COMPETITION IN FREIGHT RAILWAYS: "ABOVE-THE-RAIL" OPERATORS IN CENTRAL EUROPE AND RUSSIA

Russell Pittman*, Oana Diaconu**, Emanual Šip §, Anna Tomovᆠ& Jerzy Wronka‡

ABSTRACT

The railways of Russia and the Central and Eastern European countries are in the process of restructuring. In most cases, the "vertical separation" reform model is being pursued, and reformers are seeking to introduce competition among freight train operators through the provision of "open access" to the monopoly infrastructure. This paper shows that, in two countries, Poland and Romania, a good deal of competition has been created by the entry of new freight operators, many of them either large shippers integrating upstream or former freight forwarders. However, in other countries, the incumbent freight operators retain virtually 100 percent of the market. In particular, Russia has taken only the very first steps toward creating competition in this sector, and new freight train operators face significant barriers to competing with the incumbent.

I. INTRODUCTION

Policymakers around the world continue to debate the question of the most promising way to restructure the old state-run monopoly freight railways.¹

- * Director of Economic Research and Director of International Technical Assistance, Economic Analysis Group, Antitrust Division, U.S. Department of Justice, and Visiting Professor, New Economic School, Moscow; E-mail: Russell.Pittman@usdoj.gov.
- ** Assistant Professor, Department of Economics and Management, Polytechnic University of Bucharest; E-mail: Diaconu.Oana@gmail.com.
- § Special Advisor, Viamont, a.s.; E-mail: Sip@alliproc.com.
- † Professor, Faculty of Operation and Economics of Transport and Communications, University of Žilina; E-mail: Anna.Tomova@fpedas.utc.sk.
- [‡] Professor in Economic Sciences, University of Szczecin; E-mail: Jerzywronka@wp.pl. Some of the results here were presented at the 4th Annual Conference on "Railroad Industry Structure, Competition and Investment," Universidad Carlos III de Madrid, October 2006. The authors are grateful to the participants and organizers of that conference for helpful comments and suggestions; the original papers are available from the authors upon request. They are also grateful to discussant Sergei Guriev and other participants at the ACES session of the ASSA annual meetings in Chicago in 2007. The usual disclaimers apply. Superb research assistance from Sophia Diamantis is gratefully acknowledged. The views expressed are not those of the U.S. Department of Justice or any other organization.
- ¹ For broader discussions, see David Newbery, Privatization, Restructuring, and Regulation of Network Utilities (Cambridge, MA: MIT Press, 1999), concerning electricity, gas, and

The instinct of many liberal reformers has been to pursue the same model that has become something of a "default" restructuring model in other infrastructure sectors: complete separation of the enterprises in what is designed to be the "competitive" portion of the sector—in this case, train operation—from the enterprise operating the infrastructure network—in this case, the track, signaling, stations, marshaling yards, and so on. Other reformers, however—fearing serious disruptions from such a major restructuring action, and having observed the problems suffered by some countries that have pursued this model (especially the U.K.)—have argued for a less disruptive version of the same idea: creating competition among independent train operating companies, but allowing the infrastructure operator to continue to operate trains as well.³

The former model—that of complete vertical separation—is sometimes termed the "British model." The latter—maintaining vertical integration but requiring the integrated company to allow independent train operators to use the infrastructure—is usually termed "third party access" (TPA).

As in other infrastructure sectors, the advantage of the option of complete vertical separation is that it should remove any incentives for the infrastructure operator to discriminate among different "upstream" competitors—in this case, for the track company to favor its own trains over those of another company. This was the theory behind one of the earliest vertical separation cases, *U.S. v. AT&T.* The most obvious disadvantage of vertical separation is that it by definition eliminates the economies of scope enjoyed by an enterprise controlling both track and trains. Early skeptics feared a loss of the ability

telecoms; Russell Pittman, "Vertical Restructuring (or Not) of the Infrastructure Sectors of Transition Economies," 3 Journal of Industry Competition & Trade 5 (2003), concerning railways, electricity, and telecoms; José A Gómex-Ibáñez and Ginés de Rus, eds, *Competition in the Railway Industry: An International Comparative Analysis* (Northampton, MA: Edward Elgar, 2006) and Pittman, "Options for Restructuring the State-Owned Monopoly Railway," in Wayne Talley and Scott Dennis, eds, *Railroad Economics*. Research in Transportation Economics, vol. 20 (Amsterdam: Elsevier, 2007) concerning railways.

² See, e.g., Kenneth Irvine, "Track to the Future," working paper, Adam Smith Institute, London, 1988, and Sir Christopher Foster, "The Economics of Rail Privatisation," Discussion Paper 7, Centre for the Study of Regulated Industries, School of Management, University of Bath, 1994.

³ See, e.g., David Starkie, "BR: Privatisation Without Tears," 5 Economic Affairs (1994), reprinted as "British Rail: Competition on the Network," in Cento Veljanovski, ed., Privatisation & Competition: A Market Prospectus (London: Institute of Economic Affairs, 1989); Markus Kroll, "Integration of Infrastructure and Transport: An Assessment from Industrial Economics and Railway Perspectives," 2nd Conference on Railroad Industry Structure, Competition and Investment, Evanston, IL, 2004; and John Hibbs, "Railways and the Power of Emotion: Seeking a Market Solution," in Philip Booth, ed., The Railways, the Market and the Government (London: Institute of Economic Affairs, 2006).

⁴ Timothy J. Brennan, "Why Regulated Firms Should Be Kept Out of Unregulated Markets: Understanding the Divestiture in *United States v. AT&T*," 32 Antitrust Bulletin 741 (1980), and Brennan, "Is the Theory Behind U.S. v. AT&T Applicable Today?" 40 Antitrust Bulletin 455 (1995).

to coordinate trains owned by different enterprises—indeed this was the reason that railways became vertically integrated in the U.K. and the U.S.⁵—but an equally serious problem may be the skewing or at least confusion of investment incentives, for both train and track enterprises.

Correspondingly, the perceived advantage of the TPA model is that it maintains the economies of vertical integration of the single enterprise that operates both trains and track, while seeking to force the integrated enterprise to provide access to competitors and so to create competition in the train operating portion of the sector. The corresponding disadvantage is that the integrated company will generally have incentives to favor its own trains over those of nonintegrated companies in access prices and other terms, and a regulatory agency and/or a competition agency may face great difficulties in seeking to prevent such favoritism, especially in countries without strong traditions in those areas, or a strong judiciary to support such agencies. Broadly speaking, the share of independent train operators in the total rail freight traffic of countries that have introduced TPA regimes is not large; however, to be fair, it is not large in countries that have introduced vertical separation, either.

Partly in reaction to problems and complications with the vertical separation and TPA models of freight rail restructuring, reformers in some countries have tried a third approach: maintaining vertical integration of the railway, not requiring third party access to the infrastructure (or at least not much), but rather separating the old vertically integrated monopoly horizontally—creating independent vertically integrated railway enterprises possessing some regional monopoly power but competing for both origin and destination traffic at common points. Because this is the reform model chosen by policymakers in Argentina and Mexico, and to some degree Brazil, we may term it the "Latin American model."

The governments of Central and Eastern European (CEE) countries and Russia have chosen different options from among these alternatives in their efforts to restructure their freight railways. The larger and more reformed CEE countries have chosen the vertical separation model, separating freight train operating companies (as well as passenger operating companies) from infrastructure companies and making the infrastructure available for operations by other independent train operating companies. As we will discuss, this reform strategy has to this point been surprisingly successful in two countries and much less so in others; in fact, Romania and Poland must be ranked as two of the world leaders in creating freight rail competition out of the old vertically integrated monopoly situation. On the other hand, although

⁵ See Pittman, "Vertical Restructuring," supra note 1, and the references cited therein.

⁶ This model is discussed in more detail in Russell Pittman, "Chinese Railway Reform and Competition: Lessons from the Experience in Other Countries," 38 Journal of Transport Economics and Policy 309 (2004); Jorge Kogan, "Latin America: Competition for Concessions," in Gómex-Ibáñez and de Rus, *Competition*, *supra* note 1, and Pittman, "Options," *supra* note 1.

some Russian government liberals claim that the ultimate Russian freight rail restructuring model will be the one of vertical separation as well, Russia has so far limited itself to TPA—and a rather timid and limited version of that. It remains to be seen whether the Russian government will settle for freight rail "competitiveness" and efficiency, or whether it will in fact create real freight rail competition in the future—just as it remains to be seen whether the other CEE countries will have the same success in creating competition so far enjoyed by Romania and Poland.

II. CENTRAL AND EASTERN EUROPE: VERTICAL SEPARATION, WITH MIXED RESULTS

The CEE countries depend on their freight railways far more than Western European countries do, in part because their economies are more centered on lower-value, bulk commodities like coal than are their wealthier western neighbors. The significant declines in rail freight traffic in these countries (Figure 1)—more abrupt in some countries than in others, generally leveling off after 1998—have not changed this fact. The principal early reformers among CEE countries—Hungary, Poland, the Czech and Slovak Republics, and now Bulgaria and Romania—have adopted economic restructuring plans designed to convince Brussels of the seriousness of their liberal reform strategies and hence their suitability as EU candidate countries. Thus in each of these countries the old vertically integrated, state-owned, monopoly railway has been separated into independent (though still, at this point, state-owned) companies, including the infrastructure company, the freight train operator, and the passenger train operator.

In addition, most of the governments have set up regulatory bodies, with varying degrees of formal independence from the government. Typically the competition authorities have maintained jurisdiction over competition issues in this sector, and several of these authorities have had investigations into alleged abuses of a dominant position by the infrastructure operator and/or incumbent freight train operator.

The results have been mixed (Table 1, based on very unofficial estimates). In Romania, the share of private train operating companies is in the range of 20–25 percent on a ton–km basis, and in Poland their share is over 15 percent. On the other hand, in the Czech and Slovak Republics there are a few private train operating companies that have captured very small market shares, but in Bulgaria and Hungary (and Russia, but we return to Russia below) the share of such companies is negligible. This raises two (at least) interesting questions. First, why has entry been so much more successful in Romania and Poland than in the rest of the CEE countries? And second, what kinds of companies have entered—and thus, what kind of companies might we expect to enter elsewhere?

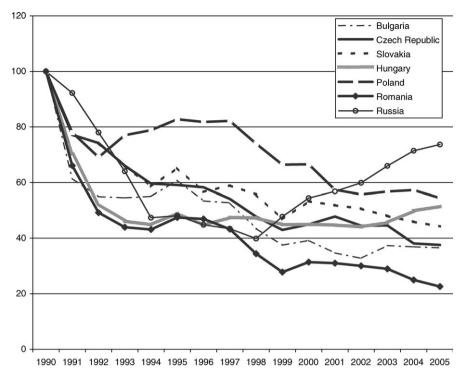


Figure 1. Indexed freight transport 1990–2005 (ton-km). *Sources*: World Bank Railways Database, UIC International Railway Statistics, UIC Railway Statistics Synopsis 2005.

Poland is in one sense an obvious entry on the list; since the fall of the Berlin Wall, it has been a leader in economic reforms in the CEE countries, including in the area of micro-level restructuring and the creation of competition. But this raises the obvious question as to why the other leading reformers, Hungary and the Czech and Slovak Republics, have made so little progress. Similarly, as shown in Figure 1, Poland has seen a smaller drop in freight railway traffic than its neighbors, but Hungary has recovered to almost the same relative level. One factor slowing reform in the Czech Republic may have been the change from a center-right to a center-left government at a crucial point in 1998, but the results from the center-right government in the Slovak Republic are not appreciably different.

One partial answer may have to do with the well established economies of system size and density in railways. 8 As shown in Table 2, Poland's level of

See, e.g., John Fingleton, Eleanor Fox, Damien Neven, and Paul Seabright, Competition Policy and the Transformation of Central Europe (London: Centre for Economic Policy Research, 1996).
 See, e.g., Wesley W. Wilson (1997), "Cost Savings and Productivity in the Railroad Industry," 11 Journal of Regulatory Economics 21 (1997); John Bitzan, "The Structure of Railroad Costs and the Benefits/Costs of Mergers," 5 Research in Transportation Economics 1 (1999); M.G.

Table 1. Estimated share of private train operating companies in total rail freight

Percentage of total ton-km	
0	
0	
Near 0	
Less than 5%	
Less than 5%	
15%	
25%	

Source: authors' estimates from newspaper and trade press reports.

freight ton-km dwarfs those of the other CEE countries, and its freight ton-km per track-km dwarfs all others except the Slovak Republic. Furthermore, and also shown in Table 2, the land areas of Poland and Romania (average 276,000 square km) are considerably larger than those of Hungary and the Czech and Slovak Republics (average land area 73,000 square km). This in turn suggests that progress in creating competition in the three smaller countries may increase considerably if and as barriers to international freight railway operations are dismantled.

Romania is the more surprising entry as a successful—indeed one of the world's most successful—creator of freight competition "above the rail." Certainly its greater challenge relative to the Visegrád countries (the Czech Republic, Hungary, Poland, and the Slovak Republic) in satisfying the criteria for entry into the European Union has been a general spur to greater reforms; a second effect of this, and perhaps an additional spur to rail reform, has been the emergence of a significantly strengthened Romanian Competition Council in recent years. However, at least some of Romania's success in creating freight rail competition may be a matter for less pride than it first appears; it may relate more to the weakness of the incumbent freight carrier, CFR Marfã, than to any strong reform policies on the part of the government or regulators. 9

Savignat and Chris Nash, "The Case for Rail Reform in Europe—Evidence from Studies of Production Characteristics of the Rail Industry," 36 International Journal of Transport Economics 201 (1999); Marc Ivaldi and Gerard J. McCullough, "Density and Integration Effects on Class I U.S. Railroads," 19 Journal of Regulatory Economics 161 (2001); Bitzan and Theodore E. Keeler, "Economies of Density and Regulatory Change in the U.S. Railroad Freight Industry," 50 Journal of Law and Economics 157 (2007); Ivaldi and McCullough, "Railroad Pricing and Revenue-to-Cost Margins in the Post-Staggers Era," in Talley and Dennis, above note 1, and William G. Waters II, "Evolution of Railroad Economics," in Talley and Dennis, supra note 1.

⁹ See, e.g., the four-part series by Ray Chambers on "Commercial Restructuring of the Romanian Railways" in the Romanian railway magazine Club Feroviar, April-September 2006. On the other hand, Vasile Olievschi (personal communication) argues that the reform policies of the government were in fact strong and were responsible, at least in part, for this procompetitive outcome.

Table 2	. Freight	rail	density
---------	-----------	------	---------

Country	Ton-km (millions, 2003)	Line-km (thousands, 2002)	Ton-km/line-km	Land area (thousand square km)
Slovak Republic	10,117	3,507	2,885	49
Czech Republic	17,069	9,477	1,801	77
Hungary	8,108	7,267	1,116	93
Bulgaria	5,274	4,073	1,295	111
Romania	10,918	10,882	1,003	238
Poland	47,394	19,618	2,416	313

Source: ECMT (2005).

We suggest a parallel here with the relatively successful experience of creating competition in cellular telephony in Romania: the incumbent fixed wire company was simply very slow to expand into cellular service.¹⁰

Second, who have been the successful entrants into private freight train operations in Romania and Poland? One might expect at least three groups of likely candidates (with a fourth soon to follow):

- large shippers, integrating vertically into transport for hauling inputs and/ or outputs;
- freight forwarders, seeing opportunities in vertical integration;
- old socialist railways serving individual plants, factory complexes, or regions;
- international train operators.

Each of the first three categories is well represented.¹¹ Probably the three largest of the shippers integrating into transport are Rompetrol Logistics, which hauls oil outputs but also refinery inputs, mostly to and from ports, Mittal Steel, which hauls both its own steel output and a large percentage of its inputs to and from its Romanian steel-making complex, and Lotos Kolej, set up by Refineria Gdanska to haul its own oil but now serving other shippers as well. Poland also has a number of smaller train operating companies that originated from vertical integration by shippers: Pol-Miedz Trans, a subsidiary of coal miner KGHM Polska Miedz; Orlen KolTrans, a subsidiary of Orlen,

Russell Pittman, "Reform of the Regies Autonomes: Should Romania Follow the New Orthodoxy of Vertical Separation?" 12 Economica 159 (2003; in Romanian). The experience in Taiwan is similar: Chorng-Jian Liu, Yuntsai Chou, Shyang-Hua Wu, and Yi-Shin Shih, "The Public Incumbent's Defeat in Mobile Competition: Implications for the Sequencing of Telecommunications Reform," working paper, April 4, 2007, http://ssrn.com/abstract=978707.

For detailed discussions, see Serban Lacriteanu and Chris Bailey, "The Privatisation of Romanian Railways," 115 Today's Railways 18–27 (July 2005); and Mike Bent, "Polish Private Companies Exploit Niche Markets," 120 Today's Railways 20–28 (December 2005).

Poland's largest producer of diesel fuel; Transoda, a subsidiary of soda producer Soda Matwy; and EuroNafT, spun off in 2003 but originally a subsidiary of the oil refinery at Trzebinia.

However, as a group those companies that are probably the largest independent freight rail carriers are unaffiliated with shippers. Some were originally freight forwarders, sometimes organized by former CFR (Romania) and PKP (Poland) employees seeing profit opportunities in the competitive freight train sector. Among the most successful are Grup Feroviar Român (GFR), Romania's largest independent freight carrier, a company also integrated into rolling stock construction and repair; Unifertrans, a very early Romanian entrant, which focuses on petroleum products and inputs into cement production; and CTL Logistics, probably Poland's largest independent freight operator, which was founded as a freight forwarder in the mid-1990s and in early 2003 became Poland's first international freight operator.

Finally, in Poland especially, a number of the independent freight train operating companies grew out of regional or specialized rail providers from socialist times. Among these are PTKiGK Rybnik and PTKiGK Zabrze, among the largest of the Polish independent carriers, which began life as a coal railway, and PCC Szczakowa and Kopalnia Piasku Kotlarnia, originally two of northern Poland's sand railways. In addition, CTL Logistics has a subsidiary, CTL Maczki-Bór, that was also originally a sand railway near Katowice.

We noted earlier that one general problem with the vertical separation model of restructuring, in rail and elsewhere, has been in the creation of incentives for investment, at both the train and infrastructure levels. Access pricing is a critical component of this problem, and is likely to become even more important in the future, as international freight trains, both for transit and for cabotage, gain access to the market. As one of us has noted elsewhere, the setting of fees for access to an infrastructure as massive as a national railway grid forces a choice among three less than palatable options:

- marginal cost pricing, which achieves short-run efficiency but then requires government subsidization (with its inherent deadweight losses, especially in countries like Bulgaria and Romania with still developing systems of public finance) for longer-term investments;
- average cost pricing (traditionally termed in regulated sectors "fully allocated cost" pricing), which in principle may eliminate the need for government subsidies, but at the expense of the inefficient denial of service to some potential users and the necessity of arbitrary allocation decisions

Russell Pittman, "Russian Railways Reform and the Problem of Non-Discriminatory Access to Infrastructure," 75 Annals of Public and Cooperative Economics 167 (2004), and Russell Pittman, "Structural Separation to Create Competition? The Case of Freight Railways," 4 Review of Network Economics 181 (2005).

- for fixed costs (with the resultant potential for rent-seeking behavior—again a special problem in developing countries); or
- discriminatory pricing schemes, generally some form of Ramsey pricing
 or multipart tariffs, which seek to achieve the most efficient usage of the
 infrastructure consistent with the elimination of subsidies, but which
 tend to favor larger haulers over smaller—and hence to run into the disfavor of competition authorities—as well as encouraging unproductive
 investments by shippers to signal a higher price elasticity of demand.¹³

The EU rail directives favor marginal cost pricing—more specifically, "social" marginal cost pricing, so long as second-best problems regarding competing transport modes are addressed—but allow mark-ups above marginal cost where full government coverage of fixed costs is deemed undesirable (or unreliable) for whatever reason. As well demonstrated in recent reports by the Australian Bureau of Transport and Regional Economics and the European Conference of Ministers of Transport, there are serious conceptual, methodological, and measurement problems inherent in attempts to implement marginal cost pricing. Broadly speaking, estimates of the share of private marginal costs in total infrastructure costs have generally been in the range of 10–25 percent. Thus it is fairly clear, as shown in Figure 2, that at this point CEE governments and regulators have chosen access prices that exceed marginal cost.

This is probably what one would expect, given the revenue needs of CEE governments, and perhaps even favor, given the opportunity costs of those revenues and the deadweight losses imposed in raising them. Access charges that are "high" have the disadvantage of discouraging entry by nonintegrated train operating companies at the same time that they have the advantage of giving incentives to infrastructure operators to welcome such entry, *ceteris paribus*. In any case, the ECMT argues that more important than the level of access charges in individual countries will be the consistency and transparency of access charges across countries, as the region's railways seek to encourage transit traffic.

A fourth option, relevant in the context of third-party access but not complete vertical separation, is the Efficient Component Pricing Rule proposed by Robert Willig ("The Theory of Network Access Pricing," in H.M. Trebing, ed., Issues in Public Utility Regulation [East Lansing, MI: Michigan State University Public Utilities Paper, 1979]); see the discussions in William Baumol and Gregory Sidak, Toward Competition in Local Telephony (Cambridge, MA: MIT Press, 1994); and Jean-Jacques Laffont and Jean Tirole, Competition in Telecommunications (Cambridge, MA: MIT Press, 2000), at 119–23.

¹⁴ See, e.g., Chris Nash, "Europe: Alternative models for restructuring," in Gómez-Ibáñez and de Rus, above note 1.

Rail Infrastructure Pricing: Principles and Practices (Canberra: Department of Transport and Regional Services, Bureau of Transport and Regional Economics, Report 109, 2003) and Railway Reform and Charges for the Use of Infrastructure (Paris: European Conference of Ministers of Transport and Organization for Economic Cooperation and Development, 2006).

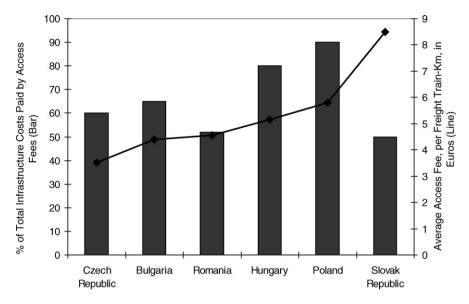


Figure 2. Infrastructure access charges for rail freight. Source: ECMT (2005).

III. RUSSIA: AN UNCOMPROMISING MONOPOLY RAILWAY

If CEE freight railways restructuring has been to some degree a pleasant surprise so far, the Russian restructuring experience has been less so, especially from a competition perspective. The original Russian government restructuring proposal for the Ministry of Railways (MPS) called for a three-stage process. The first stage was the separation of the railway operations into a new joint-stock company, RZD, while the government maintained its policy and regulatory functions (mostly folded into the Ministry of Transport). This stage was completed quickly and successfully. The second stage called for the spin-off of noncore activities and the elimination of the cross-subsidization of passenger operations. Steps have been taken in both directions, but the second stage remains incomplete; in particular, the central government and local and regional governments have not yet been able to agree on which will take over whatever subsidies to passenger operations remain. The third stage called for the creation of competition, and precisely here is where matters get complicated.

Reflecting a long-standing shortage of investment funds that translated into antiquated and depreciated rolling stock, the restructuring program early on

¹⁶ For a detailed description and discussion, see Regulatory Reform of Railways in Russia (Paris: European Conference of Ministers of Transport and Organization for Economic Cooperation and Development, 2004).

Ministry of Railway Transport, "About the Reform of the Railway System," "Analytic Material 17.02.2002" and "Analytic Material 27.06.2002."

allowed shippers to use their own rolling stock (purchased or leased) when shipping their products on RZD trains. Private rolling stock quickly gained a significant share of traffic for certain commodities (such as oil). ¹⁸ In addition, the new law provided for the creation of what are called freight "operators"—something like freight forwarders, companies that solicit shippers and arrange for haulage by RZD (and may supply rolling stock), but do not operate their own trains. The new "operators" have likewise succeeded in taking a good deal of direct business from RZD—though, to be clear, the freight hauls that they sell are on RZD trains.

RZD points to both of these trends as "competition." This seems a bit ironic—and a bit exaggerated—given that shippers who use their own rolling stock and shippers who purchase their transportation through "operators" both continue to pay an average of 85 percent of the regulated tariffs for freight hauls to RZD: an average of 55 percent of the final tariff as an access charge—almost certainly the highest percentage access charge in the world—and an additional average of 30 percent for locomotive services. ¹⁹ In addition, it is also worth noting that RZD has already been found more than once to have abused its dominant position by discriminating against privately owned rolling stock on the infrastructure. ²⁰

The original three-stage reform plan, and its implementing legislation, called for two steps for the creation of competition in the Russian freight railways sector—one immediate, the other for longer-term consideration.

The first was the implementation of TPA by licensing a group of independent freight railway companies, called "carriers," that, unlike "operators," would organize and run their own trains on the RZD infrastructure. The second was that, once TPA was achieved, consideration would be given to introducing what we called above the "Latin American" model of freight rail competition in European (west of the Urals) Russia: the possible horizontal division of RZD into a group of independent vertically integrated railways, competing with each other over parallel routes (for example, from the western point of the Trans-Siberian Railway at Omsk west to Moscow) and to and from commonly served points (for example, competing railways radiating out from Moscow).²¹

¹⁸ "In 2005 ... about a third of the aggregate freight volume is carried by private rail fleet." Tatyana Tokareva, "Business or Supporting Instrument," 1:5 RZD-Partner International 9 (March–May 2006).

Because RZD remains vertically integrated, the Efficient Component Pricing Rule is relevant as an access charge concept. (*See supra* note 13.) The fact that RZD access charges are commodity-specific—again, perhaps uniquely in the world—means that they may have some features, at least roughly, of the ECPR and Ramsey pricing.

See, e.g., "Telegrams that Shocked Railway Network," RZD-Partner, March 1, 2006; Anastasiya Lebedev, "RZD Criticized for Halting Foreign-Owned Freight Cars," Moscow Times, March 3, 2006.

²¹ See examples in Regulatory Reform, supra note 16, and Elizaveta Cheviakhova, Guido Friebel, Sergei Guriev, Russell Pittman, and Anna Tomová, "Railroad Restructuring in Central and

It is not clear that this latter plan has ever been taken seriously within RZD, and we know of no evidence that it is under active consideration within the company or the Russian government. The former plan, however, was something that was taken for granted by shippers as an early outcome of the third stage of the restructuring plan, and its almost complete failure—at least to this point—has been both a disappointment and a surprise.

In retrospect, two provisions of the principal railways restructuring legislation have probably been those most responsible for the failure of TPA up to this point. The first was that the restructuring legislation did not create the formal, legal mechanism for aspiring independent freight train operating companies—"carriers"—to acquire legal permits for use of the infrastructure; that would have to be provided by subsequent legislation. To no one's surprise, RZD exhibited no urgency in seeking this follow-on legislation, and without a strong backer, the proposed legislation languished in the Duma for many months. It is only recently that, according to our interviews, enabling legislation has been enacted, and a small group of "carriers" actually have permits for use of the infrastructure.

The second provision is likely to be nearly as stifling to independent entry unless and until it is similarly corrected by subsequent legislation: unlike any other rail restructuring legislation of which we are aware, the Russian legislation requires any new "carrier" to act as what is called in the U.S. a "common carrier"—that is, to accept any cargo for haulage at any geographic location on the infrastructure network. The first, semi-legal independent carriers on the Russian infrastructure have been oil companies shipping on their own account, probably allowed by RZD to operate without challenge because of the shortage of oil tank cars at the time. In the future, the requirement that a new carrier be willing to offer service at any point in Russia—if enforced—is likely to act as a significant barrier to entry. As with the licensing problem, RZD has made little apparent effort to have the legislation amended.

With the announced goal of TPA at more or less a standstill, there has been a set of new developments in the past year that have alarmed potential entrants and reformers. RZD's only obvious competitive vulnerability has been the fact that its tariffs have been tightly regulated, so that either freight haulers using other modes or "operators" (and eventually "carriers") had a small competitive

Eastern Europe: One Solution for All Problems?" 27 Transport Reviews 251 (2007). The Russian railways sector in the last decades of the Tsarist period was structured generally along these lines; see Russell Pittman, "Make or Buy on the Russian Railway? Coase, Williamson, and Tsar Nicholas II," unpublished paper, Economic Analysis Group, Antitrust Division, U.S. Department of Justice, 2007.

²² See, e.g., Andrey Guryev, "Market Awaits New Big Subject," 1:5 RZD-Partner International 51 (March–May 2006).

^{23 &}quot;Semi-legal" because, although they were allowed to operate by the government and RZD, they lacked formal permits to use the infrastructure.

advantage because of their tariff flexibility. ²⁴ According to the rail restructuring legislation, particular RZD tariffs could be freed from regulation only when and if RZD demonstrated to the Tariff Service that the affected shippers enjoyed competition for the transport of their cargoes. Over the past year, however, RZD has announced the creation of four "daughter companies"—controlled by RZD but formally independent of it—that it claims may legally enjoy deregulation of tariffs—and, somewhat alarmingly, it appears that regulators agree. These four are the following:

- Transcontainer, an "intermodal" (container) carrier;
- Refservice, providing refrigerated rolling stock;
- Russkaya Troika, an RZD joint venture with the Far Eastern Shipping Company to encourage traffic on the Trans-Siberian Railway; and
- the "New Cargo Company"—formal name apparently not yet chosen—that will focus on coal and other bulk cargoes.

Recent trade press articles have carried RZD announcements of the creation of two additional such companies: one for carrying timber and lumber, the other for carrying autos.²⁵ If the law indeed permits RZD to create partially owned subsidiaries that are free from tariff regulation, it is difficult to see what incentives are left for RZD to cooperate with reformers, the Tariff Service, and the Antimonopoly Service to remove the high barriers for entry by new carriers.

This does raise the question of the future of freight rail competition in Russia, and this in turn raises the question of whether there is even a single, coherent government plan for the introduction of competition. The third stage of the government's reform plan called for TPA and set as a goal the independent ownership of a significant percentage of the rolling stock and locomotives on the system. It was, however, silent on what would happen next. Reformers in the government—led by Minister of Economic Development and Trade German Gref, Minister of Transport Igor Levitan, and Director of the Federal Antimonopoly Service Igor Artemiev—have argued forcefully that the ultimate goal is full vertical separation—the gradual diminution of RZD train operations until the company is simply an infrastructure enterprise serving a number of independent "carriers." This would parallel the plan for vertical separation of the Russian electricity sector, which includes the sale of most nonnuclear and nonhydro generation to the private sector, and the creation of a National Grid Company, which will operate the long-distance, high-voltage transmission network.²⁶

²⁴ The flexibility of operators and carriers was relatively "small" because of the high access charges and locomotive charges described earlier.

^{25 &}quot;OAO RZD Plans to Get 75% of OOO Transles," RZD-Partner, October 13, 2006; "OAO RZD and 'TransGroup' to Carry Cars," RZD-Partner, October 16, 2006.

²⁶ See, e.g., Russian Electricity Reform: Emerging Challenges and Opportunities (Paris: International Energy Agency and Organization for Economic Cooperation and Development, 2005), and

However, RZD officials, including former president Gennady Fadeyev and current president Vladimir Yakunin, have just as forcefully stated that complete separation would be not only unnecessary for the creation of competition but in fact potentially ruinous. As president Yakunin has stated: "Don't cherish these illusions—we'll never have such conditions. But if we separate them anyway and ruin the company, quite a few in the West will applaud us."²⁷

This in turn places in a new context the statements of former RZD vice president Anna Belova, at one time the top company officer in charge of the reforms, that "competition" was never the real goal anyway—that lower costs, increased efficiency, and "competitiveness" on an international scale were always the real goal of the reforms.

IV. DISCUSSION

Are there any lessons to be learned from the experience of the CEE countries and Russia up to this point? Are there any compelling conjectures as to why the two experiences have been so different?

The first lesson must be the importance of the "carrot" of EU membership as an incentive for liberal economic reforms in the CEE countries. All of the CEE countries under examination here have reformed their railways structures along lines "more Catholic than the Pope": full vertical separation rather than simply TPA. It is also perhaps no accident that Romania has moved further in opening up its freight railway sector to competition than virtually any other country in western or eastern Europe: as a country whose chances of EU membership were until recently considered uncertain, it needed to demonstrate fealty to the liberal model of economic reform in this area as in others. Russia, of course, is not an EU candidate country and so faces no such policy pressures.

A second lesson seems to be that new market entrants are likely to seize whatever opportunities they are given—and thus that the reluctance of incumbents to face new competition is quite understandable (which is not the same as saying it should be indulged). CFR-Marfã seems to be losing market share fairly rapidly, to the point that outside observers wonder about its future viability. RZD quickly lost control of both rolling stock allocation and freight forwarding when these activities were opened up to shippers and other private firms; the company may be quite correct in fearing something similar if a large group of independent "carriers" presented themselves to shippers.

Russell Pittman, "Restructuring the Russian electricity sector: Re-creating California?," 35 Energy Policy 1872 (2007).

^{27 &}quot;OAO RZD Voices New Objectives," 1:3 RZD-Partner International (September-November 2005).

A third lesson—less appealing, perhaps, to the economist than to the historian—may be that Russia will always be Russia. Thomas Owen has argued compellingly that, throughout the nineteenth century, Russian policymakers observed and envied the superior industrialization and economic growth of Britain, France, and other countries liberalizing their economies; however, as czarist bureaucrats sought to emulate these successes, they were unable to release the levers of central control that provided them with their raison d'être-and hence were unable to release the energies of unbridled capitalism. 28 Similarly, Maurice Dobb described the attempts of Lenin to create better incentives for private trading through the New Economic Policy after the harsh command-and-control regime of "war communism"; however, in the late 1920s, Lenin and then Stalin feared that this bit of laissez-faire might lead to a return to capitalism, and they abandoned the NEP in favor of the creation of heavy industry through detailed five-year plans.²⁹ Perhaps the restructuring of the Russian railways will turn out to be another instance of this phenomenon: a cautious opening to private investment, but an unwillingness to give up central control truly, to abandon the country's fate to the uncertain workings of a free market.

²⁸ The Corporation under Russian Law, 1800–1917: A Study in Tsarist Economic Policy (Cambridge: Cambridge University Press, 1991).

²⁹ Soviet Development Since 1917 (London: Routledge & Kegan Paul, 1948).