

Issue **9**(1) March 2009 pp. 46-62 ISSN: 1567-7141

www.ejtir.tbm.tudelft.nl

Liberalisation of Rail Freight Markets in Central and South-Eastern Europe: What the European Commission Can Do to Facilitate Rail Market Opening

Johanna Ludvigsen

Institute of Transport Economics¹

Drawing on the features of political and economic transformation in Central and South-eastern Europe, this article explores how the First Infrastructure Package which in 2001 liberalised rail freight markets in Europe affected the process of legislative compliance and market dynamics in the new EU-members. The article focuses on how these countries governments' safeguarding of economic welfare of national voters hindered rail market opening and distorted the level of playing ground for competition between the incumbents and the new entrants.

To understand the public administrators' behaviours, the study looks into in the economic woes of the newly liberated countries which imposed considerable political pressures on the national governments. Opening of rail markets to competition magnified these problems because national incumbents did not know how to compete and earn market profits. Large financial losses that they incurred as a consequence of rail market contestability have seriously threatened the means of subsistence for many railway workers. Thus, the governments stepped in to subsidise the incumbents' employment and service continuity. These developments reveal conflict between the national priorities and the European Commission's desire for intra-rail and inter-modal competition.

Yet, the results also indicate that despite unequal playing ground, private rail operators in Poland, the Czech Republic, and Romania learned how to compete and accumulate working capital for expansion into the truck-served freight segment. Besides, the growth in markets captured by new entrants was not deterred by infrastructure fees which are among highest in Europe, the discrimination in access to rail terminals and an official favouritism towards incumbents. The explanations are rooted in socio-political transformation which created unique opportunities for entry into the rail freight sector and unleashed entrepreneurial dynamism. In order to minimise incompatibility between the national and the European interests, the article concluded that the European development funds, which the new member states receive should be channelled to remove the discriminatory praxis, dismantle the national railway monopolies, and build consensus between the national and the European prerogatives.

 $^{1}\,\text{Gaustadall\'{e}en 21, NO 0349, Oslo, Norway, T: +4722573800, F: +4722609200, E: }\underline{\text{lu@toi.no}}$

Keywords: the First Infrastructure Package; infrastructure managers (IMs); national railways; new rail market entrants; government interventions; intra-modal competition; the European transport policy

1. Introduction

This article explores how the adoption of the First Infrastructure Package² which in 2001 opened the European rail freight markets to competition, has also restructured the rail business environments in the new EU-member states from state-owned monopolies to contestable market condition (Baumol, Panzar and Willing, 1982)³.

A broad analytical framework was employed in order to shed proper light on complexity of the phenomenon studied. First, the contestable market theory provided conceptual underpinning for the EC-instigated opening of national rail freight markets to competition from private rail undertakings (Baumol, Panzar and Willing, 1986). Second, results from several studies showing that the new member states experienced severe economic predicament under adoption of the rail deregulation directives that caused their governments to intervene in reforming the national transportation sector have been incorporated in order to better understand how the socioeconomic surroundings impacted on implementation of the First Infrastructure Package (Drew, 2008; Taylor and Ciechanski, 2008; Fingleton, Fox, Neven and Seabright, 1996).

More specifically, this article explores 1) how the national governments in Central and South-Eastern Europe stifled implementation of the First Infrastructure Package, 2) what factors, within this political-administrative context, may explain the relative success of private rail entrepreneurs and their imminent expansion into truck-served high-margin goods market, and 3) how the European Commission can facilitate competitiveness of rail freight transport versus truck conveyance, increase in freight tonnage carried by rail, and reduction in negative socio-environmental externalities associated with dominance of motorised transport in the European freight market, which collectively constitute the socio-environmental objectives of the First Infrastructure Package.

In order to uncover how the governments used the state ownership of national railways to constrain the professional freedoms of infrastructure managers (IMs), the incumbents, and the private rail undertakings, all affected by three rail deregulation directives 2001/12/13/14/EC)⁴, this article turns the analytical spotlight onto the governments' involvement in rail freight

² The First Infrastructure Package includes three directives:1) 2001/12/EC which a) provides infrastructure access rights to private rail undertakings offering international freight services, b) separates accounts of passengers and freight operations, c) separates the functions of train carriage and infrastructure capacity allocation, and d) formulates the principles for infrastructure charging and licensing of new rail undertakings, 2) 2001/13/EC dealing with licensing of rail undertakings, and 2001/14/EC defining rules for allocation of infrastructure capacity, levying of charges for the use of infrastructure and safety certification. Generally speaking, these directives embody the socio-environmental goals of the Common Transport and Environment Policy which could be summarised as more intra-rail rivalry, improvement of rail freight service quality as compared to motorised conveyance, increase in freight tonnage shipped by rail, and reduction in negative socio-environmental externalities caused by dominance of road haulage in the European freight movement.

³ The notion of "contestable market condition" has been conceptually formulated by Baumol, Panzar and Willig who in 1982 published a book "Contestable Markets and the Theory of Industry Structure". In this book contestable market condition has been defined as ".... the one that is accessible to potential entrants and has the following properties. First, the potential entrants can, without restriction, serve the same market demands and use the same productive techniques as those available to the incumbent firms. Second, the potential entrants evaluate the profitability of entry at the incumbent firms' pre-entry prices". (p.5)
⁴ Same as the endnote 5.

sectors. Next, it explains why, despite the relative competitive distortion caused by the governments' favoritism towards incumbents, the new rail entrants flourish in some of the newly liberated countries and prepare to enter into the (currently) truck-dominated segments of the freight market. Subsequently, it elaborates on how the European Commission can establish a level playing ground for competition between the incumbents and the new entrants, and by so doing, speed up the deregulation of rail freight markets in this European region, and thereby also reduce the hegemony of motorised transportation in Central and South-eastern Europe.

The dynamics of rail markets in Poland, the Czech Republic, Slovakia, Hungary, Romania and Bulgaria were analysed considering that the European rail deregulation legislation was adopted there in 2002 amidst the ongoing political and economic transformation from the central planning system to market-based liberal democracies. Therefore, in order to adequately understand the pace and the scope of rail market restructuring, the legacy from the communist era, as well as the specifics of transformation of both the rail sector and the surrounding society have been considered. A combination of internal and external pressures for change that the railways in these countries encountered over 2003-2007 has grossly complicated the establishment of deregulated rail freight governance institutions and fair competition. It has also put their governments under tremendous political pressures to reconcile their EC-commitments with national interests which differ significantly from those of the established and rich EU-members.

This analytical approach was also helpful for proposing how the European regulator may assist the new EU-member governments in reconciling the national and the European priorities, as well as how to support the private operators in contributing to implementation of the European transport policy by competing successfully for freight traffic.

2. Data sources and methods of analyses

The article builds on empirical findings produced by "REORIENT", a large EC-sponsored pan-European research project within the EC' sixth framework programme which 1) explored the features of national compliance with the First Infrastructure Package in Nordic, Central and South-eastern European countries and 2) identified the different types of barriers that still permeate the national railway systems, and hinder the focal countries from reaping the full benefits of rail deregulation. Factors driving these developments were examined using primary and secondary data. The main source of structured information was a eleven-country survey of public officials and rail operators (both the state-owned and the private ones), which assessed progress in railway deregulation, the national specifics of legislation adoption processes, the occurrence of different types of barriers, and their impacts on competition patterns in rail freight markets. In addition, results from a shipper survey in twelve European countries have been used here⁵. All together, the outcomes from the following international studies provided input to this

- 1) REORIENT Consortium (2007). Interoperability Status and Progress in Implementation of the First Infrastructure Package in Ten European Countries, Deliverable 2.1, http://www.reorient.no
- 2) REORIENT Consortium (2007). Is Rail Freight Still Popular in Central Europe? Views of Voting Public and Local Politicians in Ten European Countries, Deliverable 3.1, http://www.reorient.no

⁵ The REORIENT survey of public officials involved civil servants at national transportation ministries, competition authorities, and railway regulators in Finland, Norway, Sweden, Poland, the Czech Republic, Slovakia, Hungary, Bulgaria, Romania, and Greece.

- 3) REORIENT Consortium (2007). Demand and Supply Structure for Inter-modal (Railbased) and Single-modal (All Truck) Freight Supply Solutions, Deliverable 6.1, http://www.reorient.no
- 4) REORIENT Consortium (2007). Rail Market Opportunities in Central and South-eastern Europe", Deliverable 6.2, http://www.reorient.no
- 5) REORIENT Consortium. Barriers and Countermeasures Securing Seamless Freight Flows in Pan-European Corridors, Deliverable 5.1, http://www.reorient.no
- 6) REORIENT Consortium (2007). Comprehensive Welfare Analysis, Deliverable 7.1, http://www.reorient.no

3. Governments' involvement in liberalisation of rail markets in central and south-eastern Europe

The imposition by the First Infrastructure Package of functional devolution between rail operators and infrastructure managers (IMs) was driven by the need for intra-rail competition, non-discriminatory access to rail networks, gradual enhancement of rail freight competitiveness vis-à-vis motorised conveyance, and the ultimate reduction of socio-environmental harms (pollution, accidents and congestion) caused by truck hegemony in European freight transfer. This indicates that the European legislators considered the IMs' freedom from political influence and interference as instrumental for improvement of railways' competitiveness, and reduction of socio-environmental damage associated with dominance of motorised freight transfer.

Although the functional split between the train operations and the allocation of infrastructure capacity was completed in Central and South-eastern European countries in 2003, the new rail statutory regimes installed in Poland, Hungary, and Bulgaria still include both units within one holding company. On the other hand, the deregulated market governance adopted by the Czech Republic, Slovakia, and Romania has institutionally separated operators from infrastructure by splitting them into two independent organizations⁶.

In analyzing the government roles in these two forms of organisational arrangements, Leviäkangas et al. (2006), made a distinction between the *authority* and the *subsidiary models*. Within the first organizational set-up the IMs remain a subsidiary within a state-owned holding company incorporating train operators, and other professional service providers such as information transfer and traction suppliers, and act as a state representative without any business interests of their own. Within the *subsidiary model*, however, the IMs are institutionally separated from the passenger and cargo operators and other service suppliers, and pursue their own business interests by maximizing returns from access to rail infrastructure. In this case, the IMs simply "lease" the rail track from the state and "sell" the network capacity to train operators. A typical example of the first solution is Poland while the second, is Slovakia. Our data indicate that despite the fact that the governments' legal mandate to influence the IMs professional conduct is broader under the authority arrangement, within both organizational blueprints, the national governments still play a crucial strategic role.

But, in order to understand the reasons for the governments' engagements into management and operations of the freight railway sectors we invoke the political and economic transformation that

⁶ For review of advancement in formal implementation of the First infrastructure Package and the Interoperability Directive see the REORIENT Deliverable 2.2 "Interoperability Status and Progress in Implementation of the First Infrastructure Package in Ten European Countries" posted at www.reorient.no

from the early 1990s onwards restructured the Central and South-eastern European countries from communist states into liberal democracies (Dobry,2002; Good, 1994) ⁷.

The economic crisis of the early 1990s which followed the abolishment of communist regimes reduced considerably the scope of industrial activity, and demand for freight transportation in all former Eastern block nations (Geremek, 1999). Different national statistics provide different levels of economic downturn, but most of them agree that within 1990-1993, the output of transport services in these countries went down by as much as 20 percent, while the volumes of goods shipped decreased by 40 percent (Kornai, 2006; Kovacs, 1996). Adding to the complexity was the fact that after the political shift had been completed, and the economies started to grow again in 1999, the transport industry had to cope with the dramatic changes in foreign trade. The political reorientation changed the direction of incoming goods: they ceased to flow from the east and instead arrived from the west. At the same time the commodity structure shifted from imports of raw materials and exports of semi-finished and/or consumer goods to the Soviet Union to large freight inflows from western countries, and virtually no exports to the east. These structural changes benefited mostly the motorised operators, who had been privatised in the early 1990s. In the national economies where about 75 percent of all goods used to be moved by railways, this shift undermined the ability of the state railways to serve the new freight markets. Shrinking demand for railway transport led to considerable lay-offs which in turn, invoked severe political dismay that threatened the national governments' legitimacy as social guardians of public welfare. Faced with adverse socio-economic externalities of job losses suffered by the state railway workers, the governments involved themselves in management and funding of railway operations (Grobelny and Malinowski, 2007). The figure shows the percentage of the 1990 workforce still employed in 2004 by the national railways in Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Romania, Poland and Slovakia. For example Poland, Hungary and Slovenia had well below 50 per cent of their 1990 railway workers still employed in 20048.

⁷ The REORIENT WP3 international study explored the magnitude of social support for rail liberalisation policy among the voting public, local politicians, managers and employees at national and private rail freight companies, including also the trade unions. The survey concluded that both the employers and the employees at the state railways anticipate that many more workers will loose jobs in the future as a consequence of deregulation of the European rail freight market. For reference see REORIENT Deliverable 3.1"Is Rail Still Popular in Central Europe? Views of Voting Public and Local Politicians in Ten European Countries" at www.reorient.no

⁸ The Community of European Railway and Infrastructure Companies (CER) mentioned in its 2004 publication "Railways in an Enlarged Europe- Perspectives for the Sector in the New Member States of the European Union" that "On average these cuts in staff have been approximately proportional to the reduction of demand, and hence productivity has remained constant over the period of dramatic layoff – a considerable achievement considering the scale of the change. In spite of substantial difficulties in the past, the rail sector in the new member states has inherited a substantially higher market share than Western Europe. For instance, in 2000 the rail average freight market-share in the Central and South-eastern Europe was nearly 30 percent of the total freight tonnes-kilometres as compared with just 13 percent in Western Europe" (page 9).

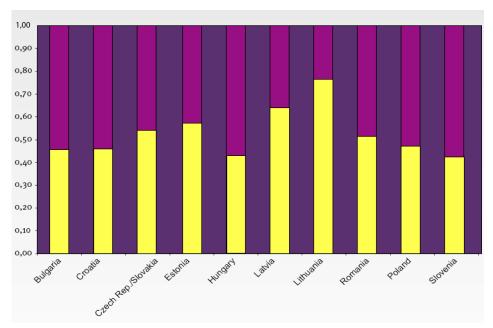


Figure 1. Reduction in Railway Employment Levels in the New EU-member States over 1990-2004. Source: The publication of the Community of European Railway and Infrastructure Companies (CER) in 2004, "The Railways in an Enlarged Europe. Perspectives for the Sector in the New Member Sates of the European Union" page 9.

Against this background, the 2002 opening of rail markets to private entrants put new pressures on national railways. Being government monopolies, they did not have experience in how to compete and earn market profits. Lack of managerial expertise and financial ability to cope with a contestable business environment led to operational disarray, which threatened the incumbents' capacity to fulfill public transport obligations⁹. In order to secure the needed level of rail service, the governments stepped in again, and subsidized the incumbents' employment and service provision¹⁰.

The infrastructure managers' (IMs) dependency on governmental transfers locked them into the state's political commitments which, among others, include

- 1. Support for loss-making national passenger and freight carriers.
- 2. Subsidies for national operators' infrastructure usage.
- 3. Prioritisation of network access for national carriers over private users.

By securing employment levels, state subsidies increased the power of trade unions and reduced the strategic latitude of the IMs' leadership for completing the technical and operational reforms mandated by the EC directives¹¹. As a result, the state transfers constrained the IMs' professional

⁹ The social transport obligation cannot be limited to passenger movement only, because many state-owned industries in the new EU member states in Central and South-eastern Europe are still obliged by law and by practice to use only the state-owned railways for transfer of all types of shipments.

¹⁰ Similar disruption occurred in the US following the post-1970 bankruptcies of major incumbent railroads in the North-east. Competition in the freight market served by these railroads had grown so strong that they could no longer cross-subsidize loss-making passenger service, including commuter traffic in the US major urban areas with earnings from freight carriage. The federal and the state governments thus were forced to take responsibility for funding continuous supply of rail passenger service. For reference, see Spychalski (1997):"Rail Transport: Retreat and Resurgence" in The ANNALS of the American Academy of Political and Social Science, Vol.53, September, pp.42-54.

¹¹ Needless to say the political priorities of national socio-economic policies may differ considerably from the European Transportation Policy in general and the goals of the First Infrastructure Package in particular. Roughly

Ludvigsen

Liberalisation of rail freight markets in central and South-Eastern Europe: What the European commission can do to facilitate rail market opening.

autonomy for network maintenance, upgrades, and investments. By so doing, the government interventions also affected the quality of network access for incumbents and new entrants.

The lack of the IMs' professional freedom influenced not only the infrastructure allocation and pricing system, but also how the infrastructure users, i.e., the train operators, perform freight service supply, and eventually, how competitive rail services are as compared to truck. The fact that the chief executives at the IMs and national railways are still political nominees rather than industry leaders appointed on professional merits also reveals the degree of governments' involvement¹².

Another important impact of the state's intervention is that a large amount of intra-European cohesion, environment protection and inter-regional development funds which the new member states receive from the European Community and distribute to nationally prioritized needs, are not only to a large extent channeled to road building, but also to modernization of incumbents' rolling stock and operations under the guise of "competitiveness-enhancing restructuring" ¹³.

As a consequence, the state ownership of both the IMs and the national railways caused significant operational irregularities, which in several cases hampered non-discriminatory access to, and fair pricing of, the track infrastructure. This in turn, distorted competition in rail service sector¹⁴. The state's involvement in Poland, the Czech Republic, Slovakia and Hungary thus delayed the true implementation of the First Infrastructure Package and the subsequent Interoperability Directive¹⁵.

However, an argument that is often voiced by the government officials and also some IMs maintains that the high-level of infrastructure fees that these countries charge for rail freight transfer actually signify the IMs' operational autonomy. This autonomy arises from the government-granted freedom to levy the network charges that maximally recoup the costs of infrastructure usage, maintenance and administration. By so doing, the reasoning goes the governments do not intervene into IMs' operational models, but judge their performance by financial outcomes only.

To this end, the results from the REORIENT studies indicate that the governments' interventions are not restricted only to economic instruments (e.g., employment subsidies) and enactment of rules and regulations (e.g., definitions of network technical conditions and user charges). Being the sole owner of national infrastructure within the authority arrangement and a sole shareholder within the subsidiary model, the state is in position to affect the IMs' performance in many other

speaking, the less economically liberal a government is, the more it will use its political might to preserve the employment stability at public enterprises and utilities.

¹² Two exceptions to this rule are represented by the state-owned freight carriers in Norway and Sweden where the state functions as financial investor only, and does not exercise its decision-making prerogatives.

¹³ The Polish government's transportation planning document issued in 2006 shows that between 2007 and 2013, Poland will receive about **19** billion Euros from the European Union funds for "Improvement of Infrastructure and Natural Environment". Out of this, about **11** billion Euros will be channelled to building the new highways, **4** billion and 760 million Euros will go to railways, 2 billion Euros will be invested in urban transit, 594 millions in shipping, and 396 millions in civil aviation (www.government.pl).

¹⁴ Data from interviews with rail entrepreneurs in Poland carried out under the REORIENT WP5 study show very clearly that these new market entrants are very concerned over irregularities arising from intra-organizational connections between PKP PLK (the Polish IM) and PKP Cargo which constitute two subsidiaries within the state-owned PKP Holding SA. As explained by informants, these irregularities involve transfers of information, resources and power, as well as existence of collective decision-making that do not correspond with the spirit of the First Infrastructure Package, although they do not necessarily violate the directives legally. Furthermore, the informants drew attention to the national market dominance of PKP Cargo, which several times have been charged by national competition authority with substantial financial penalties for obstruction of competition on the track

¹⁵ The Interoperability Directive, 2001/16/EC defines the technical specifications for interoperability (TSI) between the different national railway operations and infrastructure standards, plus modes of information transfer.

ways. Although the *authority* model, ceteris paribus, gives the government broader powers to influence the IM's performance, the following empirically documented modes of behavior blur the distinction between these two organizational blueprints.

- The state is represented on the board of national infrastructure management company and affects its decisions through operational, strategic and financial interventions reflecting its own socio-political priorities¹⁶.
- The infrastructure financing schemes adopted by Poland, Hungary, and the Czech Republic envision that the IM's operational budget is composed of infrastructure usage-fees and the state subsidies that together cover the total costs of network provision. Yet, despite the economic goal of recovering the main part of infrastructure costs from user charges, the IMs are still largely dependent on state transfers due to inability of national train-operating companies (passenger and freight) to pay for their network usage, and the actual infrastructure wear and tear caused by their traffic which still is much larger than that caused by the private carriers.
- The First Infrastructure Package, and especially Directive 2001/14/EC, specifies the train path allocation procedures and the level of charges applicable to all track usages. However, informal interferences occur, especially when the state-owned train operators (passenger and cargo) enjoy priority (over private carriers) for network access needed for fulfillment of public service obligation.
- Although the IMs prepare the technical documentation related to the needs for
 infrastructure developments and budgets for investments in networks improvements it is
 still the state which decides how much money from, say, the European socio-economic
 cohesion funds is channeled to railway sector and how this money is distributed between
 the national incumbent and the infrastructure managers.

So, the governments' influence over decisions taken by the railway and the IMs' management boards creates a complex web of intra-and-inter-organizational relationships, which obscure these subjects' functional autonomy irrespective of their legal organizational format. Therefore, the network of relationships between the state, the IMs and the incumbents influence the IMs' strategic and operational performance which collectively supports the incumbents¹⁷, even if the formal organizational structures fulfill all requirements of liberalisation legislation. Thus, despite the seemingly higher level of professional latitude that the IMs enjoy within the *subsidiary* model, the real issue is not the type of legal organizational structure, but rather, how the government exercises its ownership prerogatives and what political goals it pursues through mobilization of formal and informal power.

Hence, despite the legislation-mandated split, the infrastructure managers, the national rail carriers, and the governments in Poland, The Czech Republic, Slovakia, Hungary, Bulgaria, and Romania still live in close symbiosis. This connection is ultimately based on the governments' positions as:

- 1. Sole proprietor of national rail infrastructure.
- 2. Main source of subsidies for network usage, maintenance and investments.
- 3. Owner of national cargo and passenger railways.

¹⁶ This situation is well exemplified by Poland, where a representative of the national Ministry of Infrastructure and Communication holds at the same time a seat on the board of PKP Regional Traffic Company, and the rail regulator, the Office for Railway Transport.

¹⁷ The occurrence of informal social linkages between railway officials and railway operators is enhanced by the fact that all railway professionals in deregulated IMs and rail administration authorities originated from the national railways who in the past were the only providers of operational and managerial training.

4. Recipient and administrator of European funds promoting intra-European socioeconomic cohesion, protection of natural environment and regional development¹⁸.

In order to understand the political motives behind the governments' support for the national railways in Poland, the Czech Republic, Slovakia, Bulgaria, and Hungary, even after these countries joined the European Union, we look into the relationship between the governments' commitments for the safeguarding of national interests and the fulfillment of the Common European Transport Policy.

4. Conflict between the national interests and European commitments

When the different countries' domestic priorities are ideologically and economically congruent with the European postulates, the national governments generally use their political clout to align European considerations with country-specific interests. In so doing, the governments usually appeal to national precedence in order to respect the socio-political mood of country's voters¹⁹.

With reference to this situation, one may suggest that instead of trying to preserve the current employment levels, governments may use the national welfare systems to help out those who no longer are needed by technically and operationally more advanced IMs and national rail carriers. By skilfully marketing the benefits of rail market opening over the temporary sacrifices, governments may secure popular support for rail liberalisation, and even for gradual privatisation of cargo operators.

Public subsidies protecting the employment at state-owned operators and infrastructure managers do not only preserve the status quo. When national incumbents cover their losses and investments from "public borrowings" financed by national and/or European tax payers, while private operators pay full infrastructure prices as well as market-determined interests charges on business loans and/or other capital securities, the level of the playing ground for domestic and international competition is seriously distorted and the contestability of the entire European freight market imperiled.

In addition, subsidies make recipients ill-equipped for domestic and international rivalry, and hinder them from regaining operational, technical and financial fitness. Further, government grants incapacitate the recipients' ability to absorb the high costs of new investments mandated by interoperability legislation, such as higher technical standards of operations management and more stringent safety and security regimes. In the long run, prolonged subsidization reduces even more the incumbents' ability to cope with intra-modal and inter-modal rivalry²⁰. It is not a coincidence then that several government railways with limited decision-making autonomy such as PKP Cargo in Poland, ĈD in the Czech Republic, and MÁV in Hungary consistently lose

¹⁸ The REORIENT WP2 field investigation disclosed that the Transportation Ministries in Poland and Hungary have special departments for transfer of state "loans" to the IMs and the state-owned railways. The subsidies to the IMs cover operational deficits, which are not covered by the loss-making state railways, who still remain the largest network users.

¹⁹ This statement is well illustrated by the slogans used by the Irish government before the national referendum on the European Union Lisbon Reform Treaty in June 2008 that in the case of rejection the country may loose the large scale socio-economic benefits arising from its EU-membership.

²⁰ Because straightforward subsidies to state enterprises are outlawed by the EC competition legislation, transfers of public funds are often defined as "state loans" that the national treasury extends to unprofitable operators in the public sector. Since the magnitude of public debt acquired by PKP CARGO and MÁV CARGO grew substantially over the last years, they constitute severe impediments to pending privatization which in Poland is scheduled for the period 2010-2020. In order to enhance the operator's market attractiveness, several political factions call on moratorium of the public debt accumulated by PKP Cargo in Poland. In addition, the lack of financial solidity on the part of freight and passenger operators translates also into financial incapability to pay for infrastructure usage, and in turn leads to considerable budgetary deficits for PKP PLK and MÁV Infrastructure.

market shares to both, truck operators and private rail carriers (Grobelny and Malinowski, 2007; Kovacs, 1996)²¹.

Still further, government transfers drain the public coffers of financial resources which otherwise could be used for infrastructure expansion, installation of ERTMS (European Rail Transport Management System), and/or lowering of infrastructure charges.

Finally, governments' interventions in infrastructure and railways' management create political *power asymmetry* because private rail undertakings are grossly underrepresented in political decision-making forums. Incumbents, on the other hand, can easily access political establishments, and by so doing attract their attention, sentiments, and financial protection.

This power asymmetry magnifies the risks assumed by private rail ventures with investments in new rail freight projects, more technically sophisticated rolling stock, and more advanced ICT installations. This, in turn, delays development of highly specialized rail service capable of competing with motorized operators in inter-modal freight segments. The above shows that governments have different socio-political agendas than the European Commission; they use their control over national railways to attain national political objectives rather than the goals of the European transport policy.

To expose even more the incongruence between the governments' national and European duties, we shall in the following discuss a situation where the European considerations are in conflict with national priorities. The example is a situation where governments have a preference for stable public sector employment and/or fulfillment of public transport obligations. In this case, there can be a conflict of interest between the governments' political obligation to safeguard the welfare of national voters and their European commitments to implement the reforms mandated by membership in European Community. This conflict derives from the fact that the national administrators' socio-political legitimacy in a given country is not determined by the economic efficiency of, say, the European transportation system, but rather by how well the current power wielders cater to socio-economic needs and sentiments of their voters.

Balancing political allegiance to national and European priorities may be particularly difficult for governments in post-communist countries facing greater economic challenges and stronger welfare needs than their counterparts in the established and rich EU-members. These governments are facing two conflicting imperatives. On the one hand, they need to provide basic welfare to large groups of population who lost their means of subsistence due to the transition to a market economy, and who did not as yet manage to benefit from the new economic order (Kluegel, Mason and Wegener, 1995). On the other hand, these governments are aware that they need European money in order to be able to complete the large-scale economic restructuring, which again, preconditions future increases in the living standards of their voters. Given the interdependency between domestic economic growth and access to European markets for goods, services and capital, as well as regional development and structural cohesion funds, this "duality of structure" effectively restrains these governments' freedom of action (Giddens, 1977).

That's why the governments often oppose resolution of country-specific problems by supranational bodies. In an attempt to meet the national priorities, they distance themselves from European commitments, except of course, when the European support serves their causes. Thus, the governments' participation in international political projects, which endanger the important domestic priorities, limits their strategic freedom of action. This specifically applies to international undertakings with high-level short-term national sacrifices and long-term uncertainty related to achievement of both the national and the European benefits.

²¹ As shown by the REORIENT WP6 study, the share of domestic freight market controlled by private rail undertakings in Poland and the Czech Republic reached in 2007 20 p.c. which is by far one of the highest in Europe. At the same point in time, the Hungarian MÁV Cargo lost about 10 p.c. of freight volumes to motorised operators.

It is understandable, then, that when deregulation of European railways invokes some important socio-economic disadvantages such as higher unemployment and/or disruption of rail transport supply, governments will, in different ways, oppose its fulfillment by protecting the state-owned railways from market forces²². An official explanation for using public money on state railways is to shield them from competition until they reinvent themselves through "financial restructuring" and become ready for privatization. However, another distant but highly plausible reason is avoidance of high political costs arising from frustration of railway workers who under the previous regime enjoyed many sector-specific privileges and who today, together with their family members, exercise substantial electoral power²³. This electoral power may be used to vote the politicians out of office.

Seen from the European vantage point, a single member state which reforms its railways does not exert much impact on the entire European system. Only a uniform behavior of all European Community members may produce desirable changes in the European Railway Area.

Under these conditions channeling of European cohesion and/or regional development funds to improve the national railways' technical standards may be prudent, provided however that these investments will also enhance the quality of the trans-European network. By endowing the Central and South-eastern countries' governments with additional resources, the European funds may increase their capacity for political maneuvering. Larger amounts of discretionary resources may reduce pressures for political tradeoffs that the public administrators face as regards channeling of scarce resources to important social demands such as high-quality health care versus uncertain European railway projects. Still another strategic measure that also may enhance the national governments' allegiance to European causes may be channeling of the European funds to important national priorities against firm domestic commitments to improvements of national stretches of trans-European corridors composing different parts of the Ten-T network²⁴.

One may argue that this is already happening via transfer of large regional development funds to Central and South-eastern European countries. However, when executing this operation, the EC may need to make sure that the European money is employed in a nondiscriminatory manner, and that it supports projects which benefit both the incumbents and new rail entrants. Investments in new rail infrastructure and/or network capacity improvements are the obvious targets for such undertakings. Yet, as shown by the European transfers to Poland and Hungary, these political goals are jeopardized when Community funds are channelled to areas which undermine the objectives of rail liberalisation either through building new highways or propping up the unprofitable state rail carriers. So, it may be suggested that the European Commission should make more efforts to ensure that the European financing schemes reconcile the national and the European political objectives²⁵. This would also provide greater assurance to the individual country governments that their national policy actions reinforcing the European causes will be sponsored at the European level.

²² David Mason (1995, p.49) cited an assessment made by one Eastern European dissident historian saying: "These countries have removed many injustices from the previous political and social system. Yet in many cases, fresh social, economic and other injustices have taken the place of the old wrongs"...

²³ It is well known fact that under the communist regime the railway workers did not earn much but enjoyed many privileges such as retirement at the age of fifty five (against otherwise common sixty five), highly subsidised vacations, housing, and also (depending on the country) access to considerably cheaper heating material such as coal. Abolishment of these benefits in Poland, the Czech Republic and Hungary caused several strikes and/or strike threats organised by the railways trade unions in 2006 and 2007.

²⁴ TEN-T network is a system of ten inter-modal transport axes that connect the European Union members with each other and with neighbouring countries which will over 2007-2013 attract major investment funds from the European Commission and member states.

²⁵ As shown by the REORIENT WP2 and WP5 studies, these differ considerably not only between the countries, but also between the different departments within the same national governments.

As indicated, the delay in Central and South-eastern countries' compliance with rail liberalisation could be causally linked to at least two types of political conflicts. The first relates to incompatibility between the new rail legislation's goal to open rail freight markets to competition and the national priorities for welfare and stable employment. Introduction of measures, which in the short and/or medium-terms could be painful and unpopular among the countries' voters, generate serious political risks that discourage national politicians from accepting the high social costs of rail liberalisation. The second conflict arises from the political and economic rivalry between the different national sectors for scarce domestic resources needed for proper functioning of their social welfare. The REORIENT survey of politicians and the voting public in ten Central and South-eastern countries shows clearly that fulfilment of social needs related to high-quality education, fighting of crime and proper health care scored higher on political priority than rebalancing of freight transfer between rail and truck, and restructuring of national railways²⁶. Moreover, the levels of political conflicts arising from rivalry for scarce national resources are, in some important areas of legislative compliance, directly dependent on the absolute levels of the focal countries' economic wealth. In particular, this refers to national abilities to invest in the modernization of railway infrastructure and adoption of new and costly technologies for rail operations management (such as European Rail Transport Management System).

Within this political environment, it is not surprising that the magnitude of resources channelled by national governments to implementation of rail liberalisation directives and the ability to invest in international rail freight corridors are inadequate as seen from the perspective of the First Infrastructure Package²⁷.

The following section contrasts the governments' retention of loss-making national railways and politically constrained infrastructure managers with the developments in rail freight markets served by private carriers.

5. Market outlook for inter-modal rail service

The fact that the regulatory authorities in Central and South-eastern European countries licensed a sizable number of new entrants who compete fiercely with incumbents, and also with each other, raises an important question: why did they do it? There are at least two answers to this question: Firstly, the governments in all Central and South-eastern countries are in great need of market-generated revenues, and private rail freight operators are, to a greater extent than many incumbents, regular payers of full price for infrastructure usage. Secondly, the national governments cannot totally disregard their European commitments.

However, licensing of private rail entrants to run trains on the national networks under implementation of the basic requirements of rail liberalization legislation is not consistent with these governments expectation that these small operators would not threaten the incumbents. Yet, this very assumption seems to be driving the public administrators' actions disfavouring the new entrants.

Thus, a possible explanation for why the private rail operators in Poland, the Czech Republic, Slovakia, Hungary, Bulgaria and Romania have as yet not engaged themselves in competition with truck is that these countries' rail governance apparatus still favours incumbents.

²⁶ Same as the endnote 5.

²⁷ This situation was well summarized by Mr. Jean-Claude Juncker, a Prime Minister of Luxemburg and a chairman of the 13-nation group of euro-zone finance ministers who once observed: "We all know exactly what we shall do, but we do not know how to get re-elected after we have done it", cited by The Economist of March 13th, 2007.

However, using knowledge of business strategic development combined with observations of market expansion in other service provision sectors, one may conjecture that private rail ventures' progression into the high-margin truck-served goods segment may be just behind the corner.

Empirical studies show that business expansion is contingent on at least three antecedents:

- 1. Sufficient managerial knowledge of risks arising from domain enlargement and competition skills needed for entrenchment in new market segments Hisrich, , McDougall and Oviatt, 2000).
- 2. Availability of capital assets for enlargement of production capacity McDougall and Oviatt, 2000)..
- 3. Sufficient financial resources accumulated through firms' own profitable performance (Evans and Jovanovič, 1989; Porter, 1996, 1998).

It is reasonable thus to assume that the venturing by new rail start-ups into high-value, high-margin cargo is contingent on mastering new competition strategies, which must be learned through prior rivalry with incumbents in traditional rail markets. Hence, knowledge of competition in liberated rail markets coupled with access to financial assets needed for expansion of production capacity may both hinder and foster rail inter-modal advancement.

These preconditions translate into:

- 1. Good grasp of service quality dimensions required by shippers of high-value cargo (Ludvigsen, 1999)²⁸.
- Possession of flatcars for transfer of inter-modal Load Carrying Devices (LCUs) such as swap-bodies, containers and semi-trailers, (which interchangeably can be ferried by seagoing vessels and/or rail/road vehicles plus multi-system locomotives for seamless border crossings.
- 3. Accumulation of large stocks of financial assets that provide cash for business expansion and/or ability to attract external investors by offering yields higher than other capital investments.

Usually a combination of internal and external money is used for financing business growth²⁹.

This trend is corroborated by the floatation of shares by the two largest Polish private rail operators on the Warsaw stock exchange in 2007. Also, in the Czech Republic and Romania, working capital of several private rail undertakings has been expanded through access to the stock exchange and acquisition of strategic investors. The increase in these companies' equity foretells that access to private capital constitutes a contingency that depending on its character may either delay or speed up an entrepreneurial market expansion.

Another indicator of investments in inter-modal service supply is a considerable increase in prices of rail flatcars, which in Poland alone rose by 25-30 percent over 2006. The country's second largest private rail undertaking reported that the costs of refurbishing and repairing of the old equipment have also shot up by 35-40 percent due to overbooking of workshop capacity. This business source added also that none of the three big container platform manufacturers in Poland, The Czech Republic, and Belgium, can supply new equipment before the end of 2008. Confronted by the lack of second hand locomotives, the company will lease 5-10 new two-system engines from Angel Trains, a subsidiary of Bombardier SA, and invest 15-20 million Euros of its

²⁸ As showed by Ludvigsen (1999, pp. 31-54) in "Freight Transport Supply and Demand Conditions in the Nordic Countries", shippers do not differentiate between the quality required from rail inter-modal freight services and single-modal all-truck conveyance. Therefore, truck provides a baseline for quality levels required from intermodal rail operators.

²⁹ As registered by the REORIENT WP6 interview with major market players, one private rail entrepreneur from Poland complained that volumes of rail freight that his company transferred in 2006 grew by sixty percent only as compared to 2005, in contrast to 120 percent growth posted during both 2003 and 2004.

own money in development of inter-modal rail terminals at strategically located logistical hubs in Poland. The above developments suggest that these private rail undertakings are preparing themselves seriously for expansion into truck-dominated freight transfer markets.

The figure below outlines the time-paced market expansion trajectory from small rail start-ups controlled by private owners to publicly quoted large-turnover companies and then on further to international corporations with networks of subsidiaries and joint ventures in multiple cargo-service markets. The graphic suggests that progression into more demanding high-margin service is contingent on rail managers' acquisition of competition skills required for rivalry in new market segments, high growth of their own businesses that provide liquidity for funding of service expansion, and enlargement of capital stock through equity securitization or issuance of private bond obligations (Shane, 1998). The three business growth trajectories depict the rail business environments characterised by the different levels of market deregulation, growth opportunities, and availability of internal and external capital, which together affect managerial propensity for rail business expansion.

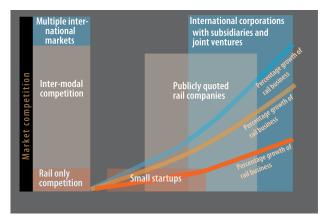


Figure 2. Entrepreneurial Expansion Trajectory in Rail Freight Markets

The above reviewed strategic behaviours of private rail entrants point to structural changes in the supply of rail freight service, and imminent emergence of inter-modal rail versus all-road freight transport competition in Central and South-eastern European countries.

6. Summary and recommendations

The evidence compiled by the REORIENT project and synthesized in this article indicates that neither incomplete regulatory implementation of rail liberalisation directives nor the government protection of national incumbents can be considered as effective barriers to intra-modal and intermodal competition in Central and South-eastern European countries. These two types of obstacles thus do not act as insurmountable hindrances to attainment of the socio-environmental objectives of the First Infrastructure Package.

It appears that both of these institutional and political barriers may be overcome by entrepreneurial spirit and propensity for risk-taking. The evidence examined suggests that collectively, these two social capital assets have spurred new rivalry methods and accumulation of risk-friendly venture capital. What is even more surprising is that these changes in market structure occurred over the last five years in business environments beset by large economic and political volatility caused by transition from the communist regime to liberal democratic system, and an explicit support of incumbent railways by the national governments.

The emerging horizontal and vertical expansion³⁰ in rail freight markets may thus justify a positive expectation that the private railway industry in Central and South-eastern Europe may grow more quickly than expected, and definitely swifter than in the Nordic region, and contribute materially to attainment of political objectives of the European Commission³¹.

The rail sector re-structuring trajectories within the new EU- member states seem to follow a pattern of business expansion which also occurs in other manufacturing and service provision sectors, and are basically driven by entrepreneurial vision, fierce competition, and ability to utilize regulatory opportunities for business growth. These results also suggest that achievement of a more competitively robust European rail freight industry is to a higher degree facilitated by flourishing rail entrepreneurs than by modernisation of the national incumbents.

This raises two important questions of how the European regulator may help 1) the member states to reconcile the national needs with European priorities, and 2) the private rail entrepreneurs in their fight with administrative discrimination, so that they may contribute even more to fulfilment of socio-environmental objectives of the European Community.

Transfers of large amounts of European money to national priorities of Central and South-Eastern European countries may need to be contingent on removal of discriminatory praxis in the railway sector. Further, the European funds need to be channelled to rail infrastructure projects that will benefit the new and the incumbent operators, and contribute to technical advancement of trans-European inter-modal corridors.

The European Investment Bank may extend some "soft" loans to technically fit but financially weak small rail ventures in order to offset the discriminatory effects of subsidies that the national railways receive from the public purse and to motivate private rail carriers to invest in higher quality, more sophisticated rail freight service.

Despite the fact that the professional decision-making freedom of infrastructure managers could be constrained by the state's interventions under both the authority and the subsidiary organisational models, the European Commission may insist on a gradual transition by the member states towards the subsidiary structure, whereby IMs, institutionally separated from the national railways remain less exposed to financial woes of national cargo operators.

As regards legislative amendments, three executive measures may be proposed:

- 1. Those that scale-back the dominant positions of national railways through gradual privatisation.
- 2. Usage of national welfare systems to help railway workers who need new skills in order to retain jobs in technically more sophisticated railway companies.
- 3. Provision of administrative and financial assistance to aspiring new rail entrepreneurs who want to enter rail freight markets.

References

Baumol, W., Panzar, J.C., and Willing, R.D. (1982). Contestable Markets and the Theory of Industry Structure. New York: Harcourt Brace Jovanovich, Inc.

³⁰ Horizontal expansion may involve bounding of rail freight service across several corridors in order to make rail offerings more competitive to motorized transit. Vertical expansion pertains to inclusion of logistics and/or forwarding service provision into rail line haulage by supply of combined rail-road-logistics to shippers and consignees.

³¹ By full-fledged legislative fulfilment we mean that the pattern of competition development in deregulated rail markets adheres to a vision drawn by the European legislator in rail deregulation directives which assumed that intra-rail competition will precede inter-modal rivalry.

Ludvigsen

Liberalisation of rail freight markets in central and South-Eastern Europe: What the European commission can do to facilitate rail market opening.

Baumol, W.J., Panzar, J.C. and Willing, R.D. (1986). On the Theory of Perfectly Contestable Markets. In Stiglitz, J. E. and Matheewson, G.F. (eds.) *New Developments in the Analysis of Market Structure*. Cambridge, Massachusetts, The MIT Press, pp.339-365.

Community of European Railway and Infrastructure Companies (CER) (2004). Railways in the Enlarged Europe. Perspective for the Sector in the New Member States of the European Union. Brussels, Belgium.

Dobry, M. (ed.) (2002). Democratic and Capitalist Transition in Eastern Europe: Lessons for the Social Science. Kluwer Academic Publisher Added as reference to the text

Drew, J. (2008). The Benefits for Rail Freight Customers of Vertical Separation and Open Access. *Transport Reviews*, pp.1-15.

Evans, D.S. and Jovanovičm B. (1989). An Estimated Model of Entrepreneurial Choice under Liquidity Constraints. In Scott Shane (ed.) (2002). *The Foundations of Entrepreneurship, An Elgar Reference Collection*. Northampton MA, pp. 383-402.

Fingleton, J., Fox, E., Neven, D., and Seabright, P. (1996). *Competition Policy and the Transformation of Central Europe*. Washington, DC, The Brookings Institution.

Geremek, B. (1999). The Transformation of Central Europe. *Journal of Democracy*, vol. 10, no. 3, pp. 115-120.

Giddens, A. (1977). Studies in Social and Political Theory. London, Macmillan.

Good, D. F. (1994). *Economic Transformation in Central Europe: Legacies from the Past and Policies for the Future.* London, Routledge. Addedd to references in the text

Grobelny, M., and Malinowski, L. (2007). The Structure of Rail Freight Transport in Poland. *Railway Industry - Polish Industrial Transport Newspaper*, issued on November 19th.

Hisrich, R., McDougall, P. and Oviatt B. (2000). Cases in International Entrepreneurship. Irwin, Chicago. Added as reference to the text

Kluegel, J.R., Mason, D. S. and Wegener, B. (1995). *Social Justice and Political Change: Public Opinion in Capitalist and Post-Communist States*. Aldine de Gruyter. Added to references in the text.

Kornai, J. (2006). The Great Transformation of Central Eastern Europe, Success and Disappointment. *Economics of Transition*, vol. 14, no. 2 pp. 207-244.

Kovacs, J. M. (1996). Social Costs of Economic Transformation in Central Europe. JAI Press Inc, London.

Leviäkangas, P., Herwig, S., Czyczula, W., Zajac, B., Thomchick, E., Spychalski, J., Mahmassani, H., Walker, W., Ludvigsen, J., and Vold, A. (2006). Infrastructure Managers' Organizational Models, Pricing of Infrastructure and the States' Ownership Role. Technical Report within REORIENT project, WP6, VTT, Technical Research Centre of Finland.

Ludvigsen, J. (1999). Freight Transport Supply and Demand Condition in the Nordic Countries, *Transportation Journal*, 39 (2), pp.31.54.

Mason, D. (1995). Social Justice and Political Change: Public Opinion in Capitalist and Post-Communist States, Aldine de Gruyter.

McDougall, P. and Oviatt, B. M. (2000). International Entrepreneurship: The Intersection of Two Research Paths. Special Research Forum on International Entrepreneurship. *the Academy of Management Journal*, vol. 43, no. 5, pp. 902-906 added as reference to the text.

Porter, M. E. (1996). What is Strategy. *Harvard Business Review*, vol. 35, pp. 61-78.

Porter, M. E. (1998). The Competitive Advantage of Nations. Free Press, N.Y.

REORIENT Consortium (2007). Interoperability Status and Progress in Implementation of the First Infrastructure Package in Ten European Countries, Deliverable 2.1. Available at: http://www.reorient.no (assessed February 2009).

Ludvigsen

Liberalisation of rail freight markets in central and South-Eastern Europe: What the European commission can do to facilitate rail market opening.

REORIENT Consortium (2007). Is Rail Freight Still Popular in Central Europe? Views of Voting Public and Local Politicians in Ten European Countries, Deliverable 3.1. Available at: http://www.reorient.no (assessed February 2009).

REORIENT Consortium (2007). Barriers and Counter-measures Securing Seamless Freight Flows in Pan-European Corridors, Deliverable 5.1. Available at: http://www.reorient.no (assessed February 2009).

REORIENT Consortium (2007). Demand and Supply Structures for Inter-modal (Rail-based) and Single-modal (All Truck) Freight Supply Solutions, Deliverable 6.1. Available at: http://www.reorient.no (assessed February 2009).

REORIENT Consortium (2007), Rail Market Opportunities in Central and South-eastern Europe, Deliverable 6.2. http://www.reorient.no (assessed February 2009).

REORIENT Consortium (2007). Comprehensive Welfare Analysis, Deliverable 7.1. Available at: http://www.reorient.no (assessed February 2009).

Shane, S. A. (1998). Making New Franchise Systems Work. *Strategic Management Journal*, vol. 19, no. 7, pp. 697-707.

Spychalski, J. (1997). Rail Transport: Retreat and Resurgence. *Annals of American Academy of Political and Social Science*, vol. 53, pp.43-54.

Taylor, Z., and Ciechanski, A. (2008). What Happened to the National Road Carrier in a Post-Communist Country? The Case of Poland's State Road Transport. *Transport Reviews*, vol. 28, no. 5, pp.619-640.