
- the forecasting and coordination of the main goals and objectives of the industry including the introduction and application of new technologies;

- the accounting, control and analysis of the main indicators of financial and economic activity;
- the stimulation in the investment and at the level of motivational interest of the personnel.

As a result of planning of financial and economic activities the various options of management decisions are considered and evaluated, their optimal ones are chosen in accordance with the prevailing conditions. The main purpose of enterprise activity planning is resources and optimization of their use [3].

Today a unified planning system aimed at the implementation of the current and strategic objectives of the enterprise is formed as part of the activities of JSC "Russian Railways".

The development strategy for the period up to 2030 reflects the tasks set by the Government of the Russian Federation within the framework of socio-economic development of Russia until 2030. Within the framework of this strategy the enterprise is set quite ambitious goals:

- the maintaining of a leading positions in the world;
- the correlation of commercial interests of the enterprise taking into account the restrictions established by the state in the field of tariff and investment policy;
- the actual planning and forecasting of key indicators for the medium and long term;
- the ensuring of the systematic renewal of assets taking into account the use of modern innovative technologies;
- the implementation of measures aimed at compliance with the standards of the established elements taking into account the actual deviations in the work of the company;
- the elimination of adverse factors hindering the development of the company, in particular, taking into account the risks in the preparation of financial and economic statements.

Financial report of JSC "Russian Railways" and its branches is carried out in accordance with Russian accounting standards.

In accordance with this report, the total income of the enterprise in 2018 increased by 5.9% compared to the level of 2017 and amounted to 1798.4 billion rubles. Revenue growth is primarily associated with the growth of freight and passenger traffic.

The unit cost has developed below the level of inflation due to the ongoing work in the field of accounting and planning aimed at increasing internal efficiency and cost optimization in 2018. The value of net profit after tax amounted to 18.4 billion rubles in 2018 compared to 17.5 billion rubles in 2017, accordingly [12].

Such growth is primarily due to the improvement of the company's performance, as well as the company's policy aimed at the modernization of the locomotive fleet, increasing

the capacity and ensuring the safety of the railway infrastructure.

The organization and development of the management accounting system is another most important areas of the railway industry reform program. The creation of this system is possible through the allocation of responsibility centers, the formation of directorates by type of activity, the optimization of the structure of management bodies, as well as the introduction of a quality system.

In addition, in 2016, in the context of a rapidly changing macroeconomic situation, the system of risk assessment of the main production and financial indicators was formed. As part of this system, a consolidated program of measures to optimize operating and investment activities, including cost optimization through the implementation of appropriate measures, was developed.

The company raised the level of energy efficiency through the introduction of resource-saving technologies, price containment and implementation of organizational and technical measures.

Also within the framework of the implementation of the adopted approach to maintain break-even activities, the expenses of the enterprise decreased, not only for the main activities but also for expenses related to taxation.

From the point of taxation, the company faces the problem of increasing the tax burden due to the tightening of tax policy.

TABLE II THE AMOUNT OF THE TAXES AND FEES IN 2015-2017 (BILLION RUBLES)

Period	2015	2016	2017
Total taxes and fees	283.04	311.47	311.3
VAT	54.69	45.30	42.10
Profit tax	0.04	29.4	27.03
Income tax	55.67	56.24	58.72
Wealth tax	42.78	49.33	45.72
Land value tax	1.61	1.55	1.42
Pension fund	93.39	93.89	99.32
Social Insurance fund	10.89	10.98	11.53
Medical Insurance fund	21.81	21.85	23.09

Given the data shown in the table is as follows for income tax in 2016 and 2017, an increasing amount of revenue compared to 2015, this year in connection with incurred losses for tax purposes, the accrual of this tax was absent.

The decrease in the share of VAT in 2016 and 2017 is primarily due to an increase in tax deductions. But on the property tax there is an increase in revenues, which in turn is due to the change in the tax rate from 1 to 1.3% in respect of railway infrastructure.

In general, the taxes and fees paid to the Federal budget have decreased in relation to revenues to the regional budget

and this is primarily due to the change in the share of income tax credited to the regional budget – from 2 to 3%.

Taking into account the growth of the enterprise’s need for net profit, the importance of tax planning as a factor of economic growth increases, this is primarily due to the following circumstances:

- the instability of the economic situation and frequent amendments to the legislation weakening the competitiveness of many enterprises;
- the tax savings which allow the company creating reserves to increase net profit for subsequent modernization and technical re-equipment;
- the maximization of net profit allows the company creating conditions for the growth of dividend payments, the value of the shares and the growth of capitalization [1].

The system of strategic accounting for management decision-making, analysis and control is important also.

The following types of strategic accounting can be distinguished for the railway industry

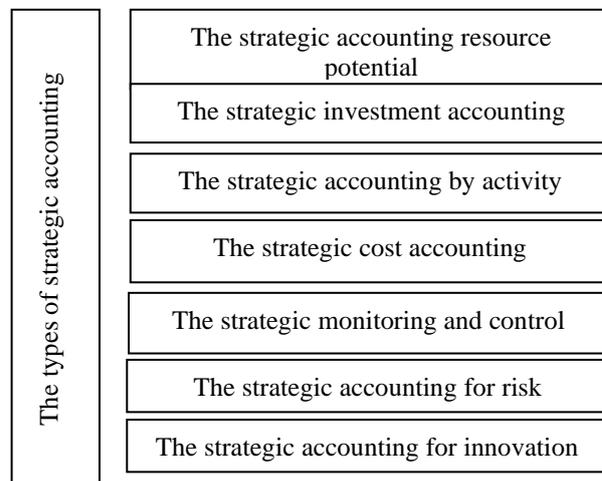


Fig 1 The types of strategic accounting

In order to implement all types of strategic accounting in the railway industry, first of all, it is necessary to take into account the innovative component, that is, the development is based on the innovative scenario.

The implementation of strategic innovation accounting is related to investment accounting and allows the company increasing investment attractiveness through the following activities:

- the introduction of the investment component in the system of pricing and other instruments;
- the selection of individual segments for compliance with the liberalization;
- the development of measures aimed at the gradual reduction of the share of subsidies allocated to the railway industry;
- the reasonable equalization of tariffs for freight and passenger transportation at the socio-economic level;

– the creation of a mechanism to support investors willing to finance and make financial investments in the industry in the field of road construction and infrastructure development [3].

Thus in 2017 the significant measures were taken to minimize costs which allowed the company optimizing costs. At the end of the year the cost savings amounted to 7.3 billion rubles, including through competitive procedures.

The share of the company's profit increased also, the revenues from freight traffic increased by 7.8% to 1352.8 billion rubles in 2017. The main growth was due to an increase in the share of transportation of goods profitable for JSC "Russian Railways" and the growth of the share of cargo turnover for export. The growth in freight turnover was by 6% more in 2017 than in 2016 – an additional 74.9 billion rubles were received, as well as due to the indexation of tariffs the company increased profits by 6% and the volume of profit amounted to 73.9 billion rubles.

TABLE III DYNAMICS OF INCOME AND EXPENSES IN 2016/2017

Features	2016	2017	Changes, % 2016/2017	
			+ -	%
Result of other income and expenses	-73.6	-87.6	-14.0	19
Including by main items				
Sale of assets	0.6	2.1	1.3	217
Including the sale of shares	0.0	0.8	0.8	-
Dividends	4.0	21.2	17.2	430
Property contribution to authorized capital	0.0	0.1	0.1	100
Interest receivable	9.2	2.7	-6.5	-71
Exchange differences	18.8	-6.9	-25.7	-137
Change of reserves	-7.0	-11.3	-4.3	61
State aid and compensation	2.1	3.2	1.1	52
Interest payable excluding capitalized	-64.2	-552	9.0	-14
Implementation of guarantees under the Collective agreement to employees of the Company	-26.9	-23.6	3.3	-12

In general, the result from other income in 2017 amounted to 163.2 billion rubles, other expenses – 250.8 billion rubles, the financial result from other income and expenses amounted to 87.6 billion rubles [12].

In the context of the changing macroeconomic situation, the risks of production and financial and economic indicators were assessed, the tasks of increasing internal efficiency were formulated and a Consolidated program of measures to optimize operational and investment activities was developed.

The various software tools for ensuring of the financial balance of the activities of JSC "Russian Railways" are used to solve the problems in the field of accounting for income and expenses of the enterprise.

In particular, industry-specific ERP-systems are being actively implemented which allow solving many management tasks at the enterprises of the railway industry, it allows ensuring the transition to common financial and accounting standards that meet Russian and international standards.

The mechanism of centralization of the accounting and tax accounting system is being formed also, which allows increasing the level of reliability of the transmitted information, its transparency and efficiency, to optimize and accelerate the process of primary document circulation.

The organization and maintenance of tax accounting at the enterprise is carried out by the Department of tax policy and methodology of tax accounting of the Accounting service. Its main tasks are:

- the development of tax policy and the methodological support of tax accounting in the enterprise;
- the timeliness and completeness of tax payments, timely tax reporting;
- the protection of the company's interests before tax authorities.

The tax accounting in the enterprise is primarily carried out on the basis of the adopted accounting policy which reflects the main methods of accounting for income and expenses, depreciation of fixed assets, etc.

One of the activities of the Department of tax policy and methodology of tax accounting is the creation of an internal control system (ICS), which allows improving the efficiency of financial and economic performance, ensure the safety of assets and economic use of resources, identify and manage risks, as well as ensure the completeness and reliability of accounting and other types of accounting.

The internal control system includes

- the single standardized accounting process for all divisions of JSC "Russian Railways" and its subsidiaries;
- the automation of accounting processes;
- the specialization of accounting staff in accounting areas;
- the ongoing training and skills development [1].

Within the framework of the internal control system, the great importance is given to the organization of the accounting and tax accounting system in order to reduce costs and improve efficiency.

III CONCLUSION

One of the initiatives for the development of the railway industry is the process of digitalization of customer services and business processes.

In addition, as part of the expansion of geographical opportunities, JSC "Russian Railways" plans to develop foreign business and promote its export portfolio through the development of its services and the creation of cloud applications and digital strategies.

Within the framework of development programs two scenarios are envisaged – basic and optimistic. It is planned that the total amount of investment costs will be in 2019-2025 according to the basic scenario of about 4671.4 billion rubles. According to the optimistic scenario, the total investment costs will be 5786.5 billion rubles [11].

In order to improve the efficiency of the implemented program, the modern technologies will be introduced including information modeling in the design and construction of infrastructure facilities, it is also planned to develop a unified information system for managing the construction complex, the development of transport and logistics systems, the introduction of innovative automation systems and mechanization of station processes, the development of traffic safety management system, energy efficiency, the development of quality management systems and much more.

The achieving of these goals is possible due to the appropriate development of technologies that ensure business efficiency, reduce transaction costs and customer focus and productivity.

The introduction of new technologies will improve the system of electronic document management for production and management purposes and provide a high level of availability of information services, increase the level of information security.

In addition, the work is underway in the field of the Internet objects, which will allow:

- maintaining the reliable accounting infrastructure and the diagnosis of their condition;
- managing the costs to plan budgets based on the analytical data obtained;
- optimizing the use of available resources;
- reducing the human impact through process management with intelligent tools

In the framework of the program "Digital Russia", JSC "Russian Railways" the five basic directions of development for the period up to 2024 were defined. These directions include the management, the personnel, the formation of research competences and technical capacities, information infrastructure, and information security.

The several innovative projects on the program of digitalization are being implemented today. In particular, the projects related to the creation of an intelligent control system for railway transport, automation of the processes of management of transportation, logistics activities, accounting of resources of the enterprise were put into operation.

The electronic document flow, technological and external, the interaction with customs and other authorities and participants of the transportation process are developing due to the digital technologies.

Thus, the introduction of modern methods and technologies will improve the efficiency of accounting and planning, as well as the level of profitability, quality of functions and activities in the railway industry.

References

- [1] A. G. Dykusova, "Tax planning and accounting as a factor of economic growth of the enterprise on the example of JSC "Russian Railways"", Transport infrastructure of the Siberian region: Materials of the fifth International scientific and practical conference dedicated to the 40th anniversary of the construction of the Baikal-Amur mainline, March 31 – April 4, 2014 Irkutsk, pp. 760, 2014
- [2] Z. V. Chebotareva, S. V. Sukhovey, "Improvement of financial stability of the enterprises of railway branch", Economics, 2 (40), pp.79-83, 2019
- [3] K. E. Ryabikov, "Development of strategic management of railway enterprises in the unstable financial situation in Russia", Economic aspects of logistics and quality of rail transport: Materials of the III scientific and practical conference, pp.123-129, 2018
- [4] A. M. Smirnova, "Problems with the accounts of accounting costs to reflect the operations of the example of business accounting services at JSC «Russian Railways», Modern science; current issues, achievements and innovations: a collection of articles II International scientific-practical conference, pp. 63-65, 2018
- [5] O. Khodakivskiy, Y. Khodakivska, O. Kuzmenko, M. Shcherbyna, O. Kolesnichenko, «Improvement of the railway transport system by increasing the level of goal-oriented activity», ICTE in Transportation and Logistics Vol.149, pp.415-421, 2018
- [6] T. Zhang, B.-H. Mao, C.-R. Ma, S.-J. Zhang, W. Zeng, «Pricing Strategy of Container Rail-road Intermodal Transport Based on Game Theory», Journal of Transportation Systems Engineering and Information Technology, Vol.18, pp.209-214, 2018
- [7] V. Ovchinnikova, A. Tolstova, H. Obruch, H. Ostroverkh, «Ensuring development of the production potential in terms of implementation of strategic initiatives of the railway transport», International Journal of Engineering and Technology, Vol.7, pp.482-487, 2018
- [8] V. Yanovskaya, O. Pylypenko, V. Tvoronovych, A. Bozhok, «Marketing research as a way to increase competitiveness of railway company and forecasting of demand for transport», International Journal of Engineering and Technology, Vol. 7, pp.583-587, 2018
- [9] A. Davydov, A. Dementev, V. Burovtsev, «Reproduction of human potential of JSC "Russian Railways"-a source of increasing labor productivity», MATEC Web of Conferences, Siberian Transport Forum – TransSiberia, Vol. 239, May 16, 2018
- [10] K. Tsvetkov, V. Slepov, V. Sekerin, V. Gayduk, A. Gorokhova, «Development of transport in eastern regions of Russia», International Journal of Engineering and Technology, Vol. 7, pp.587-590, 2018
- [11] E.B. Kibalov, A.A. Kin, «On the problems of railway in Russia», Regional Research of Russia, Vol. 4, pp.18-27, 2014
- [12] JSC «Russian Railways», official website. Retrieved from: rzd.ru