Thesaurus of Producer Price Indices for Services (SPPI's)

VOORBURG GROUP 2006 Component pricing: a pricing method that divides the service into a number of key output components of which one or more are then priced separately. The data type in the survey for this pricing method concerns existing company data (real transaction prices, revenue and amount sold, list prices, etc.). The statistician enters all the prices on a worksheet or bill, resulting in an aggregate price. This price is not (necessarily) an estimation of a transaction price as it can be the price of components which are never transacted separately.

Component pricing uses only 'hard' company data and differs thereby from <u>model pricing</u> for which at least some subjective estimation is made.

This method's best-known use is in telephony SPPI's, were it is sometimes known by a synonym, <u>bill method</u>, a term which should not to be used to avoid confusion.

Contract pricing: a pricing method which uses real transaction prices of a special kind as the data type in the survey. They are special because the prices are charged for the same (or very similar) service that is repeated each survey period by the same producer for the same client. 'Contract' in the name refers to the long-term and/or framework contracts that are established between client and producer. This pricing method may work if the pricing mechanism entails these contracts, for instance in cleaning, security services and freight transport. This pricing method can be regarded as a special case of the direct use of prices of repeated services.

Direct use of prices of repeated services: a straightforward pricing method which surveys a real transaction price or a list price, thereby acquiring directly the price of a service that occurs every survey period (a real transaction). This coincides with the PPI Manual's transaction pricing and is standard PPI and CPI practice. It is the preferred and easiest method because there is no difference between the surveyed prices and the price entering standard PPI compilation procedures, no assumptions or calculations are necessary.

ctitious service can be set as the re-pricable product for a group of respondents. Iternatively, the specifications of the standardised product can be based on an actual ervice provided in the past. Synonyms for this second type found in the literature, hich should not be used to avoid confusion, are: estimated net transaction price or illed method. n model pricing an expert of the respondent enterprise estimates a realistic transaction rice. The expert might consider real transaction prices, revenue and amount sold, list rices, input prices as data type in the survey for calculating this price, (each of which ay reflect prices for time worked). The resulting total price for the standardised roduct is always fully fictitious. Alternatively, the expert can use his subjective dgement based on the overall market situation, for instance by keeping recent bids in aind, resulting in a pure expert estimate. he model pricing method is used for unique services, notably the professional busines

Iodel pricing: a pricing method in which a price is estimated for a standardised

roduct, a model transaction, which is not transacted in the comparison period. A singl

Iodel pricing differs from component pricing in always involving estimation.

nd is replaced by a new standardised product.

ervices for which hourly charge-out rates are also used often. It is often a challenge to

take an adequate quality adjustment when the standardised product becomes outdated

Percentage fees: a pricing method that estimates a price by multiplying a percentage and the value of the good that the service and the percentage fee are tied to. This is only possible if the pricing mechanism uses these figures. For example, the price for a service related to a specific piece of real estate uses the price of this real estate and a percentage fee. Other examples include placing advertisements, architecture and rental.

For operational or practical reasons separate measurement of the change of the percentage fees and the price of the good are often necessary.

Each <u>data type in the survey</u> (the percentage and the price of the good) can be surveyed from a different source. Strictly speaking, the percentage can be taken from a list or be estimated by an expert or calculated as an average. Often, the price (index) of the good is already available within the statistical institute, like the price index for house prices or goods rented (e.g. office equipment).

A synonym, not to be used to avoid confusion is <u>ad valorem price</u>.

Pricing based on working time: a <u>pricing method</u> which surveys the money amount charged to a buyer of a service, for a standard amount (e.g. one hour) of work by an employee of the producer, contributing to the production (provision) of that service. It is only used in the professional business services were the <u>pricing mechanism</u> is such that the price of a service is largely based on the number and charge-out rates of the hours needed to produce the service (not to be mistaken for the employee's wage). The <u>data type in the survey</u> can differ highly:

- 1. <u>unit values</u> type information of <u>revenue</u> divided by number of hours worked (also known as <u>realised hourly rates</u> and <u>fee income per grade of worker</u>),
- 2. <u>list prices</u> (also known as <u>standard hourly rates</u>),
- 3. <u>input prices</u> in the form of wages increased by a factor or sum, or
- 4. <u>expert estimate.</u>

Pricing based on working time usually results in an <u>hourly charge-out rate</u>, but prices for working time can also be entered into a <u>model transaction</u>. If the price of a <u>model transaction</u> is highly determined by hourly rates, the OECD/Eurostat SPPI Guide recommends that the <u>pricing method</u> is classified as pricing based on working time, to make clear to users that the resulting SPPI has potentially a 'productivity bias', i.e. there is no correction for changing productivity during the working time.

Unit values: a pricing method that uses revenue and amount sold as data type in the survey. The quotient of these two results in an average price over a large number of transactions, which may be regarded as an output component or a real transaction but it is usually an average price over a whole group of transactions. For example in telephony, the 'local calling price' is the total revenue from local phone calls divided by the total number of local phone calls. If heterogeneous products are added up, a bias can occur.

Besides for a <u>pricing method</u>, the term 'unit value' is often used for the <u>data type in the survey</u>, (for which <u>revenue and amount sold</u> is proposed here) and for the resulting price. The term is often used for any 'average price' over multiple transactions and/or a survey period, being preferred over the alternative, a single price observation. Note that other literature like the PPI Manual uses the term slightly differently, although not in contradictory ways. Note also the term unit price.

Expert estimate: a <u>data type in the survey</u> which bases a price on the potentially subjective judgement of the expert in the responding company who fills in the survey form. The estimate can reflect different types of units, for instance only components of an entire service or prices per working time and per product. If an SPPI uses expert estimates, it effectively transfers the responsibility and burden of pricing to the expert. The pricing statistician therefore has less control over how the price that enters SPPI calculation is established.

Input prices: a data type in the survey which corresponds to the prices of all (or a number of) input components needed to make a set amount of output. The profit margin is always to be included as an important input component. The pricing mechanism is sometimes such that an enterprise applies a set factor to calculate an output price from an input price. This practice is best known from the pricing method pricing based on working time which multiplies an hourly wage with a factor (see also mark-up) to arrive at an hourly chargeout rate. The other pricing method using this data type in the survey is model pricing.

Strictly speaking, the input prices can be taken from a list or be estimated by an expert or calculated as an average from real transactions, but an input price is set apart as it is not an output price, unlike every standard data type in the survey.

List price: a data type in the survey in which the price of a product is quoted from the producer's price list, catalogue, Internet site, etc. It is generally the gross price exclusive of all discounts, surcharges, rebates, etc. that may apply to an actual transaction. A list price is therefore inferior to a real transaction price or shipment price for SPPI compilation, although from case to case the assumption of correspondence with a real transaction price can differ from reasonable to poor. List prices for fixed amounts of working time are known as standard hourly rates. Another synonym which should not

be used to avoid confusion is book price.

Percentage fees and related value: a data type in the survey, only used in the pricing method percentage fees. Strictly speaking, the percentage can be taken from a list or be estimated by an expert or calculated as an average from real transactions, but a percentage is set apart as it is not a price, unlike every other data type in the survey. The 'related value' (see percentage fees) is an unusual data type as well and refers to an underlying good or other product to which the service relates.

Real transaction price: a <u>data type in the survey</u> in which the price was truly paid in the market, taken form a receipt, bank statement or electronic database with transactions.

Revenue and amount sold: a <u>data type in the survey</u> in which the quotient of the two variables (<u>revenue</u> and <u>amount sold</u>) results in a price, which can be used in almost any <u>pricing method</u>. In calculating this price, the equation Value(v) = Price(p) * Quantity(q) is re-written at the micro level into p=v/q.