

WESTERN BALKAN RAILWAY MARKET THROUGH THE SCOPE OF THE REGULATORY BODY – BENCHMARK WITH EUROPE

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***Abstract** – With the process of railway restructuring well on the way and, in some European countries, considerable rail market openness level, new challenges arise. Keeping track of the restructuring progress and rail market development is a constant challenge and it also presents a very important issue for the states' governments. This task is mostly served by regulatory bodies, through various market monitoring techniques and assessments of railway market liberalization. For this task to be done right, the communication between the state and the regulatory body needs to be appropriate through clear goals set by the state and an adequate response from the regulatory body, and railway market monitoring indicators are a key feature of this communication. The set of common indicators and various measures are used for completing this task by European regulatory bodies. Where is Western Balkan railway market in relation to current European countries' railway market and goals according to these indicators? In this paper we try to give an answer why certain indicators are important and how they are interpreted by using benchmark to collect data and exploring indicators for market monitoring.*

***Keywords** – goals, politics, market monitoring, quality data.*

1. INTRODUCTION

In today's market of constant and frequent changes, it is crucial for every participant to know, and above all, understand his place in the market. Railway market, although quite less dynamic, certainly makes no exception in this context, yet it possesses a significant distinction which is manifested through tight connection to the government's transport policy despite formal railway market liberalization and vertical separation of monopolistic railway company. Perhaps a bit contrary to logic, what ensued after liberalization was an even greater need by government to have a clear insight in railway market in order to have up to date information about the level of competition, possibilities and barriers for market entrance, market shares of private operators in relation to incumbent etc. These and other market "indicators" are mainly shown and evaluated in annual reports of regulatory bodies.

For the purposes of monitoring and evaluating market conditions and the extent of government goal fulfillment, regulatory bodies are tracking and analyzing a large number of indicators, which are now de facto unified across entire Europe because of the

general tendency for railway markets to be comparable and to finally form a single European railway market. Thanks to that fact, it is possible nowadays to obtain sufficiently reliable data from various railway markets across Europe, even for different market segments. However, in order to have a clear picture of any given railway market, it is essential to interpret the data in the right way and in accordance with the circumstances specific to the given market.

In this context, western Balkan (WB) countries make no exception, because their railway markets also possess their own distinctions. Although most of these markets emerged from the break-up of former Yugoslavia, and at least in theory they could possess many common characteristics, that may not be the case in reality.

Many of the indicators were once common, but in current development, they may not prove themselves to be the key ones for each separate market and they even could be pointing to different conclusions, which makes the analysis of these markets quite interesting.

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2. MARKET DEVELOPMENT IN WB

As stated earlier, market development is monitored through certain indicators, and analysis and monitoring quality is essential for guiding the government's railway policy. Current European railway policy is to reduce railway subsidies, which is for most part the reason why performance indicators are much more perceived from "commercial" aspect, in contrast to the past days when they were mostly tracked for the sake of assessing the asset utilization, technological processes harmonization and "pure statistics". Therefore, due to this shift, the indicators are now interpreted much more as measures of "commercial" rather than "engineering" features, by now greater number of present stakeholders than before. A significant number of these indicators now has a new role in serving the regulatory bodies to depict the current market state in their reports to government offices responsible for creating the railway policy.

Before we analyze the indicators which are depicting the current state of WB railway market, it is important to note that markets in Albania and Bosnia and Herzegovina are not yet formed, i. e. the legislation exist and allows it, but it is still to be realized in practice. Having that in mind, further on only the data for Serbia, Croatia, Northern Macedonia and Montenegro shall be analyzed, given that in these countries a vertical separation of monopolistic railway company was done.

Therefore, in order to properly view the market conditions, one should have in mind market's level of development, which is primarily shown through a number of market participants and private operators' market shares. In other words, the indicators have to be interpreted with taking into account the current level of market development in order to obtain a realistic picture of the conditions and to direct railway policy. In practice, this would mean that the indicators cannot be interpreted (or tracked) from the same aspect in the newly formed markets as it would be the case with already formed and stable markets.

Therefore, it is essential for depicting the state of WB railway market to present the data for vertical separation and market liberalization moments which are shown in Tab. 1.

Tab.1. Western Balkan railway market state

Country	Vertical separation	Market liberalization
Serbia (SRB)	August 2015	Yes
Croatia (HR)	November 2012	Yes
N. Macedonia (MK)	April 2007	No
Montenegro (MNE)	March 2009	Yes

From Tab. 1 it can be observed that both vertical separation and market liberalization were performed in Serbia, Croatia and Montenegro, while in N. Macedonia only vertical separation to infrastructure manager and a single passenger/freight operator was done. One of the reason for that is the fact that Croatia is already an EU member state, while Serbia and Montenegro are in formal EU joining process, and therefore there was a significant amount of pressure to perform these actions, with bearing in mind their geographical location. In case of N. Macedonia, a logical approach to gradually open market was chosen, given that there is no significant pressure from EU, and also the current market state is such that this kind of scenario does not yield foreseeable advantages both to the state and market participants.

3. CURRENT WB MARKET STATE

Primary indicator of market state is the one directly referring to the level of market openness, which would be the total number of railway companies competing in passenger and freight traffic. However, this indicator should not be perceived as necessarily crucial for assessing the market openness level, because of the many barriers which potentially hamper the entrance of new operators. Therefore, for properly assessing market state, openness and competition levels, it is necessary to look at a wide array of circumstances. The current number of active market competitors in WB countries is given in Fig.1

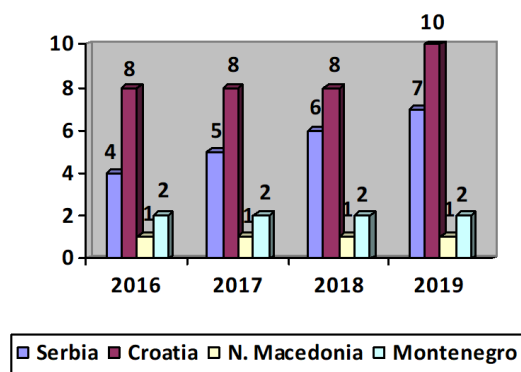


Fig. 1. Number of market competitors [1],[2],[4]

It is characteristic for all countries that only one operator in passenger traffic is present, which implies that market openness level can only be assessed for freight traffic. Serbia and Croatia lead the lot in that sense, because they obviously have opened their markets for entrance of private operators in freight traffic, which can be seen in Fig. 2, which shows private operators' market shares related to the incumbent. Croatia even went a step further by opening its market to foreign operators.

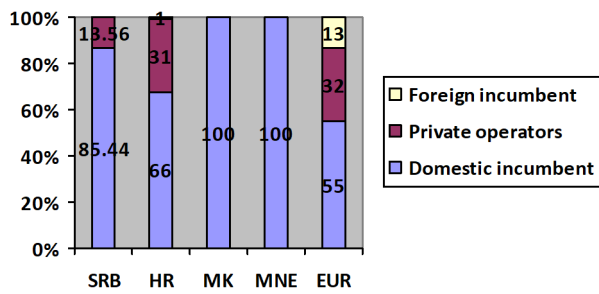


Fig.2. Freight market shares [4]

At European level, it is very important to show the data about market segmentation in the sense which type of transport is more present – passenger or freight. In majority of European countries, passenger traffic is the dominant one, with 82% of market share according to train kilometers on average. In WB countries this is also the case, because it is also higher than the freight traffic share, but with a smaller margin between the two, which can be observed in figure 3. This smaller margin could be due to poor track quality, inadequate reliability and small passenger flows, which also could be the reasons of small number of passengers per train (Fig. 4.).

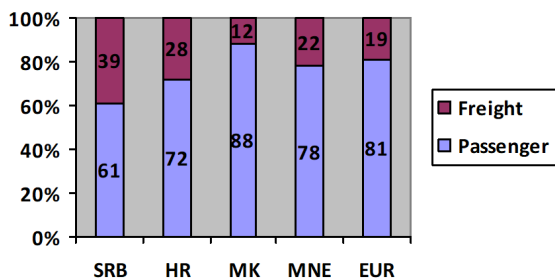


Fig. 3. – Passenger and freight traffic market share [4]

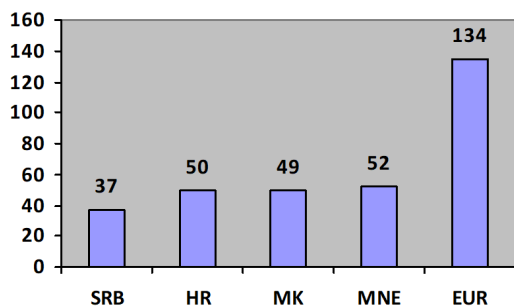


Fig. 4. Average number of passengers per train [4]

When it comes to freight traffic, the situation is quite different. In this market segment, WB countries have some decent numbers. Not only that Serbia and Croatia have significant number of private operators, but the average load of trains is similar to European average. In N. Macedonia and Montenegro, average load is around 1600t and 700t, which is quite above European average (Fig. 5.).

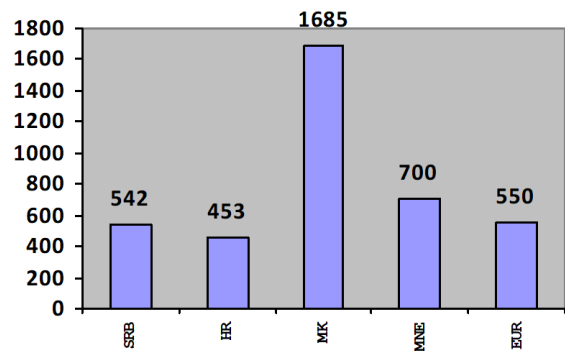


Fig.5. Average train load [4]

What shouldn't be left out is the data showing the level of railway network utilization in the form of total number of train km per network km per day. According to this indicator, WB countries are placed quite low, which is shown in figure 6. However, this indicator is not necessarily crucial, because it shows the number of trains in traffic per day, but it does not show how full with passengers/load these trains are.

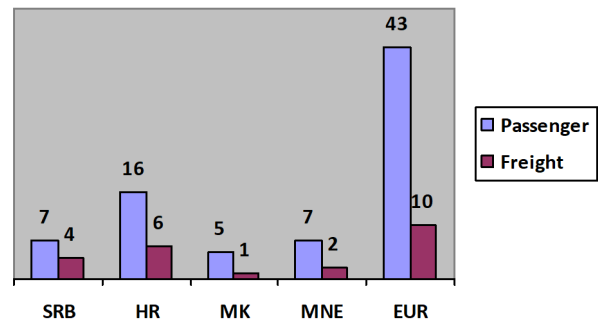


Fig. 6. Network utilization [4]

Another very important indicator at European level is percentage share of public service obligation (PSO). It shows the overall development strategy in passenger traffic, and therefore it is significant for it to find its place in the analysis. With current market openness level, the only conclusion that can be drawn is that PSO is heavily dictated by the government rather than by market conditions, i.e. according to the demand for transport. However, this indicator is one of the most important ones at the European level, and its placement in this paper is due to that fact and also because the conditions on the market could be changed with future development, and it is shown in Fig. 7.

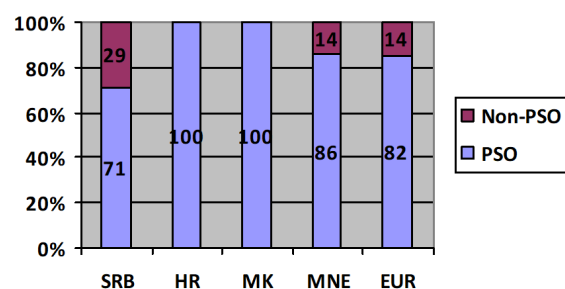


Fig.7. Percentile share of PSO traffic [4]

4. TRACK ACCESS CHARGES AND ENTRY BARRIERS

For assessment of market conditions, fees (track access charges – TAC) will always be number one factor, which by itself can be a topic of detailed and broad analyses. Market TAC is in fact an instrument of market regulation and an “unseen force of regulation”, thus its adjustment significantly affects market conditions, and it can often represent a direct consequence of government policy, especially when it comes to transport.

In railway market, TAC also have a central role, and their level and calculation formulas are a current topic since the moment market was formed. What is a bit specific about railway market is that there are many different formulas to calculate the TAC for basically the same service. Most of the infrastructure managers across Europe have their own way in calculating the charges, and thus the formulas for calculating TAC vary significantly. Average WB track access charges both for passenger and freight traffic are shown in Fig. 8. for 750-1100 gross tonne trains in freight and 200 gross tonne trains in passenger traffic in comparison to European average.

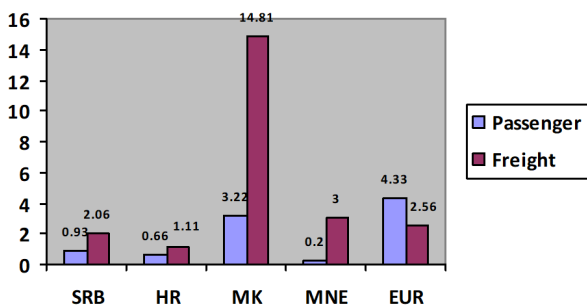


Fig. 8. Average track access charges (TAC) [1], [4]

When it comes to market entry barriers, they also vary across different markets. Which barriers are most influential in hampering new market entrants is a topic for a thorough analysis for each market individually, but in the most regulatory bodies' reports it is stated that high initial cost of rolling stock procurement is the biggest one [3]. However, there are many other barriers dependent on market conditions which could be crucial in hampering potentially new entrants, such as low traffic flows, lack of trained staff, incumbent operator who knows the market very well, etc [3].

Current level of market analysis in WB countries is not on such level to reliably mark the crucial barriers, making one such analysis heavily based on the assumptions. For example, one such assumption would be that high initial cost of rolling stock procurement could be marked as biggest barrier, which may not necessarily be the case.

5. CONCLUSION AND FINAL ANALYSIS

Having in mind that WB railway markets are relatively recently liberalized, and that they are still in the early development phases, any direct comparison to already advanced European railway markets is not realistic. It is more realistic to determine some of the benchmark markets. In this paper, the average European data is given more as a “whereabout” comparison.

General level of market development points to a significant difference between passenger and freight transport markets – especially in accordance to development in Europe. According to the indicators, passenger traffic market is at low level of development, that it practically does not exist, since only one incumbent operator is serving this market segment mostly based on PSO contracts with a small passenger flow. It is a huge difference compared to Europe, where many private operators are serving this market segment.

In freight traffic, the condition is rather different, especially in Serbia and Croatia. In these two countries, market is opened as it should be, with a stable number of private operators in Croatia for years now, and a rising number in Serbia each year. Market shares of these private operators are already significant according to both train and tonne kilometers [1], [2]. According to European criteria, markets in Serbia and Croatia would be identified as “developing markets”, making them somewhat comparable to European markets. Although because of goods flow and some other factors it is not realistic to reach European level, markets do behave similarly, because of the existence of noticeable number of private operators which will certainly grow in the coming years.

What could be the cause of such a difference between passenger and freight market, it is a matter of discussion and a detailed analysis. It might be possible that in fact the barriers in passenger traffic are more hampering than the ones in freight traffic, and they avert new entrants right away. The largest of these barriers would be a non-profitable service in passenger market in combination with high cost of rolling stock procurement and a direct PSO contract awarding in a market with an obviously small passenger flow, while in freight traffic goods flow is large enough to attract new market entrants.

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