

SPPI FOR FREIGHT TRANSPORT BY ROAD IN GERMANY

Bernhard Goldhammer

21st Voorburg Group Meeting in Wiesbaden

Definition of the Service

- Freight Transport By Road
 - All kinds of transporting cargo on the road
 - Including renting of trucks with driver, furniture removal and animal-drawn transports
- Decisive whether a company is asked is the **offering** of freight transport by road to the customer, not the conduction of the transport itself

Pricing Unit of Measure

Contracts, not transports

- Otherwise construction, distribution and short distance transports would be neglected where
 - “flat rates” are common
 - the carried out transports may vary from day to day, but the price stays the same (e.g. transportation for a supermarket)
- For longer distances, transports and contracts are identically specified.
- Repeated services are common (spot market about 10%)

Market Conditions

Size of Industry:

Sectors (NACE/WZ)	No. of companies	No. of employees	total turnover (1000 EUR)
60.24	34,038	275,207	23,380,576
63.40.1	8,851	203,422	35,993,122
Sum	42,889	478,629	59,373,698

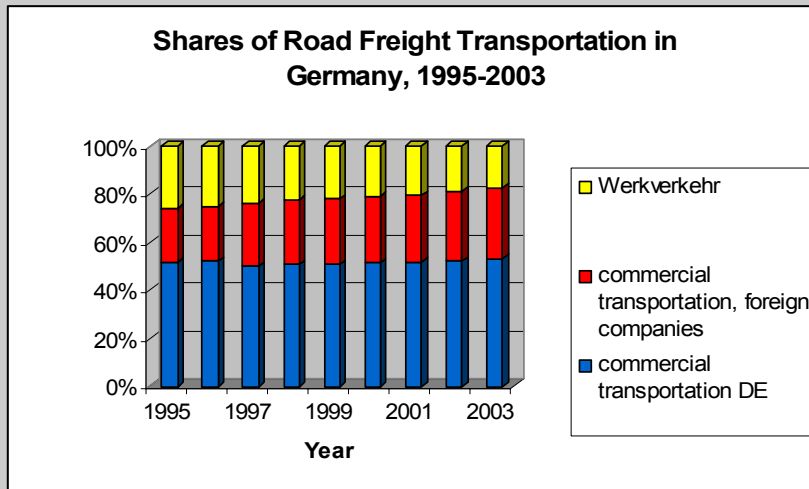
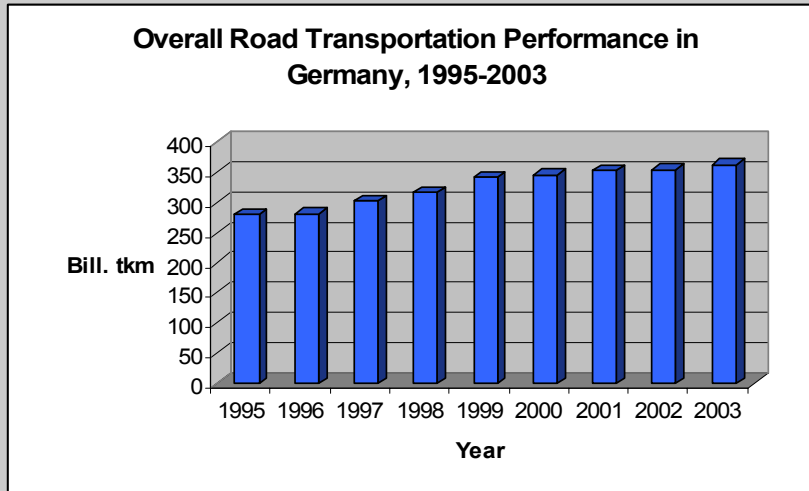
Source: FSO service statistics, 2003

60.24: Freight Transport By Road (especially smaller companies, pure hauliers)

63.40.1: Freight Forwarding (especially larger companies, diversifying in other parts of the logistics sector like sea and air freight, customs clearance, contract logistics)

Market Conditions

Size of Industry:

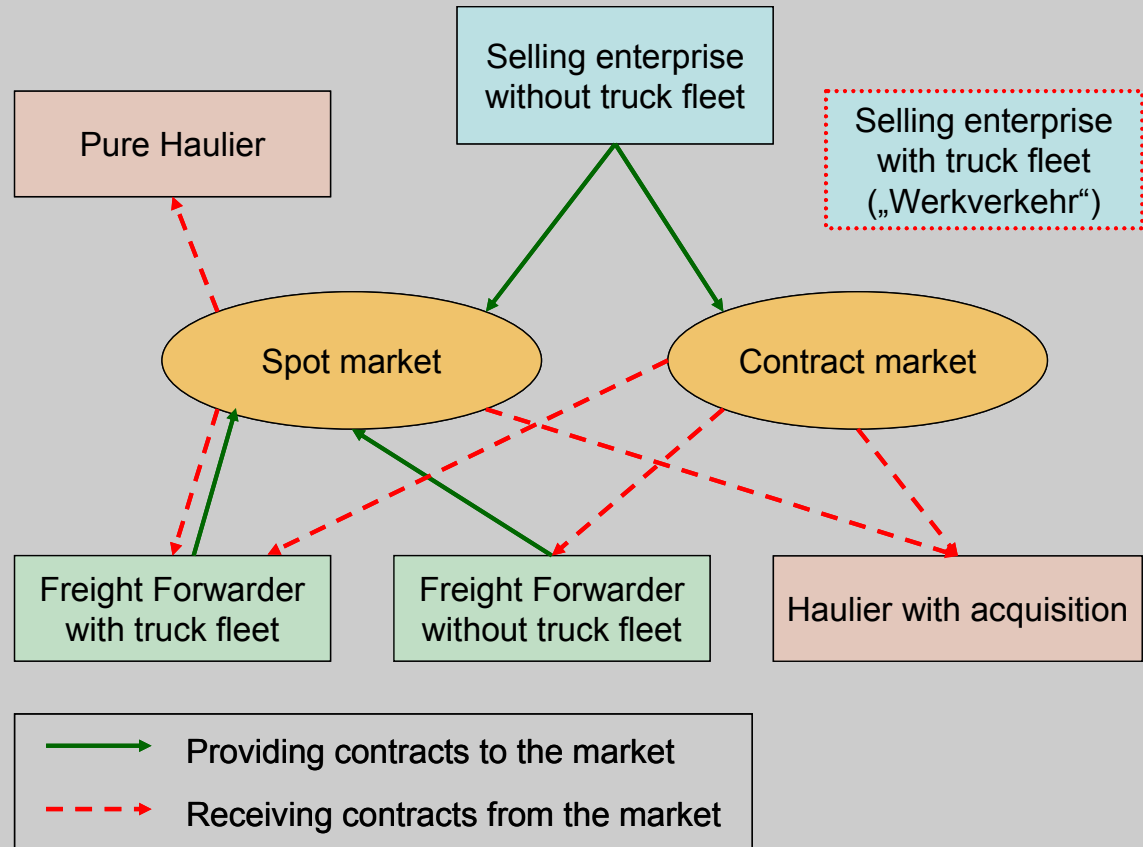


- Further growth predicted (until 2020: 64% for all modes on a 1997 basis)
- Strong competition from foreign hauliers, especially after the expansion of the EU in 2004
- Trend of outsourcing transportation activities => *Werkverkehr* becomes less important

Market Conditions and Constraints

Special conditions:

- Both hauliers and freight forwarders have to be considered => inclusion of NACE/Wz sectors 60.24 and 63.40.1
- Differentiation of spot market and contract market



Market Conditions and Constraints

Record keeping practices:

- Data collection
 - Weighting pattern: at corporate level, accounting department
 - Price collection: at operational level, marketing department

- Reduction of bureaucracy and respondent's burden: small sample, questions easy to answer, not too much details which need further calculations to be done by the respondents

Classification Structure

NACE – ISIC

- NACE 60.24 identical to ISIC 6023
- No deeper structure
- Revision of ISIC/NACE: change of numbers (ISIC 4923), but not of contents

CPA - CPC

- contains sub-structure with price determining characteristics
- However, no data about turnover distribution according to CPA – CPC available in Germany

Classification Structure

NST/R (1967): Standard Goods Classification for Transport Statistics

- Classification for purposes of transportation statistics
- According to categories of goods
- Not satisfying for classification purposes in terms of determining sub-segments

⇒ For developing SPPIs, a segmentation is necessary that brings out sub-segments which are **homogenous in their **pricing mechanisms** and **pricing levels**. This is not ensured by using the existing classification systems. A new classification has to be introduced.**

Evaluation Classification Structure

Classification for SPPI purposes:

- Two dimensions: distance and “transportation groups”:

Distance

- Short distance/distribution services (less than 50 km)
- Regional transportation (50-150 km)
- National long distance transportation (>150 km)
- International long distance transportation

Transportation Groups

- Transports of oil/oil products in tankers
- Special transports (e.g. dangerous goods, heavy load, living animals)
- Reefer cargo
- Container
- Vehicles
- Other transports with tankers
- Agriculture; loose bulk freight
- Steel products
- Wrapped and general cargo

National Accounts Concepts

- Until 2004 calculation based on freight rates by the BAG (Federal Office for Freight Transport) => not longer available, SPPI urgently needed
- German NA uses CPA 60.24 “FT” as most detailed position for price and volume measures
- EUROSTAT handbook on NA* defines a SPPI for Freight Transport By Road with the use of prices of repeated services as an A method.

* EUROSTAT, Handbook on Price and Volume Measures in National Accounts’, Edition 2001, page 107f

Pricing Methods

- 1. Contract Pricing
- 2. Model Pricing

Pricing Methods

1. Contract Pricing

- Price charged for an (almost) exactly repeated service by the same producer for the same client
- Long-term or framework contract between client and producer
- Normal case in the transportation industry

Pricing Methods

2. Model Pricing

- Only for a few sub-segments: very small companies with quite no repeated services, grouped cargo (payment conditions and customers remain constant, quantity and type of cargo varies), transportation of heavy loads which are unique
- Based on transports actually conducted; the price is then updated throughout the following periods
- regularly updating of the model transaction
- Challenge: to estimate the amount of negotiation and discounts
- Prices are not lagged

Pricing Methods

Spot market: not yet included

- None of the regular pricing methods seems to be capable to tackle the high-volatile spot market:
 - No repeated services at all (one-off-contracts)
 - Price completely subject to negotiation
 - Hauliers are happy with every price just to get a reload instead of an empty truck
- Idea for the future: create an index for the spot-market with the help of **internet-based cargo auctions** as it is already existing for sea water transport (indices of the Baltic Exchange, London)

Quality Adjustment

QA needed...

- when a contract ends or when the transport specification is modified
 - Employed QA method: match-model (substitution with a new, similar contract of the same enterprise if possible)
 - Linking of the two contracts with overlapping or imputation
- for seasonal transports (e.g. agricultural transportation)
 - Imputation necessary for missing months
 - Possible methods: adjusting with the development of the relevant elementary aggregate; expect the price to remain constant; Rothwell-Index

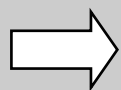
Comparing SPPI with Turnover/Output

Turnover

- FSO Service Statistics since 2000
- No differentiation according to market segments, only impression about the size of the market

Output

- Transportation statistics
- Data can be transformed to fit to the SPPI classification



Transportation statistics together with freight rates form the weighting pattern of the SPPI

Summary

- Collaboration with associations and companies major success factor
- New classification was necessary for SPPI production
- Transaction prices and model prices as preferred method for the contract market, spot market excluded so far
- Inclusion of freight forwarders necessary to get information about the whole market
- Quality adjustment task for the future; in such an early stage (first publication expected for 1st quarter 2007), quality is about getting the data from the companies in the right quality