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2009 MEETING OF VOORBURG GROUP

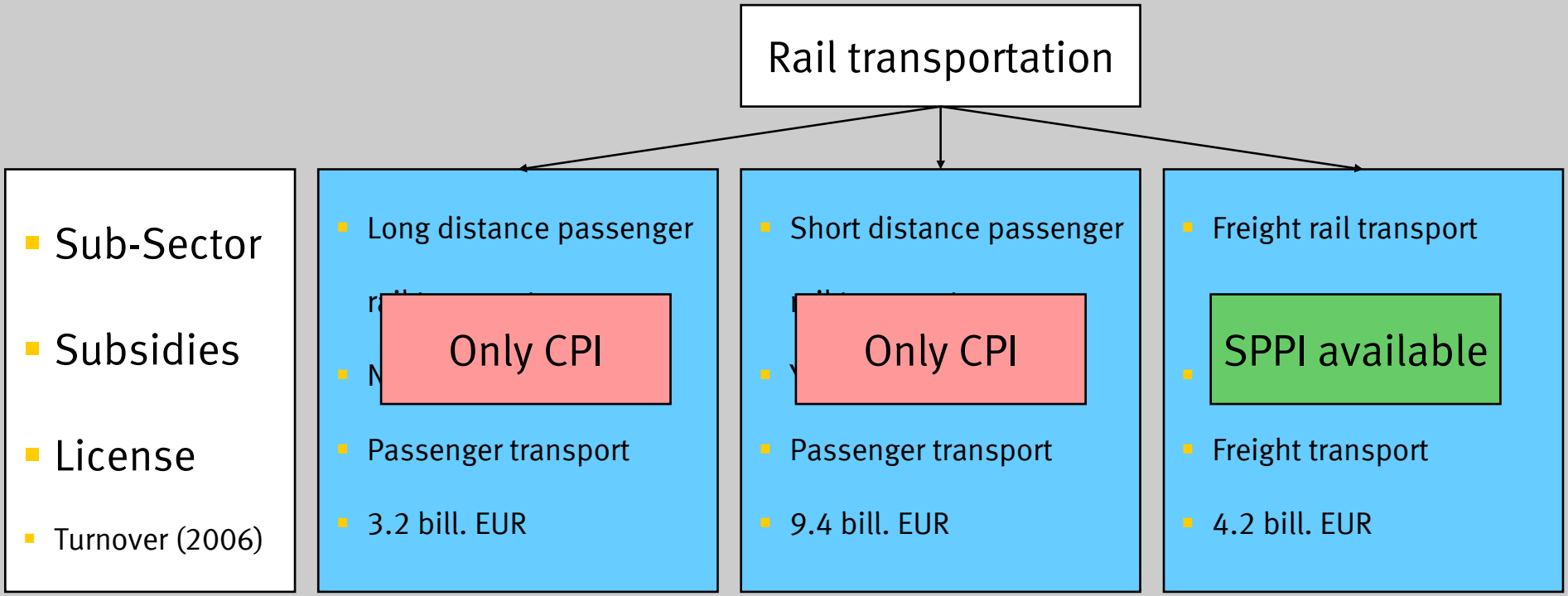
MINIPRESENTATION

SERVICE PRODUCER PRICE INDEX FOR RAIL TRANSPORTATION IN GERMANY

Preface

Railway transportation – one sector, three different sub-sectors

- Split-up necessary – three categories



Long distance rail passenger transport (1)

Pricing unit of measurement

- Tickets and other offers of *Deutsche Bahn Fernverkehr* (almost monopolist)

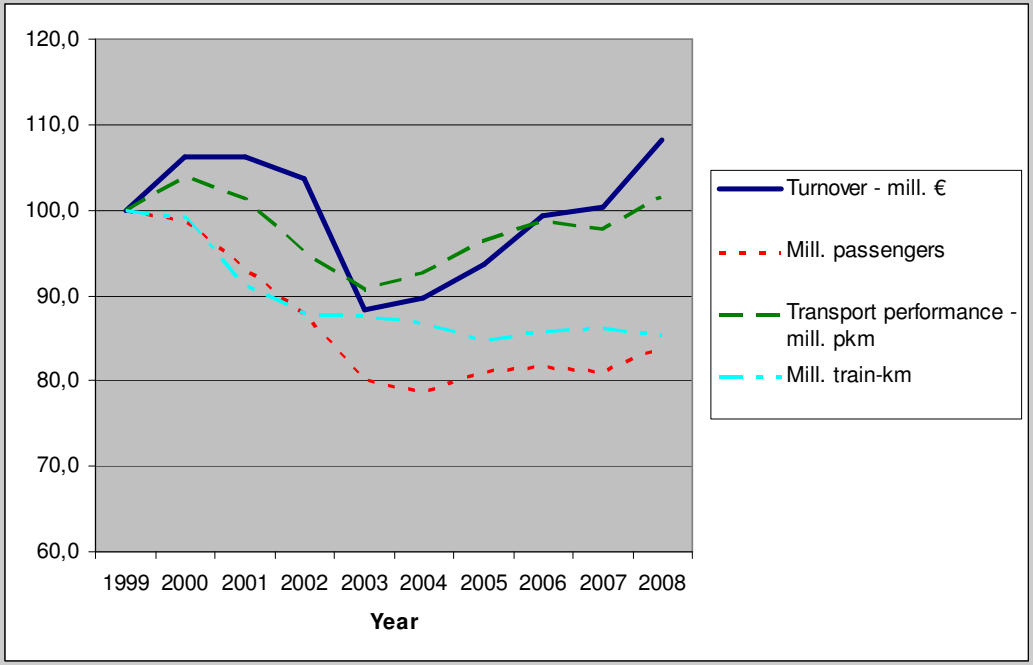
CPI data, only B2C	B2B/B2G, additional data for SPPI
▪ Most important travel relations (IC and ICE trains, 44 each) ▪ Season tickets ▪ Night trains (2 relations) ▪ Special offers („Deutschland Spezial“) ▪ *BahnCard 25/50*	▪ Special tariff agreements for large customers („Großkundenabonnement“) ▪ *BahnCard 100* ▪ Contracts with the army ▪ Contracts with touristic companies

Long distance rail passenger transport (2)

Market conditions and constraints – size of industry

- Despite liberalisation (1994): Market share *DB Fernverkehr*: ›99%
- Hence, indicators tell more about DB strategy than the market

- Figures of *DB Fernverkehr*
- Decline in 2003: new pricing system, not accepted by customers
- Abandoning of IR trains (low margins), mainly replaced by short distance trains with subsidies



Long distance rail passenger transport (3)

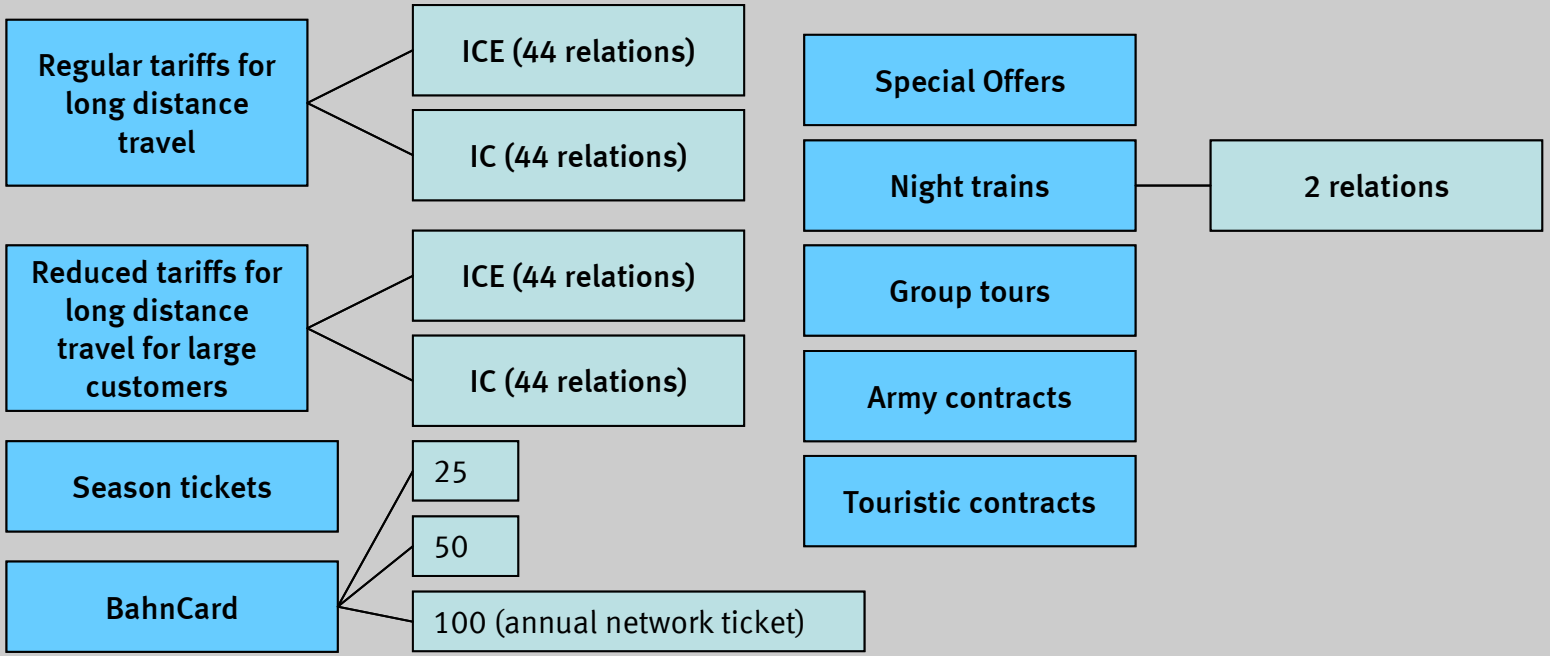
Special market conditions, record keeping

- Government-owned monopoly: publication of an SPPI doubtful. Publication of CPI sufficient for most needs.
- Data sources:
  - CPI data (regular tariff information)
  - Additional survey for new weighting pattern necessary
  - Contracts with touristic companies and the army: record keeping practices still unknown

Long distance rail passenger transport (4)

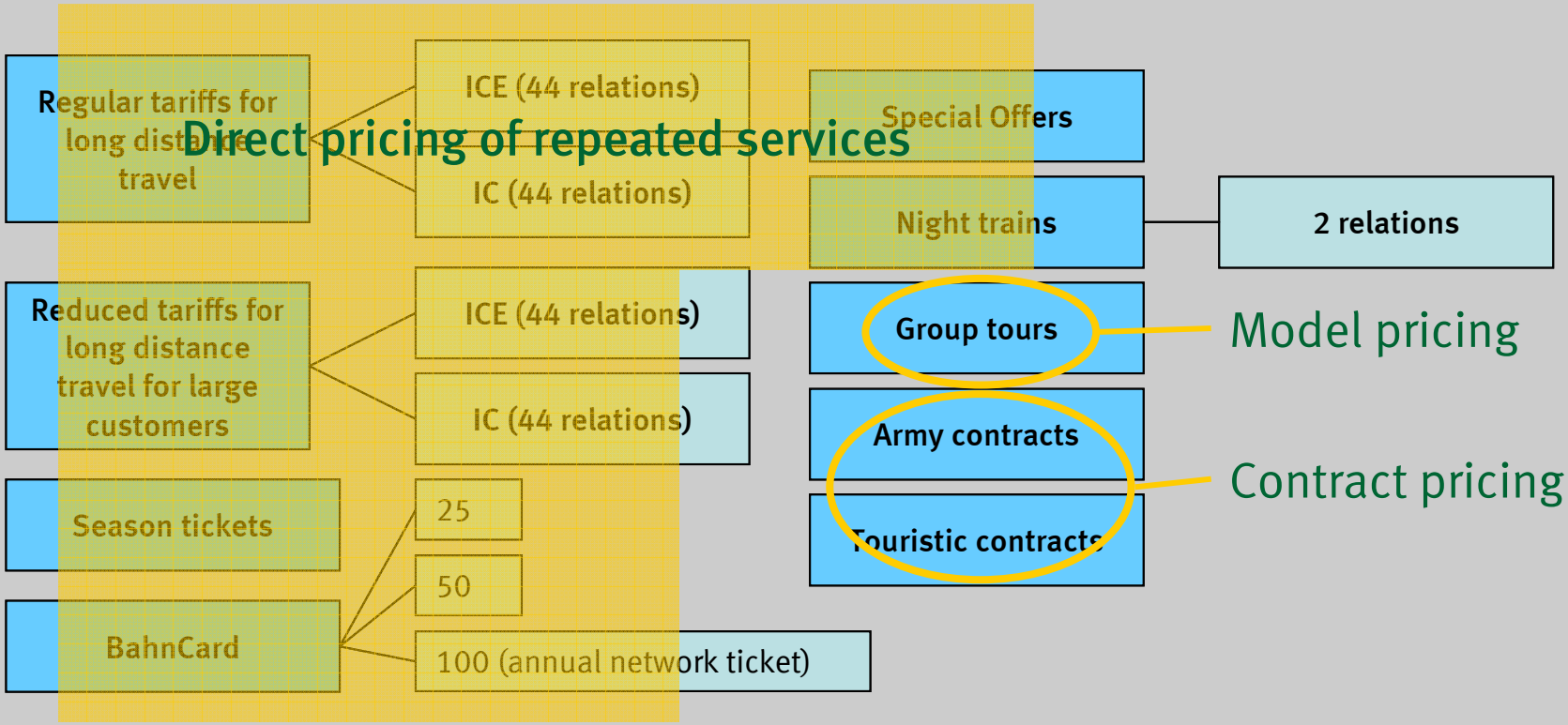
Classification proposal

- Standard classifications have no further breakdown (e.g. ISIC 4911) or no usable breakdown (e.g. CPA 49.10).
- Proposed classification alongside selected tariffs.



Long distance rail passenger transport (5)

Pricing methods (used by CPI or proposed for SPPI)



Long distance rail passenger transport (6)

Quality adjustment, comparability with turnover measures

- CPI uses QA methods…
  - when travel time changes significantly (e.g. opening of new high speed lines)
  - when trains with higher quality standards are introduced (replacement of IC trains by ICE‘s)
- Comparability with turnover/output: Perfect match – only one enterprise to be regarded in both statistics

Short distance rail passenger transport (1)

Pricing unit of measurement

Kaumanns (2005): „...it is almost not detectable, with which product turnover on which market ... is generated at all."

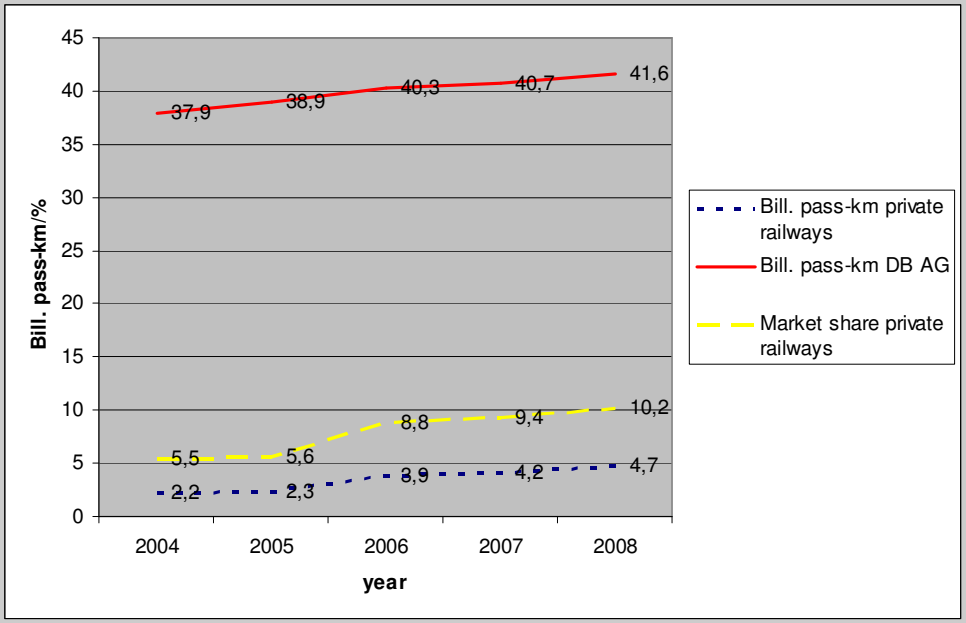
Most important influence on sources of turnover: type of contract.

Type of contract	Most important sources of turnover	Pricing unit of measurement	CPI data available
Concession	Ticket fares	Ticket	Yes
Net contract	Ticket fares Orderer's fee	Ticket Train-km	Yes No
Gross contract	Orderer's fee	Train-km	No

Short distance rail passenger transport (2)

Market conditions and constraints – size of industry

- Liberalisation in 1994: competition for the market, not on the market
- Market share of private companies (2008): 18.3% of train-km; 10% of pass-km; 72% of train-km newly assigned in competition
- Liberalisation successful: strong increase in pass-km and market share of private companies in 2004-2008



Short distance rail passenger transport (3)

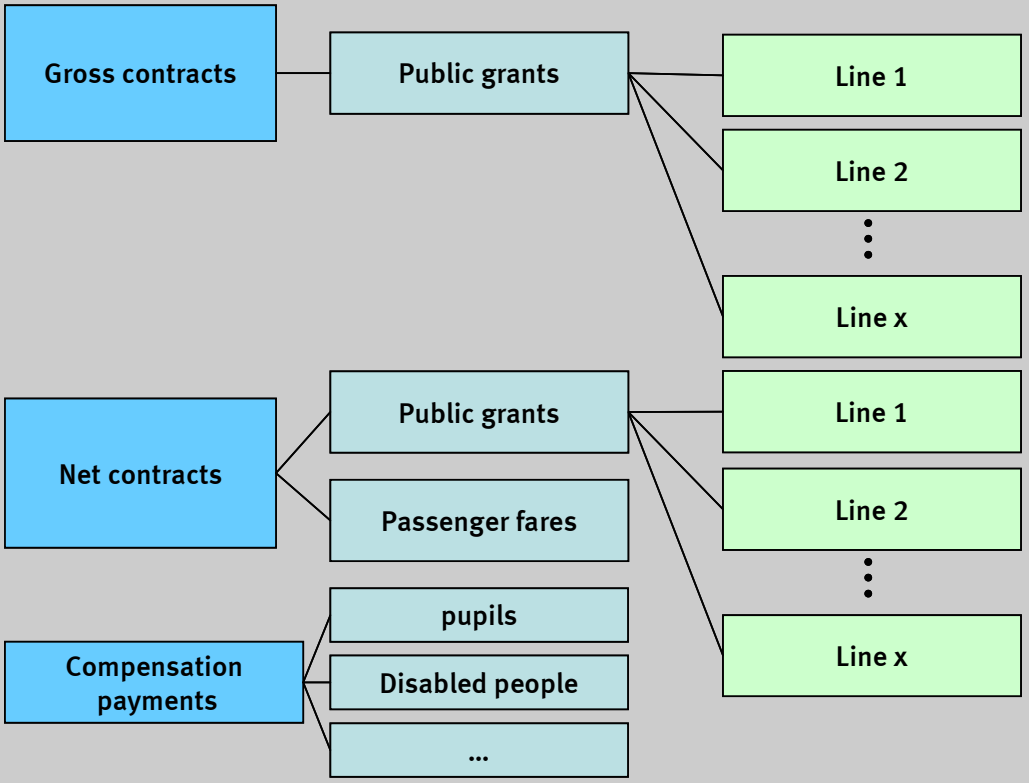
Special market conditions, record keeping

- Existence of public transport networks complicates price observation
- Data sources:
  - CPI data (regular tariff information)
  - Public authorities („task bearers“) that order railway services and pay for it => probably better source than the railway companies themselves

Short distance rail passenger transport (4)

Classification proposal

- It is not clear in which ISIC/NACE class SDRPT is included (see discussion of Sven Kaumanns).
- Proposed classification alongside sources of income (excluding public transport networks)



Short distance rail passenger transport (5)

Pricing methods (used by CPI or proposed for SPPI)

- **Contract pricing** for public grants and compensation payments. Probable price determining characteristics are laid down in the contracts, e.g.
  - Train-km
  - Duration of the contract
  - Gross or net contract
  - Lines served
  - Equipment and ownership of rolling stock
- **Pricing of repeated services** for passenger fares (can be partially extracted from CPI data)

Short distance rail passenger transport (6)

Quality adjustment, comparability with turnover measures

- Quality adjustment: large problem when contracts expire and are replaced by new contracts
  - Different railway company
  - Different lines
  - Different standards for rolling stock

  => Close collaboration with railway companies and public authorities necessary
- Comparability with turnover/output: Large problem – where in the classification is SDRPT included?

Rail freight transportation (1)

Pricing unit of measurement

The service Rail Freight Transportation can be further differentiated by asking „who is responsible for organisation and marketing?“ => Necessary to define the pricing unit of measurement

Service categories	Products	Responsibilities	Pricing unit
Service as main haulage contractor	Block train traffic Wagonload traffic	Railway: org., mkt.	Single Transports and their conditions
Traction services	Intermodal, traction for block/wagonload trains, servicing of junctions	Railway: org. Customer: mkt.	
Provision of locomotives	Construction train traffic Shunting services	Customer: org. Railway: mkt.	Mainly: Hours of provision, transfer of locomotives

Rail freight transportation (2)

Market conditions and constraints – size of industry

- Liberalisation in 1994: private companies entered the market
- Started with niche markets and co-operation with the former monopolist *DB Schenker Rail*
- Today: strong competition for block train traffic and traction services; provision almost only by private companies; wagonload traffic still a stronghold of DB
- Market share of private companies (2008): 21% of tonne-km. 59 of them compete with DB
- Liberalisation successful: Transport performance increased between 2000 and 2008 by 40% (2000: 82,7 bill. tkm; 2008: 115,7 tkm). DB: +20%. Large drawback in 2009 (1st half: -23%)

Rail freight transportation (3)

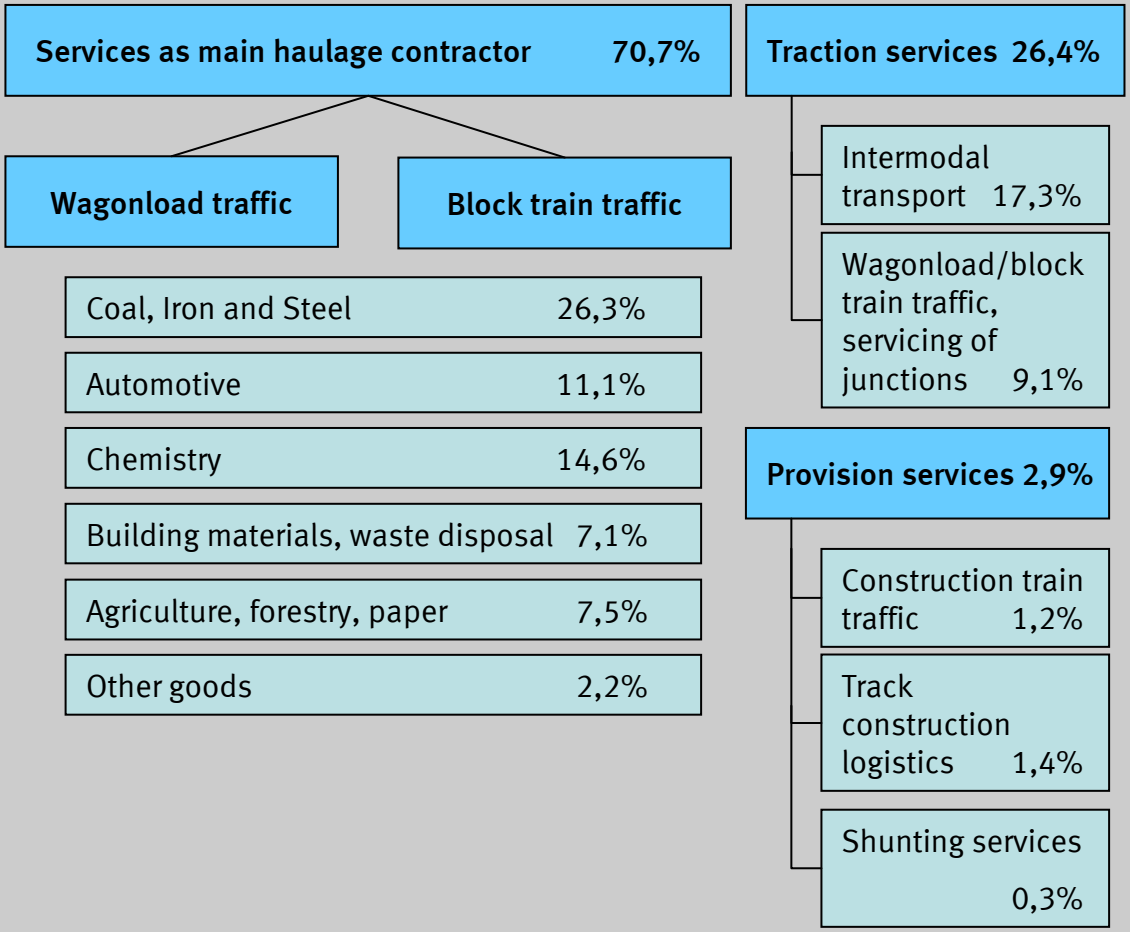
Special market conditions, record keeping

- To get a picture of the overall market, rail freight forwarders and railway companies have to be contacted
- Record keeping:
  - Data needed: prices for actual services => can be extracted from normal financial accounting
  - Problems with varying services (e.g. servicing of junctions): price observation has to be linked to a single contract

Rail freight transportation (4)

Classification used

- CPC/CPA: breakdown by used rolling stock (tanker cars, refrigerator cars,...)
- NST 2007 (transport statistics): by transported good
- No classification reflects the production system => new classification developed



Rail freight transportation (5)

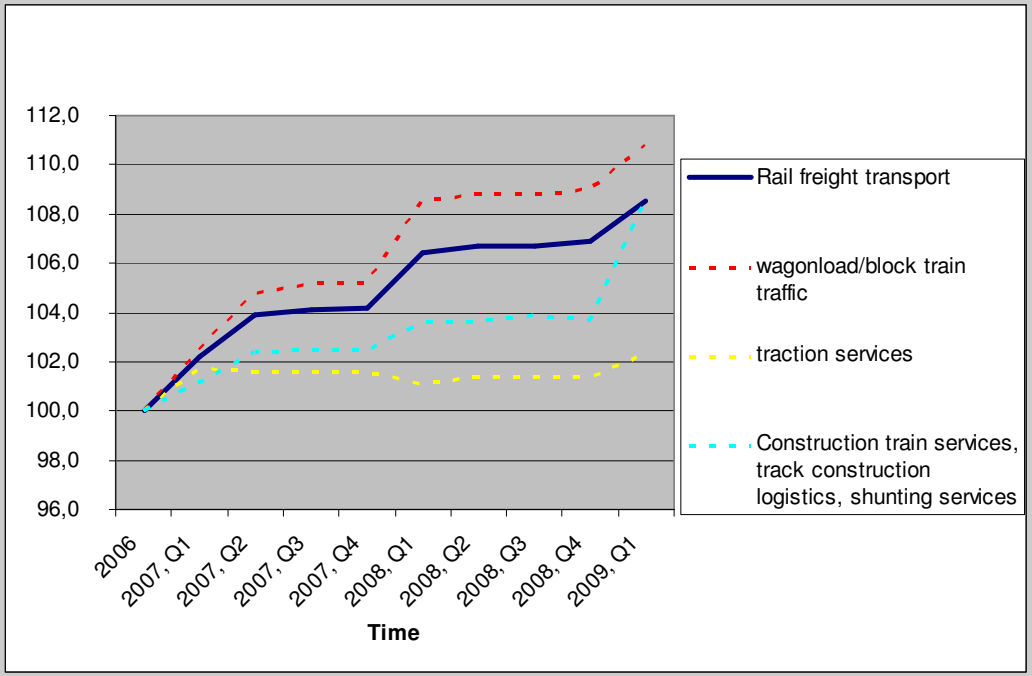
Pricing methods

- **Contract pricing** for main haulage contractor services and traction services => real transaction prices. Most important characteristics for main haulage contractor services:
  - Wagonload/block train traffic
  - Market segment (coal/iron/steel, automotive, chemistry,...)
  - Goods transported
  - Relation including starting and destination stations...
- **Pricing of repeated services** for construction train and shunting services
- **Unit value** for track construction logistics: €/tkm for ballast and sleepers

Rail freight transportation (6)

Results

- Very high response rate (up to 97% without reminder)
- 836 price quotations (387 for main haulage contractor services, 165 for traction, 284 for provision)
- 2006=100, first price collection: Feb 2007, first publication: 1st quarter 2008
- Steady increase in prices, especially in the 1st quarter



Rail freight transportation (7)

Quality adjustment, comparability with turnover measures

- Quality adjustment:
  - Changes in conditions
  - Framework contracts (esp. traction services) => „real model“ employed
  - Contracts expire => replacement with „similar“ contract => assessment of price difference

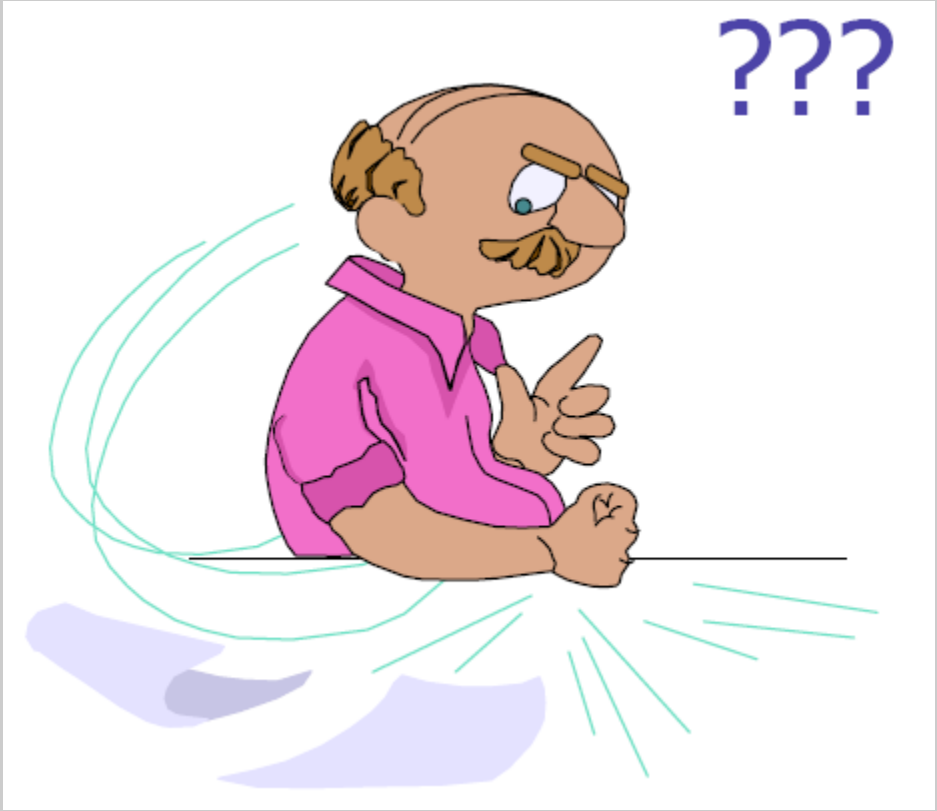
  => Close collaboration with railway companies necessary
- Comparability with turnover/output: So far, no turnover figure published for the sector. No perfect match because of sampling universe (turnover: business register; SPPI: list of licenses by FRA)

Conclusion and summary

- Rail transport = three different sub-markets with different legal background, markets, companies, and price determining characteristics
- Rail freight: just straight-forward application of SPPI methodology => introduced by FSO Germany in 2007/2008
- Long distance passenger rail service: expansion and alteration of existing CPI survey will do
- Short distance passenger rail service: problems with classification, turnover, public transport networks. SPPI significantly differs from CPI (high importance of governmental subsidies)

=> **SPPI for rail transport is not an easy task, but worth the effort. We love challenges – let‘s get it on!**

Questions ?!



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