INSTITUTE
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GEOGRAPHY AND POLICY

Open access passenger rail competition in the Czech Republic

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ITREGEP

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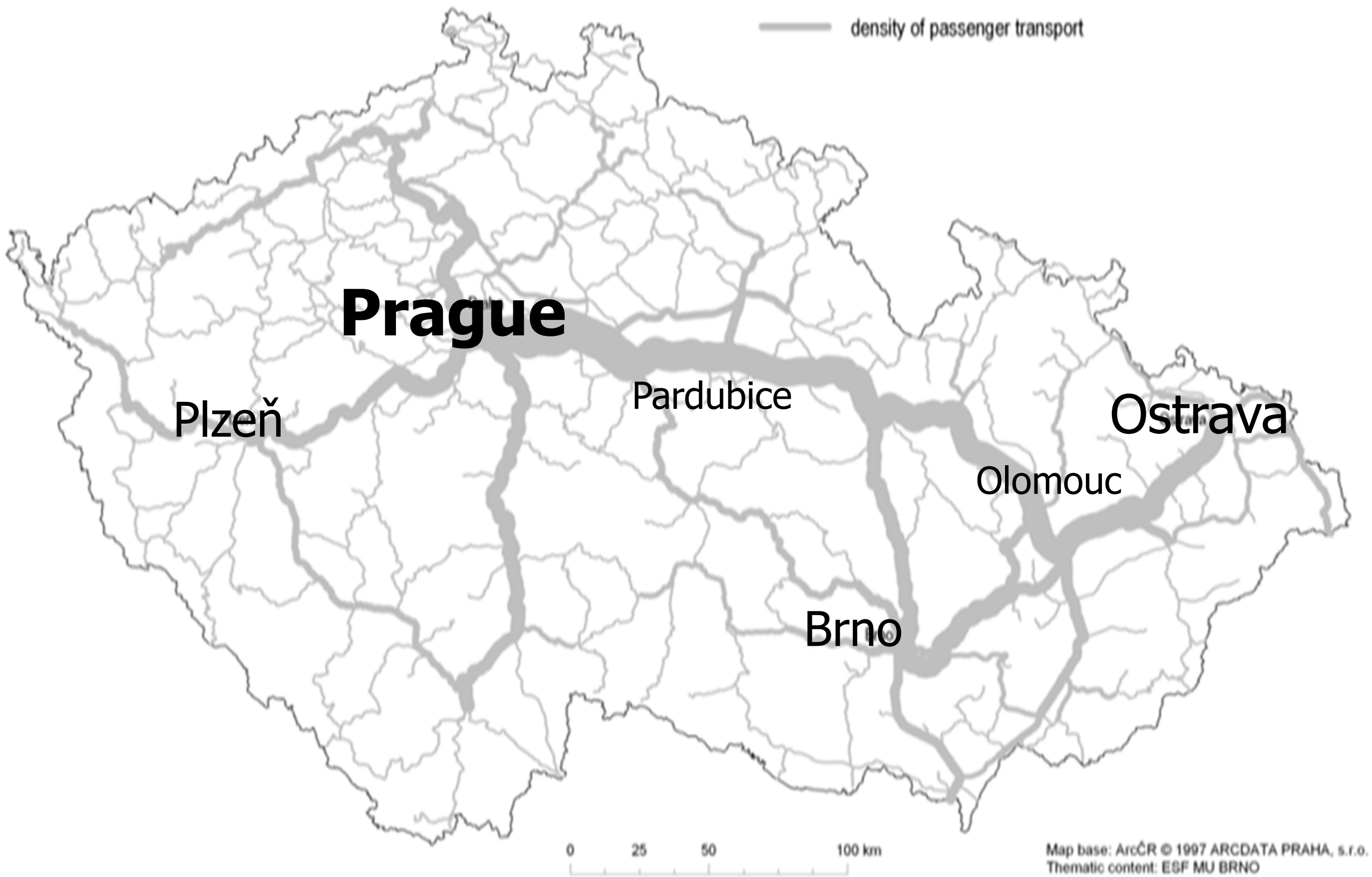
Czech railway industry

- Vertically separated structure (from 2003):
  - independent infrastructure manager (SZDC)
  - incumbent operator (České dráhy)
- The market share of České dráhy in 2015 (trainkm):
  - freight: 65%
  - passenger: 95%
- Regionalization of passenger rail transport – regional PSO financed by regions; long distance PSO by Ministry of Transport
- Until September 2011, all passenger services subsidized (PSO) and directly awarded to České dráhy
- From September 2011 on, commercial open access on the mainline Prague - Ostrava
- Regulator: Drážní Inspekce (safety issues)

Czech railway passenger market

	1995	2000	2005	2010	2015
Passenger-Kilometers (billions)	8.0	7.3	6.7	6.6	8.3
Modal Share of Railways (%)	10.8	8.3	7.3	7.5	8.0
Private Operator’s Market Share (%)	0.0	0.0	0.1	0.2	5.1

Geography



* densiity of rail passenger flows; year 2009

Open access on Prague - Ostrava

- Before September 2011 → high density of traffic, low intermodal competition, two brands of ČD services – SC (Pendolino), IC (standard), high fares, subsidies, no competition
- September 2011 → withdrawal of public subsidies; the open access entrance of the first private competitor RegioJet
- January 2013 → the entrance of the second private competitor LeoExpress
- 2011 - 2016 → intensive price and non-price competition of the operators

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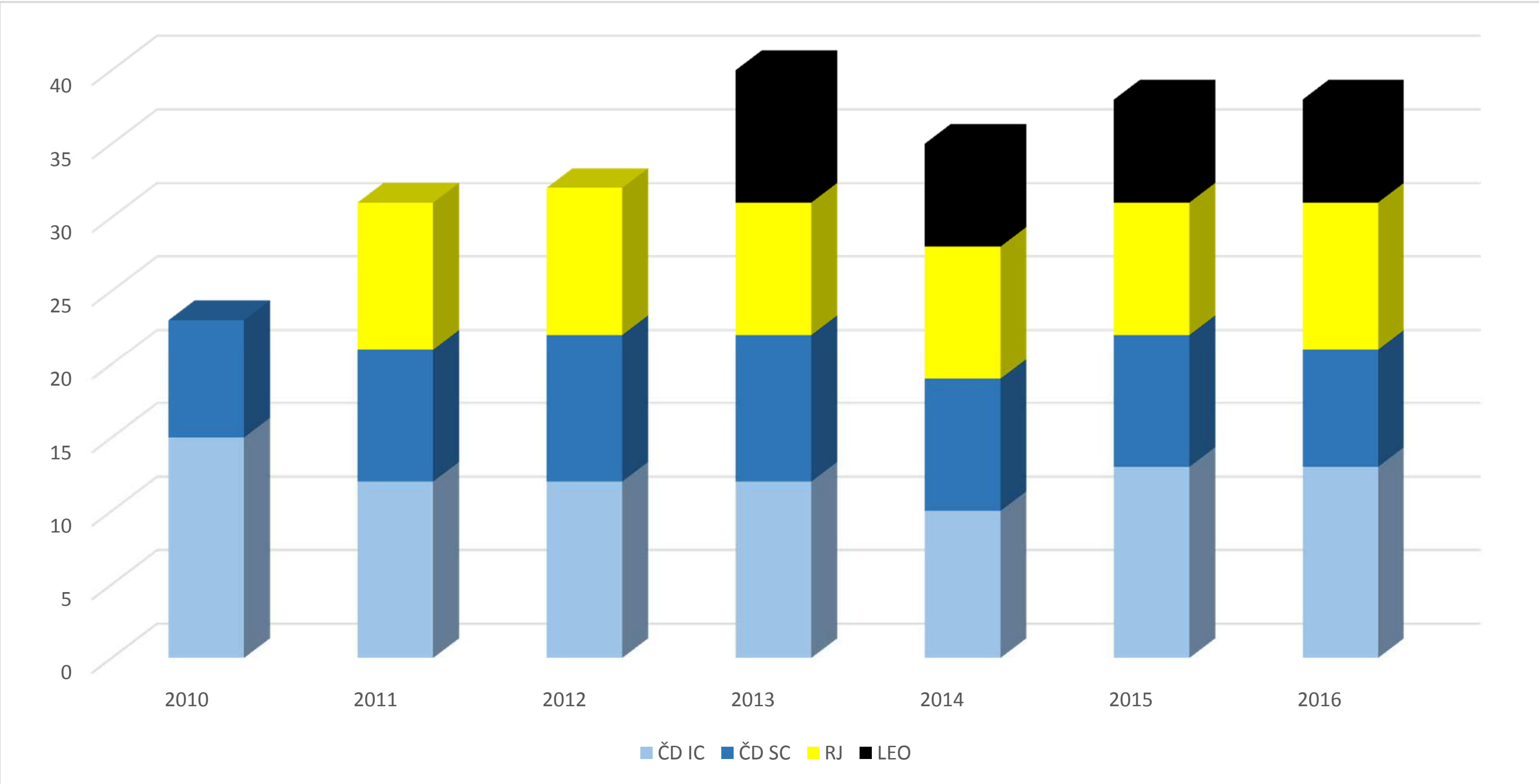
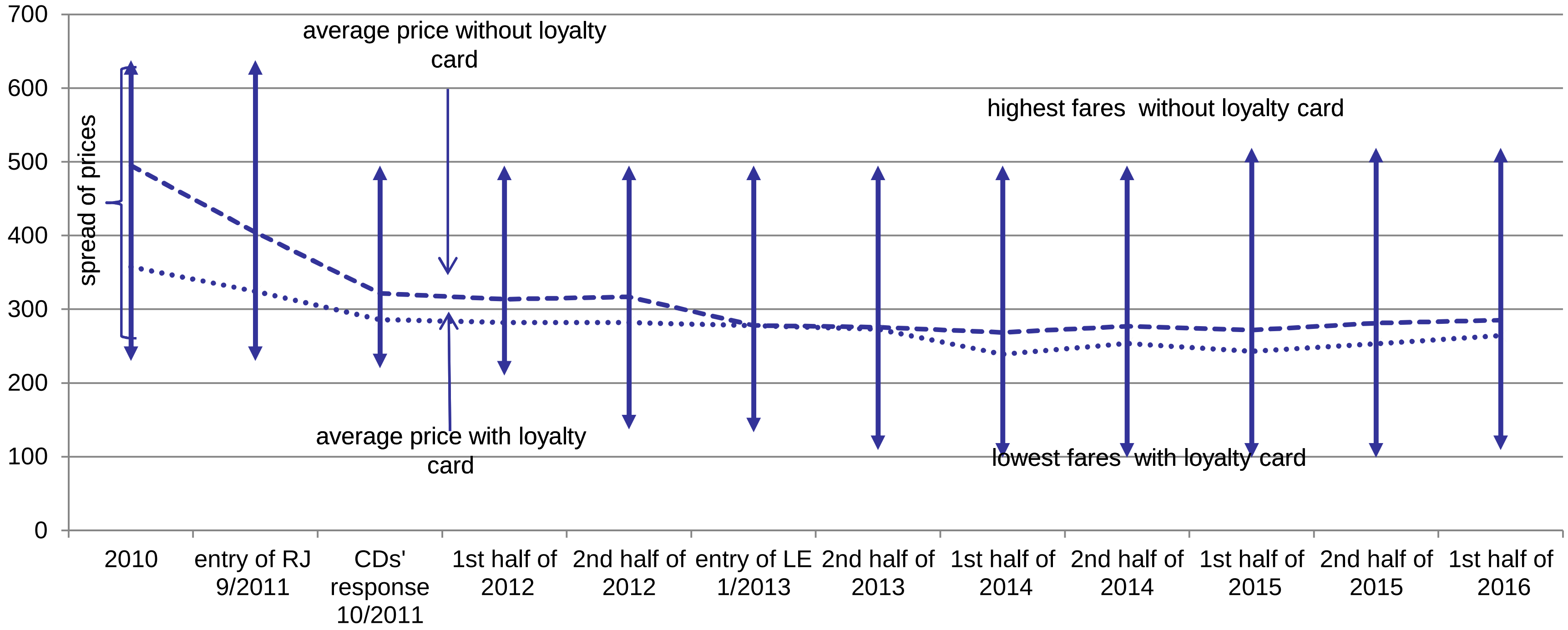
Service differentiation

Frequency of services



* daily, one-way

Prices



* CZK per one way ticket

Passengers

	ČD SC	ČD IC	Regiojet	LeoEx	**TOTAL**
2010	1,3	2,3			**3,6**
2011	1,3	2,3	0,1		**3,7**
2012	1,1	2,1	1,1		**4,3**
2013	1,0	1,8	1,5	0,7	**5,0**
2014	1,2	1,5	2,4	0,9	**6,0**
2015	1,3	1,5	3,0	1,1	**6,9**

* millions; own estimation

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Market shares

	ČD SC	ČD IC	Regiojet	LeoExpr	TOTAL
2010	36%	64%			100%
2011	35%	62%	3%		100%
2012	26%	48%	26%		100%
2013	20%	36%	30%	14%	100%
2014	20%	25%	40%	15%	100%
2015	19%	22%	43%	16%	100%

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Revenues and profits

	2012		2013		2014		2015	
	Rev	Profit	Rev	Profit	Rev	Profit	Rev	Profit
Regio	246	-76	318	-93	523	-42	718	+41
Leo	11	-78	193	-159	178	-137	258	-84
ČD	19 500	-517	19 900	-1 795	20 723	-865	21 075	-1 395

- mil. CZK
- RegioJet and LeoExpress - data for Prague-Ostrava;
- ČD – data for all Czech passenger rail network

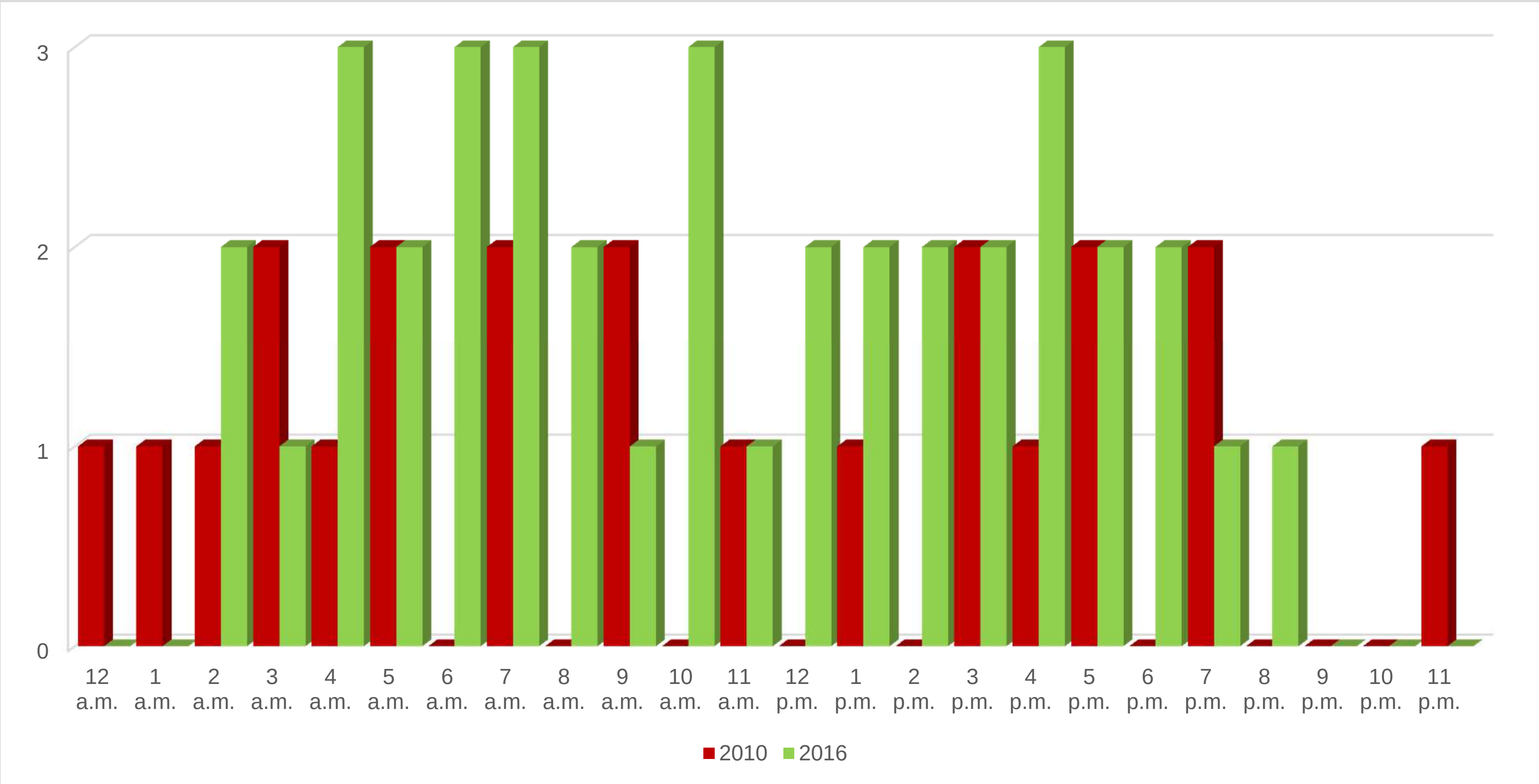
Rolling stock

	2010	2011	2012	2013	2014	2015	2016
Average Number of Coaches per Train	8.9	7.2	7.3	7.0	6.7	7.6	7.5
Average Number of Seats per Train	465	408	353	336	333	373	384
Total Daily Capacity (Number of Seats)	10 687	12 649	11 282	13 437	11 650	14 186	14 594

Infrastructure capacity

Number of passenger trains in weekdays (one way only)		2003				2011				2013			
		ČD	**RJ**	**LE**	**∑**	**ČD**	**RJ**	**LE**	**∑**	**ČD**	**RJ**	**LE**	**∑**
Prague	Long-distance	39	0	0	**39**	75	9	0	**84**	76	9	8	**93**
	Regional	31	0	0	**31**	59	0	0	**59**	60	0	0	**60**
	Total	**70**	**0**	**0**	70	**134**	**9**	**0**	**143**	**136**	**9**	**8**	153
Ostrava	Regional	11	0	0	**11**	18	0	0	**18**	19	0	0	**19**
	Long distance	29	0	0	**29**	42	9	0	**51**	40	9	8	**57**
	Total	**40**	**0**	**0**	40	**60**	**9**	**0**	69	**59**	**9**	**8**	76

Timetable



Number of Passenger Trains Departing from Ostrava to Prague on Weekdays (number of trains per hour)

Speed x stops (average journey time)

	2010	2011	2012	2013	2014	2015	2016
ČD IC	4:01	3:55	3:44	3:48	3:46	3:35	3:27
ČD SC	3:04	3:05	3:05	3:12	3:08	3:06	3:02
RJ		3:43	3:42	3:36	3:31	3:30	3:27
LEO				3:16	3:31	3:27	3:18

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Regulation challenges

- Infrastructure Capacity (charges, priority rights)
- Anticompetitive Behavior (predatory pricing)
- Lack of dedicated Regulator (frequent operator’s disputes)
- Tariff integration

Assessment

+ better quality of services
+ higher frequency of trains
+ lower prices for customers

- unprofitability of operations
- strains on infrastructure capacity
- weak regulation; no tariff integration

References

- Tomeš, Z., Kvizda, M., Jandová, M., & Rederer, V. (2016). Open access passenger rail competition in the Czech Republic. *Transport Policy*, *47*, 203-211.
- Tomeš, Z., Kvizda, M., Nigrin, T., & Seidenglanz, D. (2014). Competition in the railway passenger market in the Czech Republic. *Research in Transportation Economics*, *48*, 270-276.