VOORBURG 2003

PRODUCER PRICE INDICES

SESSION 3: Quality Adjustment and Fitness for Use

THE DEVELOPMENT OF A UK CORPORATE SERVICES PRICE INDEX FOR BUSINESS RAIL FARES

Nick Palmer

UK OFFICE FOR NATIONAL STATISTICS

<u>Outline of presentation</u>

1. **Introduction**
2. **Construction of CSPI for business rail fares**
3. **Quality adjustment considerations**

Introduction

- **Prices for passengers travelling on business**
  - **Part of overall CSPI project (business-to-business services for intermediate consumption)**

- **Same data source as for consumer price index**

- **Combination of survey and administrative data to construct CSPI**

- **Number of quality adjustment possibilities**

Construction of the price index (1)

Strategic Rail Authority (SRA):

- Regulatory body

- Data collection from all train operating companies, since 1995

- Statistics on rail usage, performance, fares, rail freight etc.

Construction of the price index (2)

SRA's rail fares index:

- **Data from automated ticket sales system, representing over 90% of all transactions**

- **Price relatives for ticket type**

- **"Basket" of tickets/journeys fixed for one year at a time and index annually chain-linked**

- **Annual indices from 1995 onwards**

Construction of the price index (3)

SRA's rail fares indices published:

- **Annual figures, every January**

- **By class of travel (first/standard)**

- **and type of operator**

Construction of the price index (4)

Use of SRA's rail fares indices:

– **Standard class: consumer price index**

– **Weighted combination of first and standard class indices for CSPI ?**

– **First class = inappropriate proxy for CSPI**

Construction of the price index (5)

National Passenger Survey results (2001-02):

- **Journeys by type of ticket, and**

- **purpose of journey**

- **13% of all journeys were on business**

  - **(and 58% of first class journeys)**

Construction of the price index (6)

**NPS data combined with revenue data collected by SRA**

- **Revenue data available by ticket type (same types as for NPS results)**
- **Applied business travel proportions to revenue figures to estimate revenue from business travel in each class**

Construction of the price index (7)

Estimated weights for each class:

	% of journeys on business	Total revenue in 2000 (£m)	Estimated revenue from business travellers (£m)	As % of total
Total	13%	3,459.2	496.7	100.0%
1st class		266.5	135.2	27.2%
Standard		3,192.7	361.4	72.8%

Construction of the price index (8)

Rail fares indices
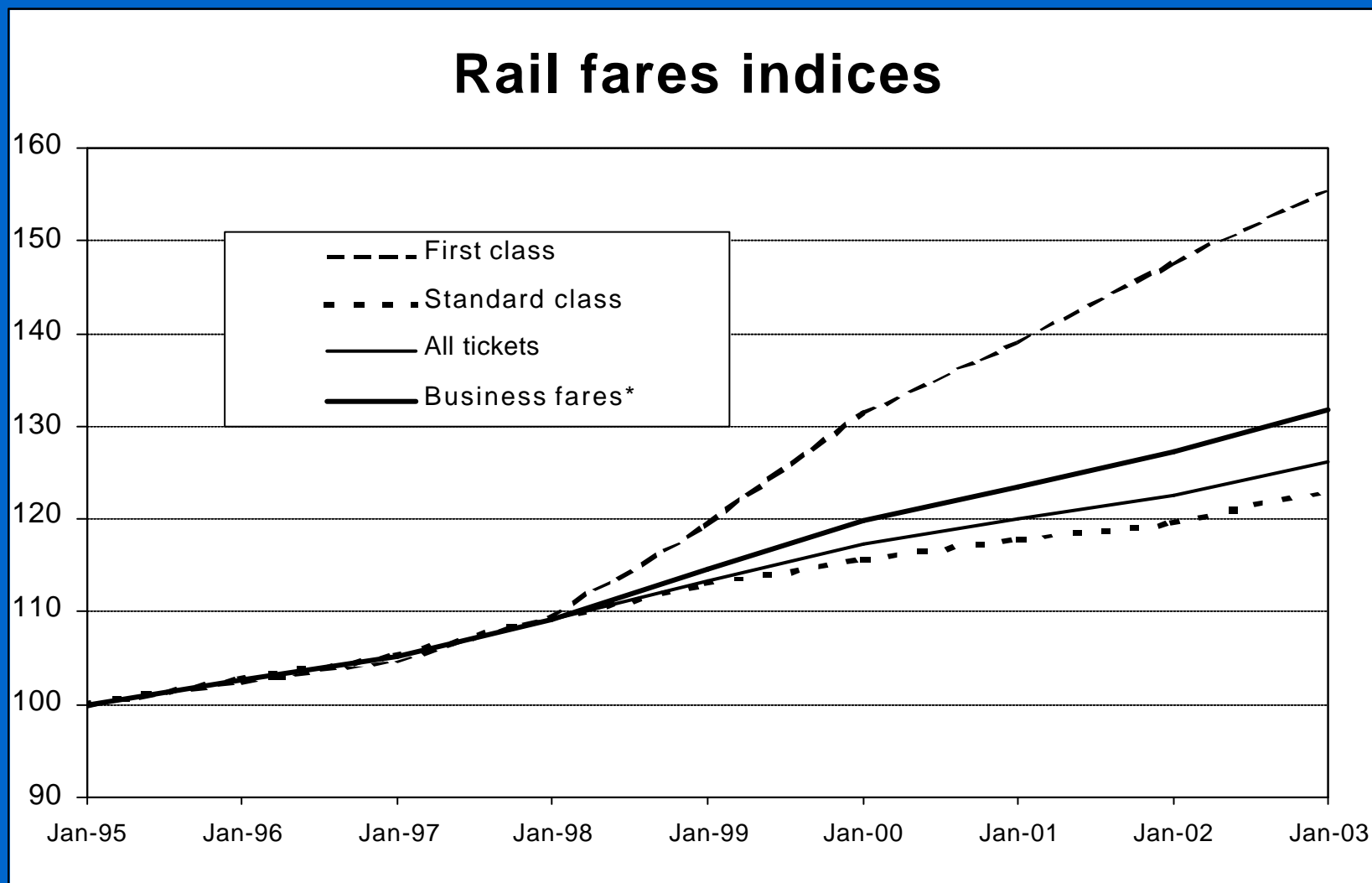
Comments on CSPI

- **Excellent coverage**

- **Business element estimated**

    – **No account of length of journeys**

- **Within year movements**

<u>Quality Adjustment (1)</u>

Two main types ?

– **Changes in the number and range of on-board facilities and services**

– **Changes in performance/punctuality**

Changes in the ticket types available – already accounted for

Quality Adjustment (2)

Difficulties:

- **some aspects of quality not unknown at purchase**

- **differing consumer expectations ?**

- **Post-consumption assessment of quality needed ?**

Quality Adjustment (3)

Possibilities:

- **Adjust for delays and cancellations by valuing time lost ?**
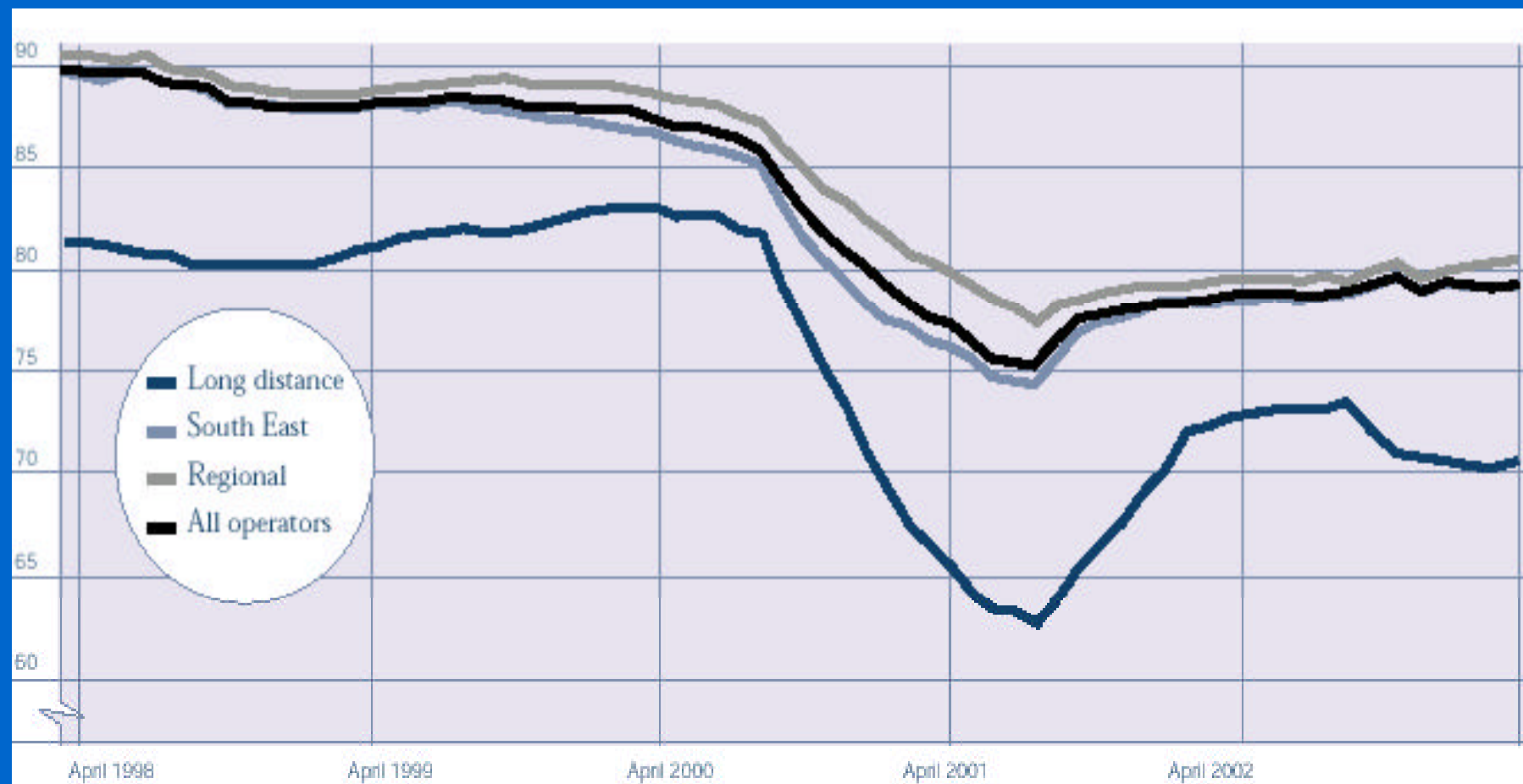
- **Combine train performance data with prices somehow**

<u>Quality Adjustment (4)</u>

Potential data sources:

- **SRA's automated train monitoring system**

  – **"Public performance measure"**

- **National Passenger Survey:**

  – **surveys passenger satisfaction**

Quality Adjustment (5)

- **SRA's public performance measure:**

Quality Adjustment (6)

NPS: top 10 factors affecting passengers' satisfaction:

1. **Punctuality/reliability**
2. **Handling of delays**
3. **Length of scheduled journey time**
4. **How station staff deal with requests for help or information**
5. **Ease of getting on and off the train**

Quality Adjustment (7)

Aspects of quality assessable at point of purchase?

- **journey time improvements**
- **entitlement to complimentary drinks:**
- **comfort improvements**
- **provision of extra facilities e.g lap-top docking points**

Satisfaction survey results = proxy for above effects ?

Quality Adjustment (8)

Further considerations:

- **comparisons with goods and other services**

- **approach for consumer price index**

- **different treatment for business travellers ?**