



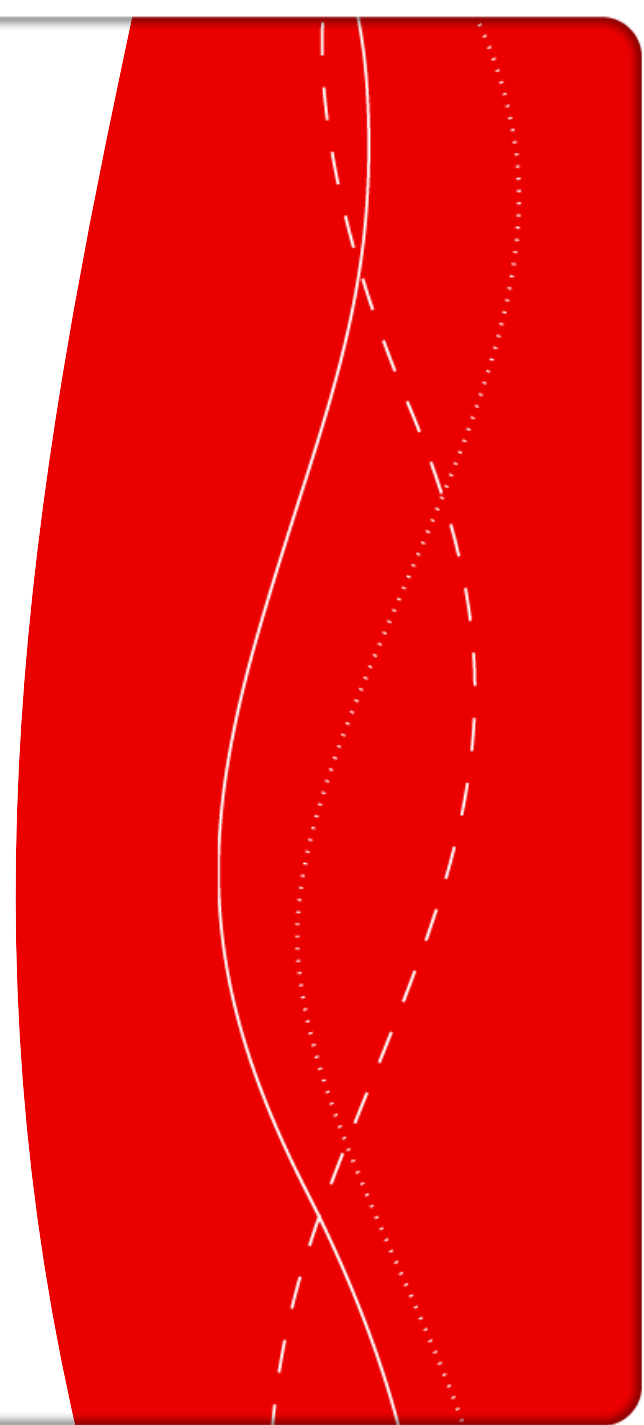
FINDING A BETTER WAY

**Comparing three models for
introduction of competition into
railways – is a Big Wolf so Bad
after all?**

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Purpose

- To compare the railway sector's performance in three countries
 - which have separated infrastructure from operations
 - with long experience of (some) market opening, but
 - which use different approaches within this framework.

Britain

- The franchising model – bidding competition for the market.
- A commercial/not-for-profit organization supplies the infrastructure.
- Government subsidies to operations and infrastructure.
- Open entry in freight; some also in passenger services.
- Strong regulator to monitor the (infrastructure) monopolist's performance.

Germany

- The holding model, i.e. all branches of the incumbent – both infrastructure and operations – government-owned through a holding company.
- Open entry for both freight and passenger services.
- Government support to non-commercial regional services and to infrastructure investment; track user charges to recover infrastructure maintenance costs.
- Regulator with growing clout but with restrictions on its jurisdiction.

Sweden

- Vertical separation with
 - open entry for freight,
 - (still) monopoly franchise for commercial passenger services, and
 - competitive tendering of non-commercial passenger services on a regional basis.
- Central government support to both infrastructure investment and maintenance, and
- ...regional subsidies to non-commercial railway services.
- A Regulator with a safety background but yet with little regulatory clout.

Baseline hypothesis

- The more complete the degree of vertical separation,
- the more competition in freight and passenger train operations,
- and the more bids submitted for tenders,
- the better will services and consequently rail traffic growth be and the lower ticket prices/costs and subsidies;
- other things being equal

The infrastructure

- Germany stipulates that costs for maintenance and operations of infrastructure should be covered by users; in Sweden and Britain tax payers contribute in this respect.
- Ceteris paribus conjectures:
 - Train user charges higher, and demand lower in Germany.
 - More pressure on infrastructure holder in Germany to minimise costs.
 - Sweden's low train user charges should make demand higher due to lower ticket prices.
- Britain's Regulator has a strong track record to discipline the infrastructure provider.
- Conjecture:
 - In combination with the above, Sweden could be expected to have the highest costs for its infrastructure.

The market for commercial passenger and freight services

- The strong dominance of Germany's incumbent makes it difficult for entrants to compete for commercial services.
- Entry in commercial passenger services in Sweden not permitted;
- ... but open entry in freight.
- Entry feasible in Britain's freight and some entry also in passenger services.

- Conjectures:
 - Scant entry in Germany,
 - More so in Sweden's and Britain's market for freight..

The markets for franchised passenger services

- Comprehensive franchising in Britain for both commercial and non-commercial services.
- ... and in Sweden for non-commercial services.
- Less franchising in Germany.
- Winners in Britain take over existing organisation, but not in Sweden and Germany.
- Conjectures:
 - More competition for contracts in Britain and Sweden than in Germany.
 - Higher train operation costs in Britain (*ceteris paribus*) due to less cost pressure on franchisees.

Bidders/operators in Britain, Germany and Sweden; passenger (franchised and commercial)

	No. of operators	Ownership	Origin	Nationality
Britain	11	7 private, 4 public	4 rail, 7 other	7 British, 4 other
Germany	59	21 private, 38 private	55 rail, 4 other	37 German, 22 other
Sweden	9	2 private, 7 public	9 rail	1 Swedish, 8 other

Operators in Britain, Germany and Sweden; freight

	Germany	Sweden	Great Britain
Valid licences	315	17	26
Market share; incumbent	78% (DB Schenker)	76% Green Cargo	56% (DB Schenker)
Market share; other major operator		Cargo Net 7.5% Malmtrafik 7%	34% (Freightliner)

Observations

- Generally sufficient competition for contracts.
- All countries have seen entry where this is feasible,
- ... but the incumbent still has a strong position in Sweden (freight) and in particular in Germany (passenger and freight).
- Much entry in niche segments of the market;
- while far less head-on competition.

Taxpayer costs

Year*	Britain, m pound, 2005/06 prices		Sweden, m SEK, price level 2005		Germany, m €, price level 2005	
	Total support to services and infrastructure	Infra-structure investment	Support to infrastructure (net of track user charges)**	Thereof investment	Total support to regional services and infrastructure investment	Thereof Infrastructure investment
2001	1 914	3 148	6 760	4 295	9 578	3 934
2002	2 609	3 756	7 129	3 116	9 456	3 593
2003	3 643	4 722	7 101	3 376	10 670	4 421
2004	3 732	3 543	8 758	3 240	9 637	3 261
2005	4 578	3 237	11 052	2 671	9 978	2 878
2006	6 073	3 766	11 427	4 332	10 079	2 781
2007	4 825	4 134	16 740	5 982	10 580	3 237
2008	4 530	Na	15 503	6 308	Na	Na

Comparisons of tax support in 2007 to the railway industry in the three countries. 2005 prices.

	Support, m	€, m	€/train km	€/inhabitant
Britain, £	5 727	6 737	13	112
Sweden, SEK	18 740	2 052	15	224
Germany, €	10 580	10 580	10	134

Average fare revenue 2009, cent per passenger km

	Average	Long distance	Regional	London
Britain ¹⁾	10.3	10.7	8.1	10.9
Sweden ²⁾	-	10.8	11.7	-
Germany ²⁾	-	9.9	7.6	-

Average annual price increases, percent

	Sweden, 1990- 2007	Britain, 1997- 2007	Germany, 1996- 2007
Consumer Price Index	3.1	3.8	1.5
Local public transport ¹	5.5	4.2	3.9
Long distance rail	3.2	6.6	2.4
Domestic air	5.7	0.8	4.7
Petrol price	3.7	4.3	4.8

Average annual traffic growth, percent

		Sweden 1990-2007	Germany 1996-2007	Britain 1997-2007
Rail	Total pass km	2.6	0.9	3.5
	- thereof regional services	4.6	2.0	3.8
	- thereof long distance services	1.6	-0.04	3.0
Car	Passenger/ vehicle km*	0.9	0.6	0.9
	Average annual GDP growth	2.3	2.1	2.9

Rail freight growth, 1995-2007

	Sweden	Germany	Britain
Freight tonne km 1995	19.39	70.50	13.30
Freight tonne km 2007	23.25	114.62	26.38
Percentage growth	20	63	98

Observations

- Taxpayer support to the railway industry has increased in Sweden and Britain;
- Support in Sweden is highest in terms of taxpayer costs relative to traffic production and population.
- Both freight and passenger demand has increased after reforms:
 - While this may not be attributed to reforms, it is obvious that reforms have not been a stumbling block.
- Prices have increased in real terms.

Textbook conjectures

- Sweden has no competition in the commercial passenger market and makes little use of economic incentives => high ticket prices.
- High support from tax payers => low ticket prices.
- Germany's strong incumbent should work towards
 - Better cost effectiveness but
 - monopoly pricing.
- Britain's system should be more efficient due to
 - comprehensive introduction of competition through franchising
 - no state owned dominant operator in the freight sector
 - complete separation of infrastructure from operations,
 - systematic use of economic incentives
 - and strong regulator.

But what do we see?

- The German system operates with the lowest level of subsidies and fares
- In Britain both investment and operating costs have risen and
- in Sweden taxpayers costs have increased, partly due to growth in infrastructure investment.
- In contrast to state-of-the-art economics, the presence of a strong incumbent in the system is not necessarily a bad for tax payers or travellers:
- A Big Wolf does not seem to be so Bad after all.

Thank you for your attention.

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