

Case Study

Lithuanian Railways

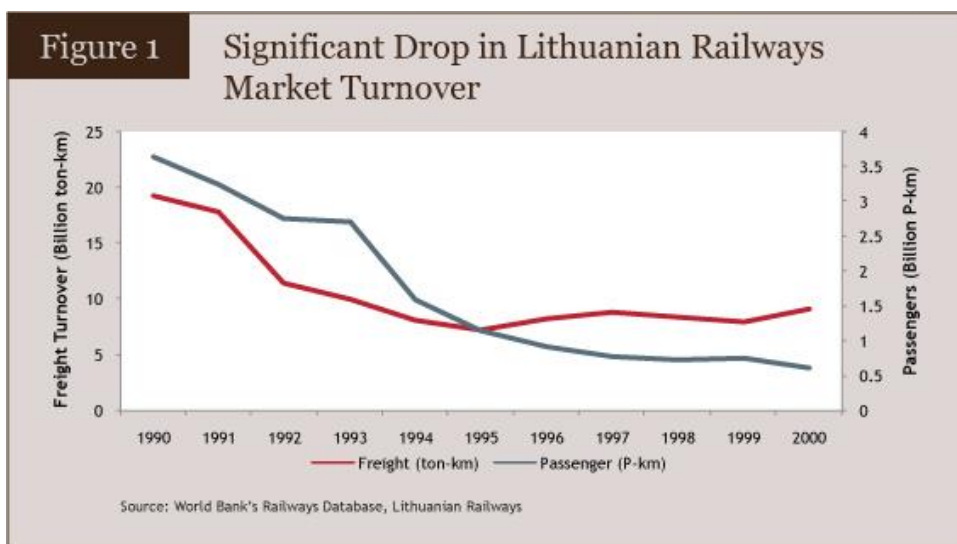
1 Introduction

In 2000, Lithuania initiated railway industry reforms, in part driven by a desire to join the European Union (EU), an alliance that promised significant strategic benefits to the country in general, and to Lithuanian Railways in particular. EU membership promised hundreds of millions of Euros in national developmental aid and tens of millions of Euros to invest in railway infrastructure. Secondly, EU membership would enable Lithuanian Railways to grow the predominantly EU-based north-south traffic and reduce its dependence on traffic to and from Russia. Almost a decade earlier, the political disintegration of the Soviet Union had triggered a catastrophic economic collapse; freight and passenger market turnover had dropped by over 50 percent, profitability had vanished, assets condition deteriorated, and productivity plummeted. This case study describes reforms that Lithuania Railways initiated to prepare for EU accession, and address economic challenges that confronted former Soviet Union railway companies.

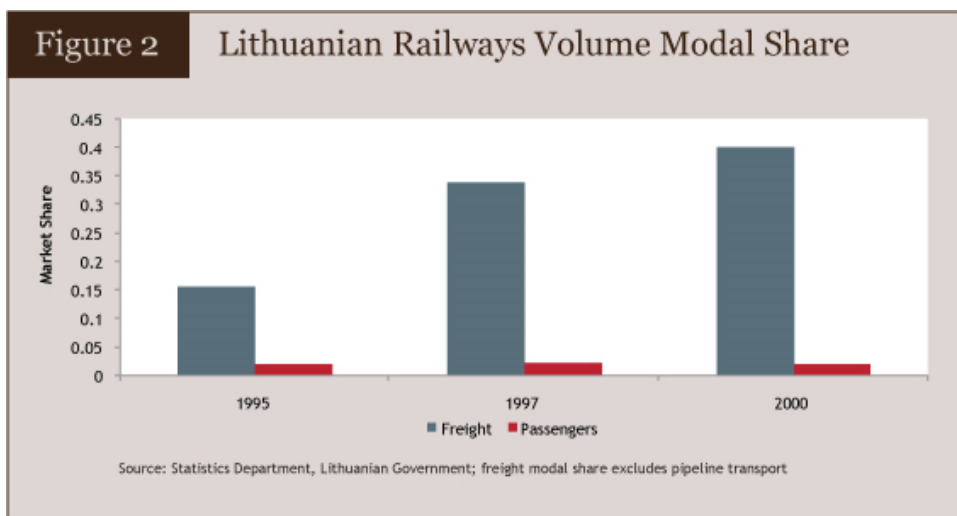
2 Before Reforms

Since 1940, Lithuanian Railways had been one of three operating divisions of the Baltic Railway, one of the Soviet Union's 32 regional railway administrations that reported to the Ministry of Railways (MPS) in Moscow.²³⁸ In 1991, Lithuanian independence created a national railway company, Lietuvos Geležinkeliai (LG), (Lithuanian Railways) from what had been an operating division of a regional administration.

²³⁸ The Soviet Union had 170 such divisions.



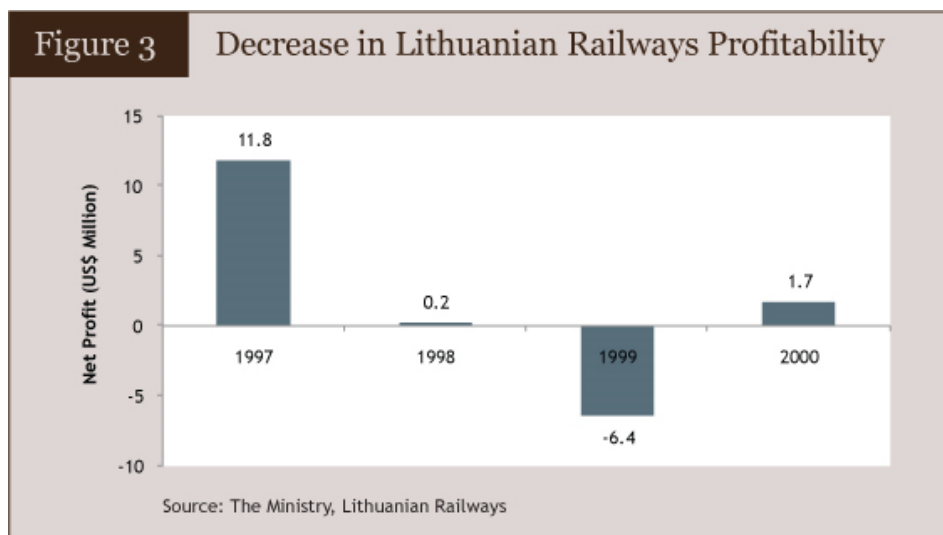
Lithuania had always been an important transit route for traffic from Russia and other Union republics to Kaliningrad and the Lithuanian port of Klaipeda. The regional economic collapse that followed Soviet Union disintegration precipitated severe challenges for the new national railway company. During 1990-00, traffic turnover plummeted by 54 percent for freight and 84 percent for passengers (Figure 1). The LG passenger volume modal share stagnated at 2.0 percent; freight business increased modal share due to increased rail transit of oil from Russia relative to other freight (Figure 2).



As LG's market turnover suffered, profitability took a nose dive. Profits of US\$11.8 million sank to a loss of US\$6.4 million in 1999 before rebounding to US\$1.7 million in 2000 (Figure 3). Real investments in railway transport infrastructure maintenance sank as well. During 1993-95, investment declined by 11 percent,²³⁹

²³⁹ *Investment in Transport Infrastructure: Country Studies*, (European Conference of Ministers of Transport, 1999)

and during 1997-99, track replacement volumes dropped by 49 percent.²⁴⁰ Thus railway infrastructure was dilapidated and the rolling fleet was outdated.²⁴¹



Similarly, productivity suffered as a result of the drop in traffic. Coach productivity declined by 78 percent, wagon productivity, 36 percent; employee and track productivity declined by about 50 percent (Figure 4).

Figure 4 Productivity at the Lithuanian Railways

	1991	1995	2000
Coach Productivity (000, P-km per coach)	4,857	1,605	1,085
Locomotive Productivity (000, TU per locomotive)	84,911	24,704	34,277
Wagon Productivity (000, ton-km per wagon)	1,380	538	881
Employee Productivity (000, TU per employee)	1,126	477	611
Track Productivity (000, TU per standard track km)	10,450	4,171	5,002

Source: UTC, World Bank Railway Database and Lithuanian Railway

3 Reform Goals

Lithuanian Railways strategy objectives are articulated in Resolution No. 692 - Development Strategy of the Lithuanian Transport System (2002), and summarized below:

- Create a legal framework and strengthen market regulatory authority to participate effectively in the EU railway transport market;
- Fully restructure the railway sector;
- Create a strong and effective traffic safety control system;

²⁴⁰ *Transport Restructuring in the Baltic States: Toward EU Accession*, (World Bank, 2004)

²⁴¹ *Resolution No. 692: Development Strategy of the Lithuanian Transport System*, pp. 23, 58

- Create an integral system of railway environmental protection covering all potential sources of pollution;
- Modernize infrastructure for successful integration with EU transport system;
- Acquire passenger/freight rolling stock to comply with modernized infrastructure parameters; and
- Ensure railway transport safety.

4 Reform Process

The reform process emphasized commercial management in addition to structural changes needed to meet EU membership requirements. Under the Soviet system, Baltic regional railway headquarters were in Riga, Latvia. As a result, LG did not inherit an ossified bureaucratic culture and began with a clean slate to implement structural changes and commercial management practices. Reforms were legally supported by the following key legislation:

- Lithuanian Railway Transport Law (2001), based on three EU Directives (2001/12/EC, 2001/13/EB, and 2001/14/EB), allowed separate transport operations and infrastructure management, through divisions within the company, or separate companies under a joint stock holding structure.
- Resolution No. 853 - Long-term Economic Development Strategy of Lithuania (2002) enhanced competition by allowing independent operators on the rail network and liberalizing the market.
- Resolution No. 692 – Long-term (until 2025) Development Strategy of the Lithuanian Transport System (2005) continued the organization of a joint stock company, and restructured the railway sector according to EU legislation.

This section describes Lithuanian Railways progress in the reform process guided by these laws.

In 2005, an Order of the Minister of Transport and Communication established AB Lietuvos Gelezinkeliai (LG) as a public limited liability company. In 2006, LG established three directorates: Freight Transportation, Passenger Transportation and Railway Infrastructure Management. This improved transparency within LG, prepared groundwork to form a joint stock holding company, and met a major goal of the 2001 Lithuanian Railway Transport Law.

The LG is now organized as a joint stock holding company, wholly Government-owned, and comprising commercial entities and entities managing public property. Freight and passenger directorates and ancillary service subsidiaries are commercial entities. Subsidiaries include UAB Gelmagis and UA Gelezikelio Tiesimo Centras (railway construction), UAB Vilaniaus Lokomotyvu Remonto Depas (overhauling locomotives and diesel trains), UAB Gelsauga (security services) and UAB VAE Legetecha (turnout manufacturing). The infrastructure directorate is non-commercial and manages railway infrastructure.

Legally, the Lithuanian railway network is open to private freight train and international passenger train operators under the Lithuanian Railway Transport Law

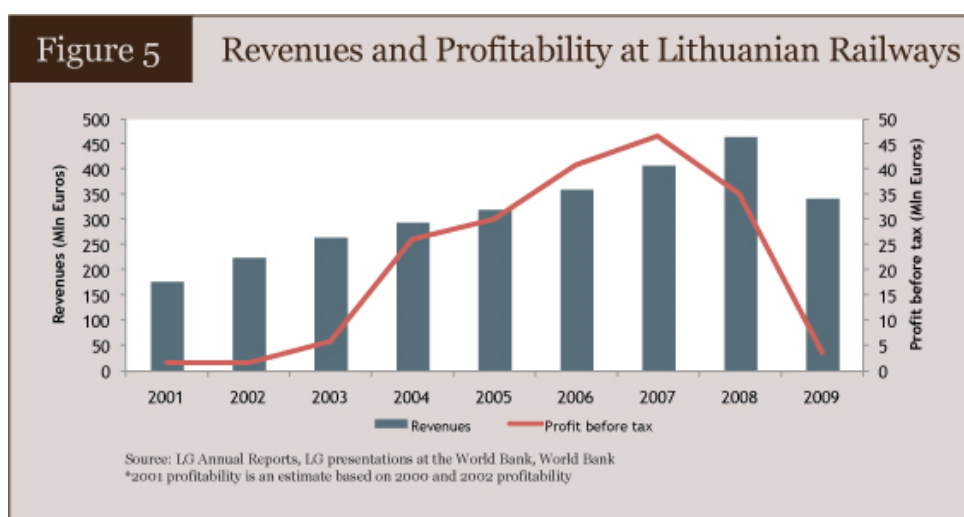
and Resolution No. 853. However, in practice, LG remains the dominant rail operator; the private sector is involved primarily in network appendages such as port operations. In 2009, only 22 passenger trains from other countries passed through Lithuania.²⁴² The Transport and Transit Development Strategy aims to further liberalize the railway market, and by 2015, to create conditions for open operator access to railway networks.

Beyond these structural changes, LG introduced commercial management practices that use modern management systems and information technology to improve productivity and transparency. LG prepares and publicly discloses its audited financial statements according to International Financial Reporting Standards. Publicly available procurement procedures improve procurement transparency. The management body comprises a director general, deputy director general, and directors of passenger, freight, and infrastructure directorates. Most management body members have backgrounds in commercial business, and a few, in politics.

5 Reform Results

5.1 Financial Performance

As the global economy recovered from the 1999 economic downturn, Lithuanian Railways was rewarded for establishing commercial management practices during reforms. During 2001-09, revenues improved by an impressive 93 percent (Figure 5). In 2006, profits peaked at 11 percent of total revenues before plummeting by 93 percent ahead of global financial crisis. The fall in profitability was driven partly by a 37 percent increase in total costs during 2006-08. Thus, LG must continue the reform process to establish solid profitability.



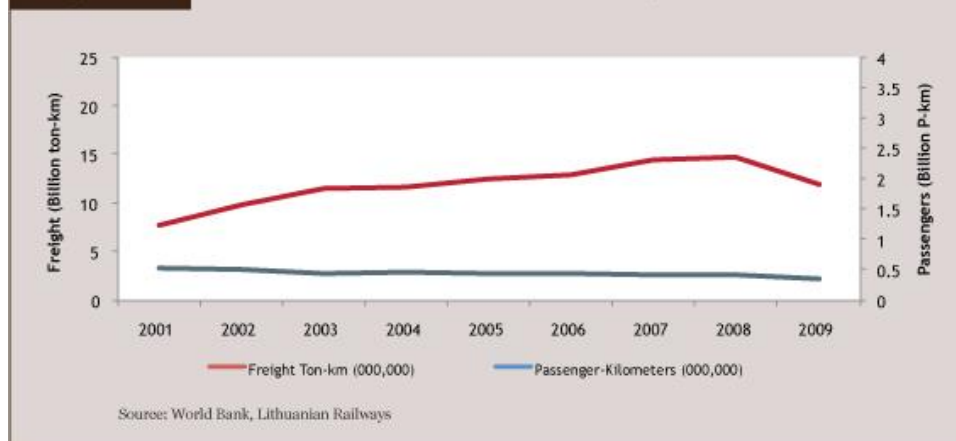
5.2 Market Performance

Before the fall caused by the global financial crisis, freight turnover increased by 91 percent (Figure 6), and freight market share increased by 9.0 percentage points (Figure 7). Freight traffic is dominated by transit cargo from/to Kaliningrad and to

²⁴² *Annual Report* (LG 2009)

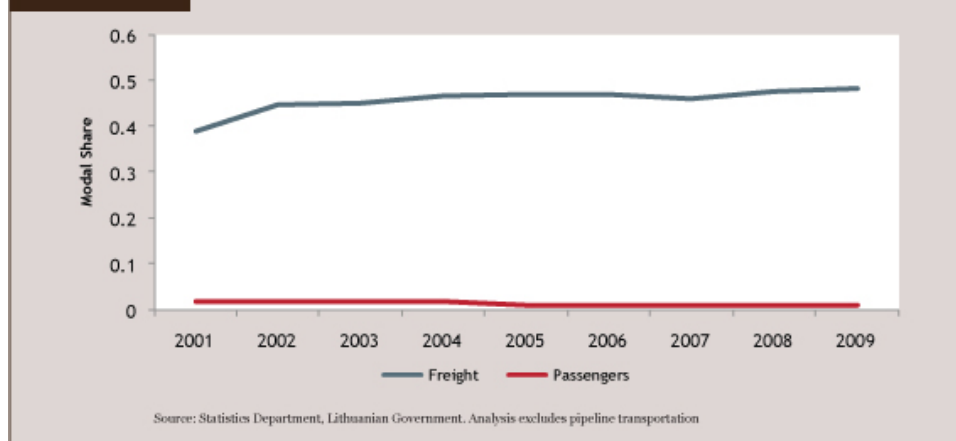
the main Lithuanian port of Klaipeda. Oil products are the most common cargo, and railway transport can handle much larger volumes

Figure 6 Continued Decline in Railway Market Turnover



at much lower cost than road transport. In contrast, passenger turnover declined by 25 percent (Figure 5) and market share fell from 2.0 to 1.0 percent (Figure 6). The continued loss of passenger market share is due to the relatively short distances of most routes within Lithuania, increased motorization among Lithuanians, limited modernization of rolling stock, and better regional accessibility compared to rail transport.

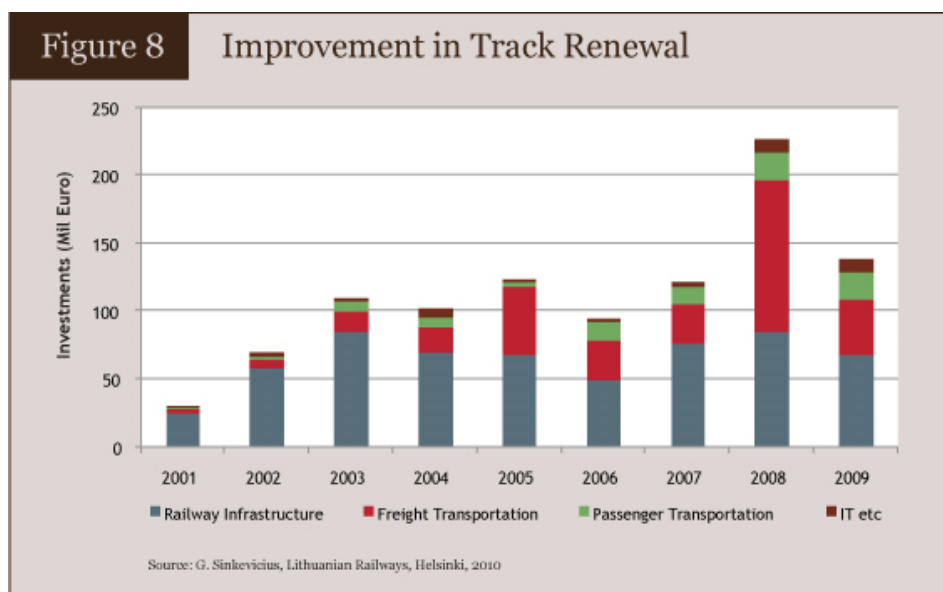
Figure 7 Railway Modal Share



5.3 Asset Condition

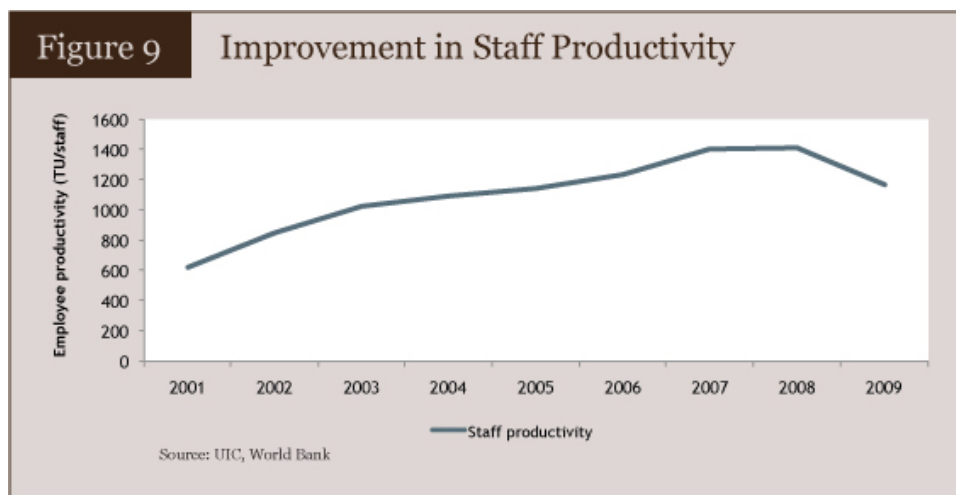
Figure 8 shows that investment has increased in improving assets condition since reforms began. In 2008, investment peaked at €226 million when LG purchased 34 locomotives from Siemens. About half of shunting locomotives are less than 20 years old, and rolling stock is in fair condition compared to that in neighboring countries. About half of the investment came from LG funds, 5.0 percent from state funds, and 25 percent from EU grants. Nonetheless, railway tracks need significant additional investment. About 40 percent (850 km) of tracks need repairs and

maintenance, and maximum allowable speeds are as low as 40-60km/hr on some sections.²⁴³



5.4 Operational Productivity

In 2001, LG began with 13,307 employees; by end-2009, it had only 10,506, which, combined with improved traffic, boosted staff productivity by 87 percent (Figure 9). Also, wagon and locomotive productivity improved by 50 percent, and coach productivity by 37 percent (Figure 10). Track productivity improved the least, although it remains substantially higher than the EU average. In part, this is because track length is not easy to adjust when the market slows down, and in part because LG, perhaps due to political influence, has closed few of the lines with the lowest traffic density on the network.



²⁴³ *Country Report Lithuania*, "Study on Strategic Evaluation on Transport Investment Priorities under Structural and Cohesion funds for the Programming Period 2007-2013," (European Commission, 2006)

Figure 10 Increase in Asset Productivity

	2001	2005	2009
Coach Productivity (000, P-km per coach)	993	916	1,357
Locomotive Productivity (000, TU per locomotive)	31,223	53,688	46,559
Wagon Productivity (000, ton-km per wagon)	827	1,338	1,243
Employee Productivity (000, TU per employee)	622	1,140	1,166
Track Productivity (000, TU per standard track km)	6,454	7,271	6,930

Source: Lithuanian Railways, UIC, World Bank Analysis

6 Conclusion

Lithuania is moving ahead with railway reforms and significant improvements have been observed due to commercial management of the process. Since 2001, LG revenues have risen by 93 percent, freight modal share improved by 9.0 percentage points, investment in assets rose by 360 percent, and operational productivity has improved across the board. Lithuania Railways' current strategy focuses on improving infrastructure to enhance interoperability with EU railway networks. The EU Community Strategic Guidelines prioritizes "the most important infrastructures for international traffic, bearing in mind the general objectives of the cohesion of the continent of Europe, modal balance, interoperability and the reduction of bottlenecks."²⁴⁴ Thus, EU Cohesion Funds, Europe's Regional Development Funds, and Structural Funds are the primary sources of funding for transport infrastructure development in Lithuania.

²⁴⁴ *Ibid.*