



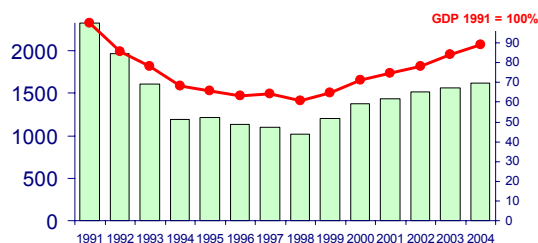
Reforming Russian Railways: The Emergence of Competition and Regulatory Challenges

Andrei Dementiev



Good time to reform...

Rapid (oil price driven) economic recovery with
spare railroad infrastructure capacity

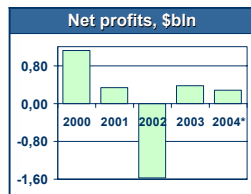
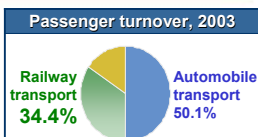
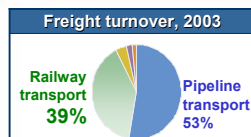


Freight rail turnover (bln. tkm) and GDP dynamics

Outline

- Railways in Russia
- The reform agenda
 - Timing and sequencing
 - Means and ends
- Regulatory reform
 - New regulatory bodies
 - New tariff structure
- Emergence of competition
 - Investments in rolling stock
 - Cream-skimming
- Concluding remarks

... railways in Russia



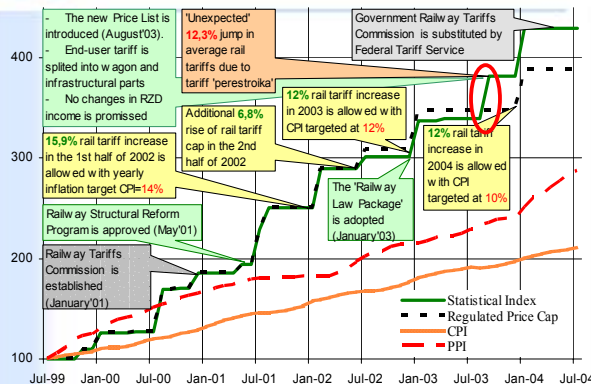
- Enormous infrastructural and social role
- Spare infrastructural capacity of low quality
- Rolling-stock shortage
- No direct subsidies from the state
- No restriction from EC on reform methods

Russian railways




- **21,6%** of the world railway freight turnover
- **7,6%** of the world railway passenger turnover
- Railroad infrastructure development is ranked **17** among 102 countries (*Global competitiveness report 2003-2004*)



Tariff dynamics and reform

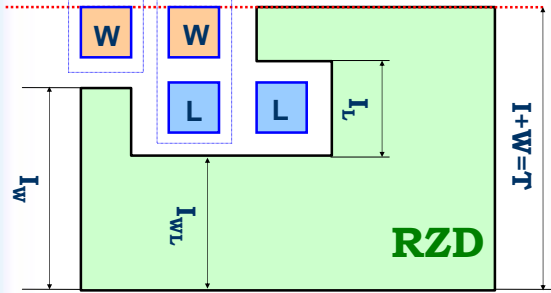


Stages of reform

2001-2002	2003-2005	2006-2010
Ministry of Railway Transport (est. 1863)	Russian Railways Co. 'RZD' (est. 2003)	'RZD' + Freight + Passenger Co.
'Self-regulated' monopoly providing 'public utility'	'Partially' vertically integrated 'over'-regulated 100% state monopoly	Regulated Infrastructure monopoly
		 ???????
Separation of regulatory and business activities	Introduction of on-track competition	Complete vertical separation?

New Railway Price List #10-01 legalizes on-track competition ...

No-arbitrage condition



Means and Ends of Reform

Goals

- Increasing
 - reliability,
 - safety, and
 - quality
 of railway transport
- Cutting overall transportation costs in the economy
- Meeting projected demand for transportation

Principles

- Encouraging on-track competition
 - Non-discriminatory access to infrastructure
- Increasing attractiveness for investment
 - Financial transparency
- Developing tariff policy
 - Elimination of cross subsidies

... with no government support of infrastructure

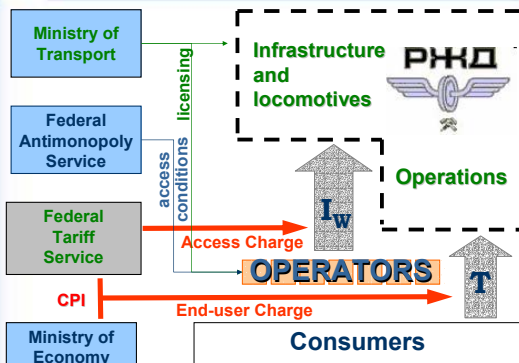
- According to Ramsey formula

$$\frac{I_w - MC_w}{I_w} = \frac{\lambda}{1 + \lambda \eta(I_w)}$$

Mark-up should increase if

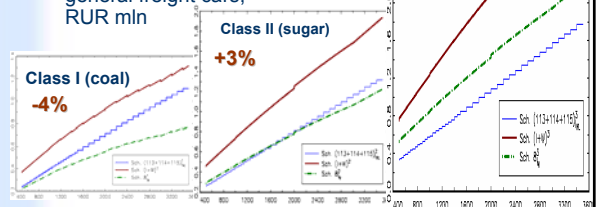
- Shadow price of public funds **increase** (distortions of tax system $\lambda \approx 0.5$)
- Rail tariff (T) elasticity of demand for transportation (η) **decreases**

Current railroad industry and regulatory structures in Russia



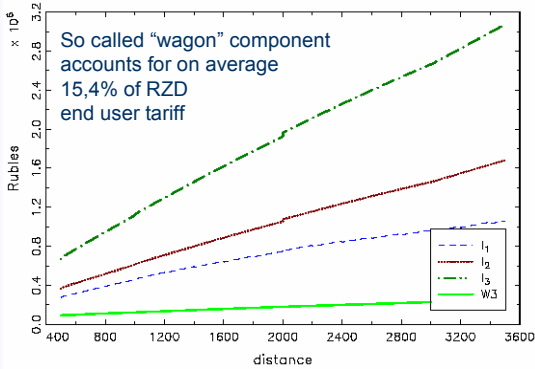
New tariff structure revealed

RZD end user tariff (T) is **well above** comparing to infrastructure charge for car operators (I_w) and carriers with own locomotives and cars (I_{WL}), Charge for train of fifty 66 ton general freight cars, RUR mln





Ramsey pricing of access?



... and skim the cream

Private operating companies ship

- 31.7% of high-value commodities
- 21.3% of medium-value commodities
- 18.8% of low value commodities
 - <10% of coal

Total tonnage of private operating companies jumped from 24% in January to 31% on July 2004

Revenue per t-km

- 4.0 RUR for private companies
- 3.6 RUR for RZD on average
 - (4,5 RUR on the same routes)

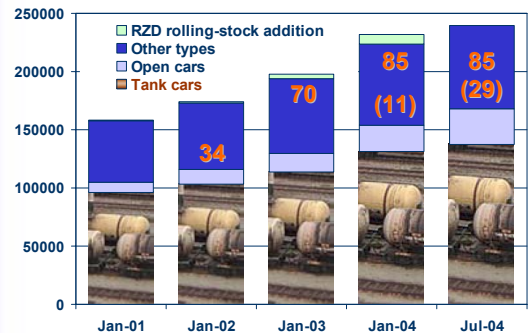


RZD discriminates

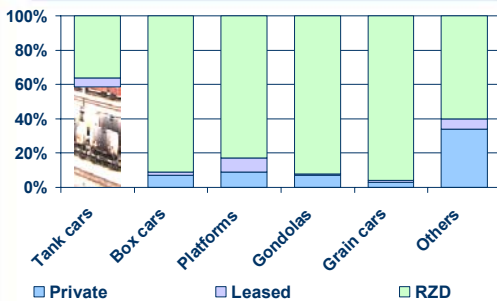
	Tariff class	Share in loading, %	Share in turnover, %	Share in revenues, %	~η, (T/P) %
Ore minerals	I	10.3	8	5.6	31
Coal	I	22.9	28	13.4	26
Mineral and construction products	I-II	19.6	7	6.8	15
Oil	II-III	17.7	16	29.6	8*
Ferrous metals	III	6.3	18	11.6	4
Total		76.8	77.0	66.6	



Private car fleet and private operators (carriers)



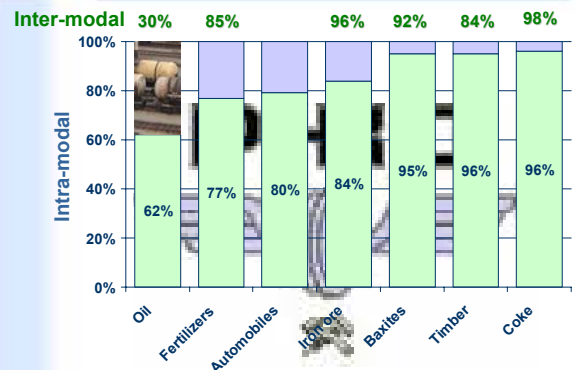
New entrants invest in specialized cars...



- 57,6% of private cars are tank cars
- 29,8% of private car fleet – specialized cars



Inter- and intra-modal competition (2004)





Which strategy for RZD?

Tariff instruments to suppress competition

Setting high charge for access to infrastructure



Undercutting in the final market



RZD is bound to stick to Price List #10-01 in terms of tariff **structure** (relative levels of I_w and T are fixed)

⇒ Only 'moderate' tariff level indexation is left (favored by the government)

Non-tariff instruments to deal with competition

- Capturing rolling-stock suppliers (long-term contracts)
- Establishing RZD operating 'daughter' companies
- Getting rid of social obligation and non-core activities to cut costs



Concluding remarks

- Russian railways face **'oil'-induced internal competition**
 - Limited capacity of pipe-lines
 - High price of crude oil
- **Access charges** to infrastructure are based on **Ramsey formula**
- Current regulatory system favors **complete separation** of regulated infrastructure and unregulated operations
 - 'Transparent' cross-subsidies
 - 'Daughter' operating companies (to fight cream-skimming)
 - Flexibility of freight tariffs