Transport Policy 46 (2016) 7–19

Contents lists available at ScienceDirect

Transport Policy

journal homepage: www.elsevier.com/locate/tranpol

Institutional rail reform: The case of Ukrainian Railways

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ARTICLE INFO

Article history:
Received 16 April 2015
Received in revised form
5 September 2015
Accepted 3 November 2015
Available online 19 November 2015

Keywords:
Institutional changes
Institutional economics
Railway
Reform
Ukraine

ABSTRACT

Rail reforms are aimed at increasing the share of rail in a country's or region's modal split through an efficiency improvement in railway operations, a stimulation of intra- and inter-modal competition and an increased financial accountability and sustainability of the railway company. The recent approaches to railway institutional change in the leading economies of the world was guided by deregulation and liberalization of railway transport. Rail reform in the European Union aimed at a more open market and a clear division of roles between infrastructure managers and railway operators is well documented. The reforms taking place elsewhere in Europe received less attention. This paper deals with the reform of the Ukrainian Railways taking into account the difficult economic, political, social and financial environment the country is in.

We analyzed the processes of institutional change in Ukraine and the effectiveness of this institutional change for the development of Ukrainian Railways. Theoretical concepts from institutional economics were applied to map how railway administration and railway players modify existing institutional arrangements to their interests.

The analysis in this paper demonstrates the place-dependent nature of changes in the institutional–organizational framework for the rail sector. The case of Ukrainian Railways supports this notion. Ukraine presents a unique case given the path dependence created by its former Soviet history, the great significance of rail in the national transport network and the role of industrial tycoons in cargo generation. We believe railway transport in Ukraine should not be exposed to shock reforms given its great importance to the national economy. However, further changes in the Ukrainian Railways institutional framework are needed to fit even better into the economic realities. We propose specific recommendations for the rail institutional framework adjustments in Ukraine.

1. Introduction

In many parts of the world rail has been subjected to reform processes of deregulation and liberalization. The reform of the institutional framework of railways can be driven by a low productivity (efficiency) of existing railway operations, financial losses of railway companies (RC), internal cross-subsidization within RC, a high level of amortization of the rolling stock and infrastructure, a high level of government subsidization and or a lack of investments in rail infrastructure. In essence, rail reforms are aimed at increasing the share of rail in a country's or region's modal split through an efficiency improvement in railway operations, a stimulation of intra- and inter-modal competition and an increased financial accountability and sustainability of RC. Key to any rail reform process is to design a new institutional framework that contributes to reaching the long-term policy objectives for rail while at the same time taking into account the economic, political, social and financial environment the railway mode is operating in.

Rail reform in the European Union aimed at a more open market and a clear division of roles between infrastructure managers and railway operators is well documented. The reforms taking place elsewhere in Europe received far less attention. This paper deals with the reform of the Ukrainian Railways (UZ) taking into account the difficult economic, political, social and financial environment the country is in.

Ukraine is an interesting case, not only because of its fast changing geopolitical and economic setting, but also as the rail mode is crucial for the freight mobility in the country. The share of freight transported by rail in 2012 was 61% (excluding pipeline) much higher than observed in the countries of the European Union (see Fig. 1). Rail cargo flows in Ukraine are generated by a limited number of heavy industry players who exert a strong influence on the national government and thereafter on the state-

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http://dx.doi.org/10.1016/j.tranpol.2015.11.001

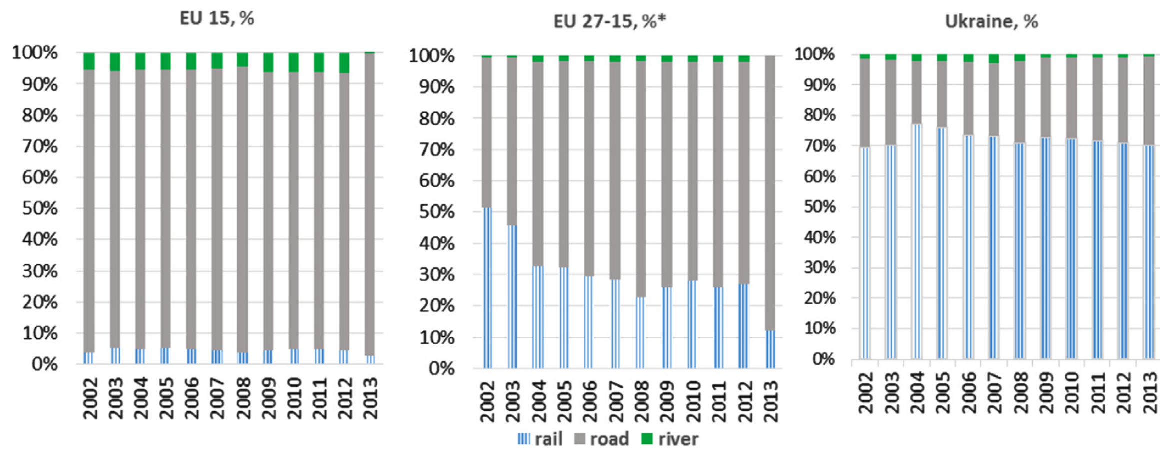

Fig. 1. Freight modal split in the EU (left) and the Ukraine (right) – based on tons *EU 27-15 represents the recent EU states: Bulgaria, the Czech Republic, Estonia, Croatia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovenia and Slovakia. Only the Baltic States (Estonia, Latvia, Lithuania) have considerable railway market shares of more than 50%. Source: Eurostat and Ukrstat (www.ukrstat.gov.ua).

owned railway company in general.

The central hypothesis of the paper is that the regulated, state-owned and integrated RC model is the institutional framework that best fits the transport policy objectives and the economic environment of Ukraine. We will analyze the processes of institutional change in Ukraine and the effectiveness of this institutional change for the development of UZ. Theoretical concepts from institutional economics are applied to map how railway administration and railway players modify existing institutional arrangements to their interests.

The paper is structured as follows. In the next section we present a theoretical framework that serves as the basis for the empirical application to rail reform in Ukraine. Section 3 provides a brief description of EU rail reform with its main drivers followed by an analysis of its effectiveness and efficiency based on previous studies. Next, we present the current institutional frameworks in the EU member states and other countries. The remaining sections analyze the case of UZ, followed by conclusions and recommendations.

2. Theoretical framework

The theoretical concepts used in this paper are based on economic geography literature, more precisely on institutional economics and evolutionary economics applied to transport networks.

The notion of institutions forms the basis of the theoretical framework used in this paper. Institutions are formal or informal rules “humanly invented and/or socially constructed which shape human interaction” (North, 1990). Another definition by Strambach (2010) describes institutions as arrangements that “steer perceptions and activities of various actors”. Scott (2001) recognizes three pillars of institutions (i) the regulative, (ii) the normative and (iii) the cultural-cognitive, with their individual rationale, tools of enforcement and ground of accordance and legitimacy. Although the pillars are different, institutions restrict and empower human activities. Martin (2000) makes a distinction between the “institutional environment” and “institutional arrangements”. To the institutional environment are related informal guidelines such as conventions, customs, routines, norms as well as formal rules such as legally enforced decrees and regulations. Institutional arrangements are organizational forms such as enterprises, public authorities or in general governance structures that are supervised and regulated by the institutional environment. Notteboom et al. (2013) note that institutions are reproduced, strengthened, challenged and changed through the interactions between the “institutional environment” and “institutional arrangements”.

Institutions are both explanandum and explanans for the society in general and for institutional evolution in particular. North (1990) states that the function of institutions is to decrease the ambiguity in a society by contributing to a stable structure for human interplay and claims that “history matters” in the process of institutional change as the anticipations for the future are formed by the decisions made by actors in the past. Martin and Sunley (2006) argue that institutions “provide the stability and predictability needed for social and economic actions and transactions, whilst incrementally responding to and incorporating the outcomes of those actions and transactions; this duality of structure and agency necessarily means that institutions evolution tends to exhibit path dependence”.

The concept of “path dependence” is used in both institutional and evolutionary economics to define how current settlements are bound by the decisions of the past. Path dependency in institutional economics is viewed from the institutional change perspective. In evolutionary economics it is linked to the inheritance of the firm routines, innovation and new technology.

The concept of “lock-in” effect is used to refer to the result of industrial specialization of a region because of the agglomeration forces and a corresponding technological regime and innovation system (Grabher, 1993). The railway gauge is a rail-based example of a technological “lock-in”. For example, the railway gauge in Ukraine is 1520 mm while in the majority of EU countries it is 1435 mm. Differences in railway gauge have an impact on the ease of railway connections between rail networks.

“Inertia” is a phenomenon whereby institutions tend to become latent once there is an arrangement accepted and in place (Genschel, 1995). Martin (2010) calls for a rethinking of path dependence with a focus on evolution rather than inertia or continuity.

There is another approach on “path dependence” and “lock-in”. In evolutionary economics terms such as *path disruption, path creation* and *institutional plasticity* are being used (Martin and Sunley, 2006; MacKinnon et al., 2009; Strambach, 2010). The last term is applied to explain the case when an institutional change is taking place, with no mandatory fracture of the existing path (Strambach, 2010). There are several modes of institutional transformation: *layering, stretching, conversion, and displacement* (Martin, 2010). *Layering* represents a process of adding new rules, procedures or structures to existing institutions (Thelen, 2003; Boas, 2007). *Stretching* refers to changes of institutional arrangements by creating new layers to existing institutional