



Current challenges and issues faced by the Voorburg Group in the area of Services Producer Price Indexes

Author: André Loranger

Presenter: Marc Prud'Homme

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What is the Voorburg Group?

- The Voorburg Group was founded in 1987 at the initiative of Ivan P. Fellegi and a few of his colleagues from other statistical agencies.
- The name of the Group was derived from the location of the first meeting.

What is the Voorburg Group?

- About 20 or so members.
- The VG meets once a year.
- There have been 26 meetings so far from 1987 to 2011.

Objectives

- To establish internationally comparable methods for the proper measurement of the service sector of the economy in current and constant prices.
- To develop, maintain, and adjust concepts, methods and best practices in the areas of classification, output measures and price indices?
- To transfer knowledge on concepts, methods and best practices in the areas of classification, output measures and price indices.

Background

- As stated by David Dodge (2003)
 - *“Better price and output measures for services would improve our ability to assess overall economic conditions by providing better information on current trends in aggregate output and prices. They would also help us identify other emerging trends or structural changes in the economy.”*

Examples of work

- Example work:
 - accounting services
 - telecommunication services
 - legal services
 - real estate
 - advertising services
 - road freight transport
 - engineering services
 - pre-packaged software



STRATEGIC VISION OF THE VOORBURG GROUP ON SERVICES STATISTICS

- The VG is primarily concerned with “practical” considerations and “implementation” challenges as they relate to service price statistics .
- In contrast, the Ottawa Group (OG), which is also involved with price indices focuses mainly on the conceptual and methodological issues of consumer price indices.
- There is some potential for closer ties between both groups with the aim of defining “best practices” in the area of quality adjustment where commonalities exist.



STRATEGIC VISION OF THE VOORBURG GROUP ON SERVICES STATISTICS

- The VG is focussing more and more on outstanding questions regarding the treatment of quality change for services producer price indexes (SPPIs).
- At the heart of the debate are questions pertaining to the appropriate conceptual and theoretical basis on which to base quality adjustments.

The debate

- Should consumer utility be considered when quality adjusting Services Producer Price Indexes (SPPI)?
- Most VG members are of the view that they should not.
- Quality adjustment for SPPIs should be based on changes in the characteristics affecting productivity or the production function.

Two camps (from Triplett, 1979)

- Two camps for QA (**Is this discussed in the PPI manual?**):
 1. Based on the “**user-value**” criterion: Looks at the output implications of quality change in some productive input; a machine is of higher quality if it has higher productivity when used in producing something else.
 2. Based on the “**production-cost**” criterion: The cost of making a machine is the proper basis for making quality adjustments.



Simple example of the issue

- The case of a transport truck
- Manufacturer introduces air conditioning when it was not available the previous year or some other feature which does not affect the truck's capacity to transport more merchandise.
- How should this quality improvement be treated?
- If the truck's capacity to transport merchandise changes then a QA is required.



At recent VG meetings

- VG discussions have recently centered on:
 - Advertising services
 - Air Transportation
 - Distributive trades

Questions about quality change

- When is quality adjustment appropriate?
- When does quality change take place?
- Is audience size a measure of quality for advertising?
- What quality adjustment strategy is available for air transport?
- How best to treat quality for distributive trades.

Importance of QA

- Producer Price Indexes (PPIs) are typically divided into two categories:
 - PPIs used as deflators of inputs
 - PPIs used as deflators of outputs (most common)
- In the absence of appropriate input PPIs, then output PPIs are used as deflators.

Advertising services: The issue

- How to treat quality change for advertising services?
- The question of whether or not the number of viewers of an advertisement was the appropriate metric for quality adjusting advertising services.
- Possible pricing strategies for an advertisement:
 - Based on work invested
 - Based on expected viewer size
 - Based on achieved audience size

Advertising services: The issue

- One view is that viewer size is “always” the basis for QA.
- Higher viewership is always better for the entity consuming the service, i.e., the sponsor. (is it the sponsor who is consuming the service?)
- The Handbook on Price and Volume Measures states in the case of ads in newspapers: “It is however important to take into account changes in the number of people that see the advertisement. An ad in a national newspaper is a higher quality product than an ad in a local newspaper.”
- More viewers are better than less.

Table 1: Expected viewer size example

	Price £	Quantity	Turnover	Expected Audience	Achieved Audience	Price per <i>expected viewer</i>	Price index	Output (constant prices)
Q 1	1000	10	10,000	1 million	1 million	0.001	100	100
Q 2	1500	10	15,000	1 million	1.5 million	0.0015	150	100

Table 2: Achieved viewer size example

	Price £	Quantity	Turnover	Expected Audience	Achieved Audience	Price per <i>achieved viewer</i>	Price index	Output (constant prices)
Q1	1000	10	10,000	1 million	1 million	0.001	100	100
Q2	1500	10	15,000	1 million	1.5 million	0.001	100	150

Air transport services: The issue

- Area of contention within the group: Are input costs (the production function) the appropriate basis for making adjustments for quality change OR should quality adjustments be based on the utility to the consumer.
- A recent paper at the last VG meeting discusses the issues pertaining to Quality change for this industry.
- From the production view, ticket conditions vary from period-to-period: e.g., restriction to baggage weight, meals included or not, and flexible ticket options.

Air transport services: Example 1

1. A new 10% baggage levy is charged by the airline where the fee was previously included in the price.
 - According to the user-value model, the levy would result in an increase of 10% in the price index.
 - According to the resource-cost approach, there is no change in the quantity of resources for producing the service then the output-price index will remain unchanged.

Air transport services: Example 2

2. Smaller, less roomier seats are now installed on the aircraft.
 - If producing a CPI, then a QA is required
 - If an output price index and the cost of producing the service has not changed, then for an SPPI no QA is required.

Distributive trades

- The heart of the debate is the definition of the price concept used for measuring distributive trades.
 - Traditional view for an output price index is the “margin price”
- The view of most at the VG is that quality changes related to the goods being retailed or wholesaled should not be considered when pricing the service.
- Opposing view is that the value of the service implicitly includes the value of the good so that quality change for the margin must also be related to the good being sold.



Comments