



Cross-cutting topics – Part 1

Distributive Trades – Issues Paper

Alain Gallais - INSEE, France

Mary Beth Garneau – Statistics Canada

Sven Kaumanns – Eurostat

Bonnie Murphy - United States Bureau of
Labor Statistics



Classification Issues

Issue	Description of Issue	Suggested Best Practices / Examples of Solutions Employed
1. Wholesale and Retail Sales of Automotive vehicles, parts and accessories	Combining wholesale and retail of motor vehicles together in one industry is problematic in that it will create duplication in the estimates of turnover.	<ul style="list-style-type: none">○ Future versions of ISIC should consider separating the wholesale and retail sales of motor vehicles and parts.
2. Classification of boundary between automotive maintenance and repair and sales of motor vehicles	The repair and maintenance of motor vehicles can be an extremely important secondary activity of wholesalers and retailers of motor vehicles.	<ul style="list-style-type: none">○ NSOs are advised to develop Implementation rules to prevent flip-flopping between sales of motor vehicles and maintenance and repair of motor vehicles.



Classification Issues

Issue	Description of Issue	Suggested Best Practices / Examples of Solutions Employed
3. Classification of Manufacturers' sales branches (MSBs) and Manufacturers' sales offices (MSOs)	MSBs and MSOs sometimes show up as ancillary units supporting manufacturing or may be blended with the overhead function of the head office. The book keeping practices of individual enterprises can make it challenging to collect establishment level data from these entities. This can be problematic for regional statistics.	<ul style="list-style-type: none">○ United States and Japan produce separate estimates for this area of wholesale trade.○ United States excludes these units from its monthly turnover indicator.○ In Europe where trade statistics are measured at the enterprise level, MSBs/MSOs are not covered by trade statistics.



Classification Issues

Issue	Description of Issue	Suggested Best Practices / Examples of Solutions Employed
4. Classification of Factoryless goods producers (FGPs)	The ISIC rev.4 treatment of FGPs only takes into account the ownership of the material inputs to production and does not allow for the return on intellectual property and the entrepreneurial assumption of risk for the production of goods. Can this definition be easily implemented and will it lead to instability in the industrial coding of firms?	<ul style="list-style-type: none">○ This issue that should be reviewed in the next revision of ISIC. By then, National Statistics Offices (NSOs) will have experience in the application of this concept and will know whether a narrow focus on ownership of the material inputs can be implemented.



Classification Issues

5. Bundling of goods and services

How should NSOs handle bundled goods and services in industry classification?

For example, a cell phone sold below cost and used as an incentive to attract a customer to commit to a long-term service contract for the phone or data plan. In an establishment-based survey, the negative margins will likely appear in the retail trade establishment while the inflated operating profits would appear in the telecommunications industry.



Classification Issues

6. Method of sale

The products of distributive trades should take into account the various methods of sales. Such methods relate to ownership of the good (as noted above in distinguishing margins and commissions) or in how the buyers and sellers interact (mail-order, Internet, direct sales, in-store purchases, etc.).

Is there a need to divide trade agents from merchants in the industrial classification of retail trade?

Is the distinction between specialized and non-specialized stores appropriate in a product classification?



Turnover Issues

7. Turnover vs. gross sales vs. operating revenue

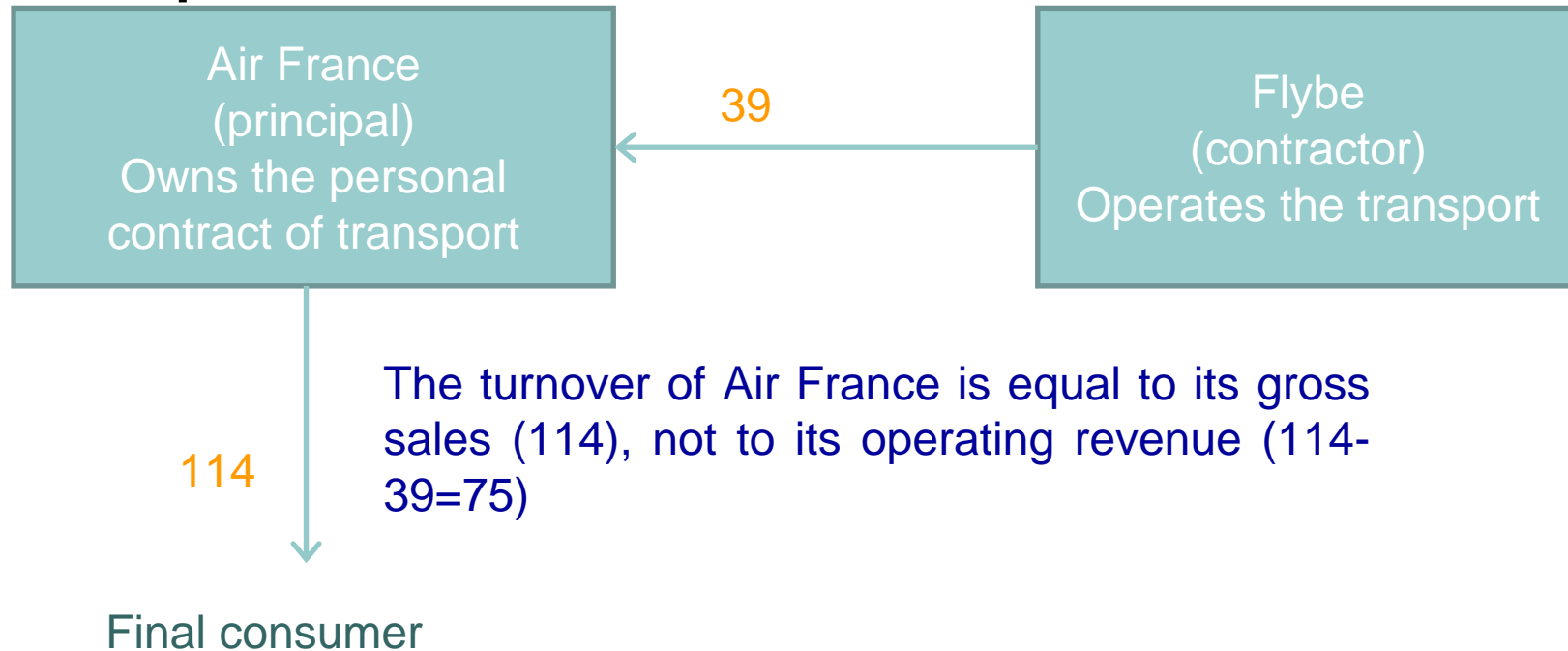
Should turnover include the gross sales from departments, concessions and amusement and vending machines operated by others?

Recommendation:

Given that turnover is meant to be internationally comparable, the turnover concept for distributive trades should be considered to include the commissions or fees received by agents rather than the gross sales of the goods and services sold on behalf of third parties.

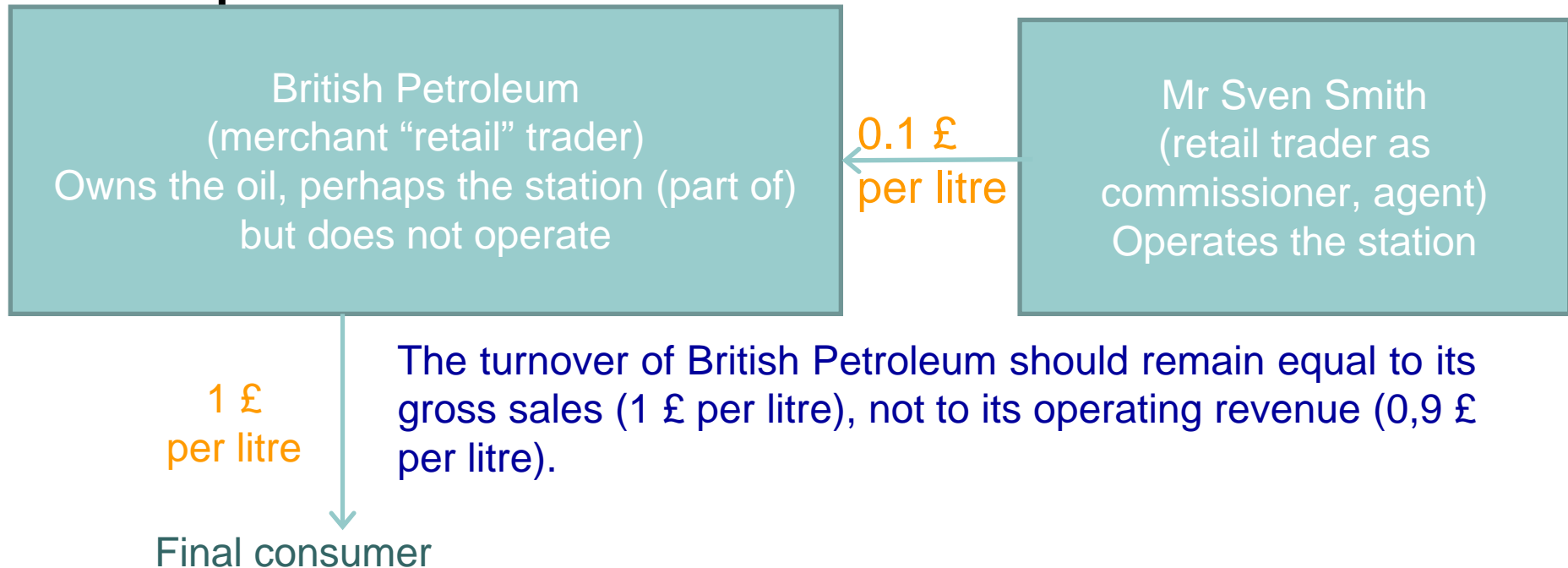
As a **consequence**: Retail turnover may not be a good estimator of consumer expenditures when measured at an enterprise level as in Europe.

“Operated by others” in outsourcing of air transport services



- UNSD rules of outsourcing, in case of services: both principal (owner of the contract of transport) and contractor (operator of the transport) are classified in the activity air transport and provide the same product: passenger air transport.

“Operated by others” in outsourcing or contracting between merchant trader and commissioner



- In such a scheme, “provides a service on goods owned by others” means the “contractor”, and “sells goods with vending machines operated by others” means the principal. The principal sells the good and produces a trade margin. The agent produces a commission, sold to the merchant.



Turnover Issues

7a. Trade agents' non-monetary benefits

How should non-monetary benefits as part of a trade agents' compensation be treated?

Beside monetary per item or per value compensations some contracts between a principal and a trade agent allow for in kind benefits instead of money (eg. free shop fittings or forecourt equipment) leading to reduced monetary compensation. Does this have to be reflected by turnover statistics? If yes, how?



Price Index Issues

Issue	Description of Issue	Suggested Best Practices / Examples of Solutions Employed
8. Availability of data on replacement cost	The cost of replacing a good in inventory should be used in margin calculations. Recordkeeping practices dictate the cost data that can be collected.	<ul style="list-style-type: none">Collect replacement cost when available, collect LIFO price as fallback (U.S.)Product's purchase prices collected (Australia)Collect cost to the retailer to purchase a product from a supplier (Canada)
9. The level of product aggregation for collected margin prices	Should the level at which profits are maximized or the need for deflators at the commodity level dictate whether to collect margins at the product or location level?	<ul style="list-style-type: none">Collect average margins at the product level (Canada)Collect average margins at the product line level (U.S.)



Price Index Issues

Issue	Description of Issue	Suggested Best Practices / Examples of Solutions Employed
10. Negative or zero margin prices	Negative and zero prices have no economic meaning in an output price index.	<ul style="list-style-type: none">○ Negative or zero margin prices are not given a chance of selection at initiation○ Loss leaders should not be included in average margin prices.
11. Seasonal items	How should seasonal items that are typically introduced at high prices at the start of the season and then prices are reduced periodically throughout their season be priced?	<ul style="list-style-type: none">○ Only price seasonal items in the months they are in season (Canada and U.S.)○ Substitutes for seasonal items no longer sold should be comparable (direct substitution with no quality adjustment) and should be introduced at the start of the next season at the introductory high price.
12. Base price	Setting the base price at an artificially low level causes the long-term price relative to incorrectly reflect price trend when non-sale prices resume.	<ul style="list-style-type: none">○ Avoid using a sale price as the base price when establishing a new series, rebasing an item that had been delinquent, or taking a non-comparable substitution. A non-sale price should be established as the base price.



Price Index Issues

13. Should quality adjustments be made on changes in the goods traded?

Should quality adjustments be based only on changes in the distributive trade service provided, not the products that are being measured?

Traders play an essential role in the distribution of goods in the economy and the trade margin is seen as the price that the buyer pays for the service.

- The U.S. and Canadian SPPIs focus on quality changes to the service being provided.


Or should quality changes of the goods being sold be taken into account?

- The method that Australia uses to measure margin indices takes into account change in quality of the good sold as their product prices are indexed to the CPI.

● ● ● Additivity (good + services) is not independence

- SNA 2008:
 - “Each acquisition of a product from a wholesaler or retailer is regarded as being the acquisition of two distinct products. One is the physical good, valued at producers’ prices, the other is the trade margin. The purchase of the good is shown as a use of that good; the margin is shown as a use of services provided by wholesalers and retailers.”
- Eurostat handbook on volume and prices (2001):
 - “The trade margin can be seen as the price the buyer pays for the trade service although there is no direct transaction” and “They supply services rather than goods (although consumers may have a different perception of this)”
- mean only the convention in SUT, but we could say also:
 - Trade Margins = sales at purchasers’ prices – purchases at vendors’ prices

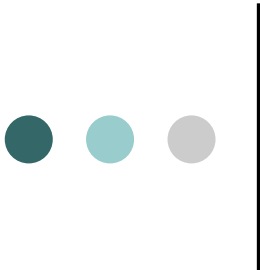
Should be adjusted on quality of goods on both parts



Eurostat handbook on volume and prices advises “double deflation”

- “The A method for margin output is a method taking the changes in quality of the trade services into account. So far, the only method that can do so - in theory - is by taking the difference between deflated sales and deflated purchases.”
- The handbook includes also quality of products in the quality of trade services...

	Purchases of goods for resale	Retail trade margin	Sales of goods for resale
Value T	214	47 (18%)	261
<i>Price index</i>	<i>101.9</i>	<i>105.4</i>	<i>102.5</i>
Volume T (prices T-1)	210	44.6 (17.5%)	254.6
<i>Volume index</i>	<i>105.0</i>	<i>111.5</i>	<i>106.1</i>
Value T-1	200	40 (16.7%)	240



The distributive trade is more seen as multiplicative by traders and purchasers

- Except price level and quality of products, all other components of “quality of trade services” can be seen as purely additive to the goods sold:
 - the range of products on sale (can one buy everything one needs in one shop or does one have to go to several shops)
 - the accessibility of the shop (availability of parking space, distance from home, opening hours, etc.)
 - general service level of the staff (friendliness, knowledge of the products, guarantees, waiting times at check-out, etc.).
- But the fact is the customer pays this service only when he purchases some merchandise (“free entrance”), and ~ proportionally to the volume of goods purchased!
- Also, most store departments aim a rate of (net) trade margin, not a level of trade margin “per unit”.
- Hence, trade margin is “multiplicative” with goods sold, in both trade price policy and customer willingness to pay.

A practical example, for merchant retailers and commissioners

- Imagine an ICT product with rapid quality change of 10% a year (for instance LCD 42”), compensated by an equivalent price decrease, so that unit price is constant, and the trader keeps also constant his trade margin (20%):

	Unadjusted on quality of goods		Adjusted on quality of goods	
	Purchases of goods for resale		Retail trade margin	Sales of goods for resale
Value T	300		60	360
<i>Price Index</i>		90,9		90,9
Volume T (prices T-1)	330		60 or 66?	396
<i>Volume Index</i>		110		110
Value T-1	300		60	360

- If the trader is a commissioner with a flat rate, his price index (rate x base) would have naturally “benefited” from the quality adjustment on goods...



Price Index Issues

Issue	Description of Issue	Suggested Best Practices / Examples of Solutions Employed
14. Quality adjustment of service	Quality adjustments are appropriately made based on changes in the distributive trade service provided and values for changes in these services are difficult to obtain	<ul style="list-style-type: none">○ Product prices are indexes to the CPI (Australia)○ Collect store location characteristics and develop hedonic model (used for 1 industry in the U.S.)
15. Response issues	Response is an issue due to respondent burden and late or delayed response caused by recordkeeping practices for average margins	<ul style="list-style-type: none">○ Price quarterly (Australia and Canada)



Price Index Issues

- How should fees and commissions be covered by the price index?
 - Where agents and brokers comprise an industry
 - Where fees and commissions are included in turnover estimates (mixed with resale of goods of own account)



Hedonic models in retail trade

Presentation by Bonnie Murphy
US Bureau of Labor Statistics