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Producer price index for services

The French SPPI on business and management consultancy

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I) Industry Output

"Business and management consultancy" branch is made up of two very different sub-branches: management consulting services, on the one hand, and public relations services on the other. In France, the weight of these two sub-branches is approximately 90% (management consulting services) and 10% (public relations services), respectively.

Management consulting services is made of a wide range of activities: business strategy studies and advice, financial consulting, auditing of marketing functions and proposal for improvement, auditing and proposals related to the organisation of the staff, studies to improve productivity for example. Due to the increasing overlap between management consulting and IT, one of the main difficulties is drawing a clear distinction between management consulting and IT. This problem is found mainly in large companies, which often refer to "management consulting in the broad sense", including IT consulting.

Public relations services provide support for a company in its relations with different public. This may involve promoting the company's products, promoting the company itself (internally or externally) or its brand mark, promotional work with the company's clients. In order to fulfil its mission, a public relations consulting agency must handle relations with a all set of partners and networks: the press, in particular the financial press, unions, public authorities, networks that shape opinion in general.

In CPC, the group 831 includes "management consulting services" (class 8311) and "business consulting services" (class 8312: public relations services and other business consulting services).

Within management consulting services, it is possible to identify the following sub-classes:

- strategy consulting (general management consulting services)
- financial management consulting services
- human resource management consulting services
- marketing management consulting services
- human resource management consulting services
- production management consulting services
- other management consulting services

Some companies are specialised in "resources coordination and management services" for the preparation, implementation or completion of a project on behalf of a client (cost control, forecasting of expenditure, quality control, for example). We classified this kind of activity in "other management consulting services".

In management consulting services, **the definition of the output** is not an easy task. What is the output of a strategy-consulting project? What is the output of an audit of internal political of human resources in a given firm? The situation is not the same in industry as computer services, engineering or architectural

activities. In these industries, the output is more "visible". Linked the difficulty of well defined the output, it will be difficult to define the value of the product and of course to set the price.

II) Index methodology

a. Pricing mechanism

The fixed price method is fairly classical for labour based services activities. **The fixed price** predominates in this industry. In order to calculate the price of a service, the consultant company uses a cost analysis for each category of staff, e.g. multiplied unit cost by the estimated time spent on the project. This gives us the cost of the project to which the consultancy company applies a target profit margin. The price finally proposed to the client will be negotiated, which roughly amounts to negotiating the consulting company's profit margin. Some companies may charge a risk coefficient to take into account the uncertain nature of the time-spent estimates. Finally, a large number of companies use catalogue-type prices according to qualifications in order to set their fixed prices.

Invoicing on a time-spent basis is clearly the minority. This may relate in some cases to the provision of staff, at the client company's premises. Clients are increasingly asking for fixed price invoicing. Fixed price invoicing provides greater security to the client than invoicing on time-spent basis, which can "get out of control".

For major clients, the **referencing system** is used. The purchasing departments of major groups are pushing for this system: it involves defining daily rates according to qualifications and a system of discounts for large volumes. When the consultancy company uses this system, the client can call on it for a given project. Prices charged are those defined in the referencing system. In practice, prices can however be renegotiated.

Although still marginal, **the success fees** is growing, particularly when the client is in manufacturing industry. In this case, part of the price is dependent on the consultancy service provided. For example, a consultancy company may put forward proposals in order to improve productivity. Part of the price may depend on how productivity changes, once the recommendations have been implemented. With the success fees, the output appears more clearly. The client and the business management firm try to define accurately the product.

Some sizeable companies are specialised in **company merger and takeover consulting**. This involves a certain type of **financial advice**. The way prices are set in this case is very specific: a percentage is applied to the sums involved in the merger-takeover. This percentage depends on the size of the operation, its complexity and negotiations with the client. In front of the complexity of monitor the price evolution in this kind of industry, we decided to stop our investigations in this area.

One business unit has told us of a special invoicing system for crisis reporting. This involves a starting price (a lump sum of 30 000 euros in this example), which applies even if the firm spends very little time on the matter. This starting price is evaluated against the service provided in a difficult context. If a lot of time is spent on the matter, an invoice is issued on a 'time-spent' basis in addition to the starting sum/price.

b. Pricing methods

As far as public relations services are concerned, annual contracts may be signed with regular clients. Invoices are issued on a fixed price basis with an estimate of the time spent at the start of the year. Nevertheless, it would be difficult to apply contract pricing methods. Even for regular clients, it appears that services provided change from one year to another, which makes it difficult to monitor contracts over time.

In conjunction with the price mechanism and the operating method for the consultancy profession, it appears that monitoring evolution of price with **charge-out rate method** is always relevant and possible (realised charge-out rate). As a rule, **time sheets are not completed** within the **public relations consulting profession**. In this profession, **there is no link between time spent and charge** (see the typical case of crisis reporting). This aspect is very similar to that observed in advertising agencies. Nevertheless, in response to pressures from clients and given the tense economic situation, a number of companies have advised us that they were going to set up more effective management tools which would allow them to monitor average charges according to qualifications.

Even when time sheets are completed, in some cases the business may very well not calculate average charges according to qualifications on an aggregated basis (but only an a contract-client basis). If the company has time sheets, without aggregating the results recorded, it is possible to monitor average charges according to qualifications by selecting certain client contracts (**charge-out rate method for a given client**). It is therefore necessary to select a sample of client contracts (giving preference to regular clients) and within each client contract, monitor average charges according to qualifications.

It is possible to obtain directly from firm charge-out rate by qualification. Nevertheless, in some cases, price statistician must collect some other information in order to estimate price per qualification. For example, an alternative approach could be to monitor costs for a number of qualifications and the average margin over a quarter. It is possible to estimate average charges according to qualifications by applying the margin to costs. This method is still relevant, but less so than direct monitoring of the average charge according to qualifications since it uses a more aggregated approach. Nevertheless, it can be used to monitor rates charged and not catalogue type charges.

Another alternative approach is to approximate prices from the turnover per head, corrected for variations in activity rates. Ideally, this involves considering: turnover excluding subcontractors,

number of productive staff on a full-time equivalent basis and the activity rate. The activity rate is an indicator widely monitored within the profession. In view of its highly aggregated nature, this method is not to be preferred over the previous two. It does however look at market prices, unlike catalogue type charges. For this approach to be relevant, the qualifications pyramid must remain stable over time. This approach may also be used in public relations consulting services, replacing turnover with the gross margin.

In our case, we can say that we monitor more than the evolution of "realised charge out rate" more than "truly paid charge out rate". We take into account the turnover and the realised time and not the estimated time when the client signed the contract. Nevertheless, we are in line with the accrual principle: we monitor the evolution of price during the delivery of the product. To calculate "realised charge-out rate" the firms calculate an average on several contracts.

For all these pricing methods, quarterly price monitoring has to be considered with caution, particularly in public relations services. For example, with an annual contract, the client generally pays a fixed amount every month (total for the annual contract divided by 12). However the time spent on the matter is not linear over a year. Thus the average selling price in August will be artificially high on account of the fact that the time spent is more limited at that time. Furthermore, some contracts may involve end-of-contract regularisation according to the time actually spent. In fact, a new turnover figure will be recorded (regularisation of an annual contract) without the corresponding time spent, which may affect the price index. All these problems appear if the firm, in order to calculate the realised charge-out rate, take into account the turnover linked with the payment of the client and not the turnover linked with the production of the services.

III) Sampling and weights

The identification of a sample is a complex phase in management consulting services. Using classic sources, we have identified in France many companies who are not included in the sample for two main reasons. Firstly, many companies work only for subsidiaries within the same group and prices are not linked with market prices in some cases. Furthermore, many companies are classified as consultants since they consider this to be a more "prestigious" field. In practice, they do very little if any consulting. They may in particular operate in the field of IT services, stocks and shares portfolio management or estate agency management. As a result, official sources of statistics include many more consulting companies than those counted by other organisations such as professional associations. In order to identify a relevant sample, it is therefore important to combine the use of these sources of official statistics with figures issued by professional associations.

An INSEE field officer visits each company in the sample. His task is to obtain a breakdown of the company's turnover according to the classification used (the sub-classes of part 1). In order to calculate

the weighting coefficient of each prestation, we need some information on structure of the qualification of the firm: price on the base period ($p_b^{c,x}$: price on the base period for the qualification c in the firm x), number of employees for this qualification at the reference period ($e_b^{c,x}$: number of employees at the base period for the qualification c in the firm x). $H_t^{c,x}$ is the index at the period t for the qualification c in the firm x. If I consider the product J (for example strategy consulting), the Laspeyres Index $L_t(J)$ can be written:

$$\mathsf{L}_{\mathsf{t}}(\mathsf{J}) = \sum_{x \in X} \sum_{c \in J} pca_b^{J,x} pef_b^{c,x} H_t^{c,x} \text{ with } pca_b^{J,x} = \frac{CA_b^{J,x}}{\sum_{x \in X} CA_b^{J,x}} \text{ and } pef_b^{c,x} = \frac{e_b^{c,x} p_b^{c,x}}{\sum_{c \in J} e_b^{c,x} p_b^{c,x}}$$

 $CA_b^{J,x}$ is the turnover of firm x for the product J; $pca_b^{J,x}$ is the weighting coefficient of the firm x if you consider the product J, $pef_b^{c,x}$ is the weighting coefficient of the qualification c in the firm x. This formula shows us that we need two types of weighting coefficient (for a product): the weighting coefficient of the firm (for this we need the turnover of each firm for each product) and the weighting coefficient of each qualification in each firm (we need the number of employees for each qualification inside the firm x). Of course, it is crucial to update these weighting coefficients. In computer services, we update these weighting coefficients every year. In business and management consultancy, after discussion with trade organisation, we decided to update these weighting coefficient every four years. The structure of the qualification seems more stable in this industry. Of course, if a major event occurs for a firm (merge, fast growth...) we decide to update the turnover of the firm.

In **public relations services**, there are many purchase-sale transactions. This lead to re-invoicing service charges (production of an in-house newspaper for the client company for example). As a consequence, like advertising agencies, the indicator that will be used as a basis for weighting purposes for public relations services will be **the gross margin**. In short, in relation to the price monitoring method, it is important to understand the weight of fees in the gross margin (share as a %).

IV) Issues in maintaining constant quality

In first, we can note that "realised charge-out rate" is more than "virtual transaction price of a component of pricing mechanism" as "real transaction price of the product". It is not a "truly paid by client of hourly rate" but "virtual" one when we take into account realised time (and not estimated time). Of course, it is not a price of a product paid by client. (Nevertheless what is the product?).

From my point of view, all the drawbacks of this kind of method come from two aspects:

- Would be possible to estimate the price of the product with the transaction price of a component of pricing mechanism?
- Would be possible to estimate the transaction price of a component of pricing mechanism with realised charge-out rate?

Of course, **changes in productivity** are the major and difficult issue. One of the aspect (it would be important to keep this point in mind) is the difference between estimated time and realised time. If the difference changes over time, the measure of price with «realised hourly rate» method introduces a lot of difficulties. If we consider that this difference stays stable over time, of course there is a problem of productivity if the truly paid hourly rate stays the same and if the estimated time changes (linked with the increase of productivity) for the same product. Nevertheless if a given qualification work faster and in more efficient way, do we consider that the truly paid charge-out rate stays the same? If the productivity of a given qualification increases of 20 %, the firm would change the price per hour for this qualification...

V) Some results

	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
	2003	2003	2003	2004	2004	2004	2004	2005	2005
Business and Management Consultancy	100,0	98,6	98,9	99,2	100,2	99,8	100,2	99,9	99,8
Management consulting services	100,0	98,8	98,6	99,2	100,0	99,6	100,6	100,4	100,5
Public relations services	100,0	97,1	98,0	95,7	99,1	102,2	102,0	103,0	102,6