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Review of SPPI for legal services and accounting services

Final technical implementation report

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Foreword

As part of the process to improve economic statistics, producer price indices for services, Services producer price indices (SPPIs), were developed a few years ago. The primary aim of SPPIs is to measure price trends in business services. Services production has made up a large share of Sweden's gross domestic product (GDP) for a long time, but relevant price indices were not developed to any great extent before the year 2000. This can partly be given historical explanations: commodities have previously made up a dominant part of the economy and economic statistics have also been focused on commodities. Another reason is that measuring price trends in services is complicated.

As another step in improving economic statistics, regular reviews are made of the developed indices. This is because many industries are constantly changing at the same time as we price statisticians gain more experience from different industries and countries and can more clearly see improvement opportunities.

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1 Introduction

A feature of many industries in the service sector is that change is a permanent ongoing feature as the aim is to meet the shifting needs of customers. Producing functional price indices requires a review at regular intervals of price measurements to measure representative services using accurate methods.

The financial consultancy industry is no exception; development of computers and new accounting programs has changed the industry radically over the last few years. The producer price index for financial consultant services was developed in 2003 and with the help of experience gained from this and other producer price indices, it is now appropriate to review the methods for measuring prices and drawing samples.

The review has been carried out in close collaboration with the industry. It is important that we understand the industry so that we measure the important areas using the most appropriate methods in an effective way. An intermediate goal of the review is to keep the response burden low. It is also of importance that the industry understands the basic theory behind the price index and its areas of use, so that useful data is obtained. With this in mind visits have been arranged to the industry representative organisations, FAR and SRS, and also the largest companies in the sample. A second industry organisation, SRF (The Association of Swedish Accounting consultants/Sveriges Redovisningskonsulters Förbund), has been contacted via mail and telephone.

A comparison with other countries' studies has been carried out. In connection with this review, a paper was written for the Voorburg Group's 23rd meeting in Aguascalientes. Statistical agencies in Australia, France,

Japan, Canada, New Zealand, the UK and the USA have provided their views on the industry and its particular difficulties.

2 Industry structure and statistical classification

Legal services can be divided into two main categories; Civil law and Commercial law. Civil law is mostly purchased by households. Services which are mainly supplied for private consumption are monitored in the Consumer Price Index (CPI) and are thus not included in SPPI. The survey in SPPI thus focuses on Commercial law.

In developing the index, industry representatives considered that prices differed between large city regions and the rest of the country. The sample population was stratified in order to form an appropriate sample from both strata.

SNI 2007 (Swedish Standard Classification of Economic Activities 2007) includes 69.1 - *Legal and accounting activities* and 69.2 - *Accounting, bookkeeping and auditing activities* in group 69 Legal and accounting activities.

Legal and accounting activities is divided into 69.101 - *Legal advisory and representation activities of solicitor's firms*, 69.102 - *Other legal advisory activities* and 69.103 *Advisory activities concerning patents and copyrights*. Commercial law occurs in both 69.101 and 69.102, the difference between these is the formal level of competence the lawyers have and perhaps the degree of complexity of the work.

A similar structure occurs in 69.2 - *Accounting, bookkeeping and auditing activities* which is divided into

69.201 - *Accounting and bookkeeping*, 69.202 - *Auditing* and 69.203 - *Tax consultancy*. In the current survey, accounting and bookkeeping, as well as auditing are caught.

Table 1: SNI 69 Legal and Economic consultancy

SNI 2002	SNI 2007	Description SNI 2007
74.111	69.101	Solicitor's firms
	69.102	Other legal advisory firms.
74.112	69.103	Patent and copyright agencies etc.
74.120	69.201	Firms of accountants and bookkeepers
	69.202	Firms of auditors
	69.203	Tax consultancy firms

Source: SNI 2007

3 The current survey

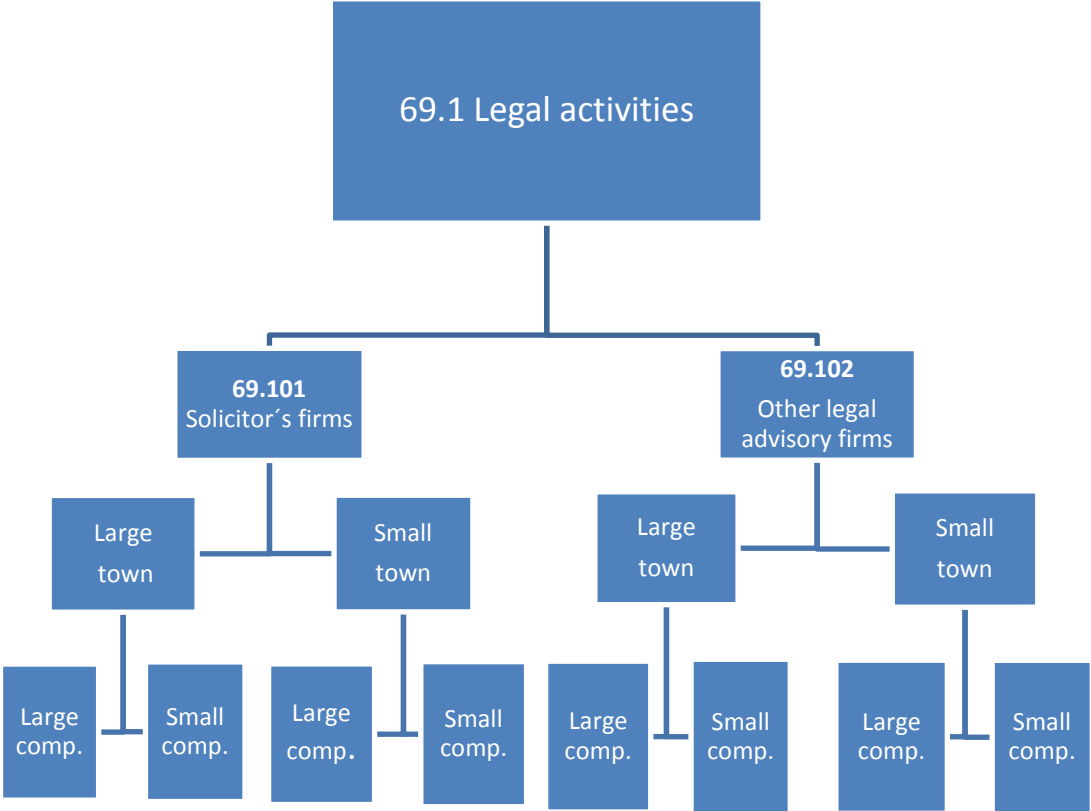
3.1 Sampling and collection method

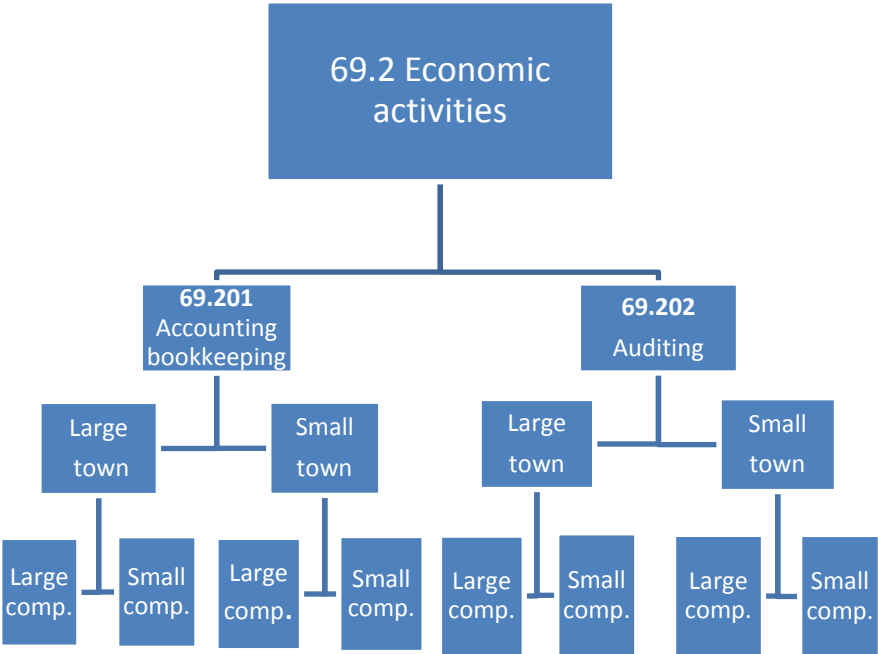
Statistics Sweden's Business Register (FDB) is used as the sample frame. From SNI 69.1 and SNI 69.2 a PPS sampling method is used to draw a sample of 82 legal and 102 financial companies (figures apply to 2009). A combination of the number of employees and turnover is used as a measure of size when drawing the sample.

In large urban areas, it is assumed that smaller legal offices work with civil law and a limit of 10 employees is applied in order to exclude "incorrect" companies in the

sample, and reduce the burden of response on smaller companies.

The companies selected receive a user ID and password via normal post so as to be able to input data via SPPI's web site. These companies can then select the services that are representative of their activities.





3.2 Pricing methods

Having studied attempts made by other countries to use different pricing methods such as model pricing and component pricing, Statistics Sweden decided to use a time-based pricing method and measure hourly prices.

Within the category of *legal* consultants, the survey is divided into a number of personnel categories. The division is made on the basis of length of employment and the categories are: assistant lawyers with 0-2 yrs in the profession, assistant lawyers with 3-5 yrs in the profession, assistant lawyers with 6-9 yrs in the profession and finally partners.

In the category for *economic* consultants, as well as for other consultancy industries, a time-based method is also used for monitoring price changes. Data providers give the average actual hourly price paid for a number of representative service groups, distributed by work area and/or experience.

Price data for large companies is submitted in accordance with the following specifications:

- Professional group – e.g. authorised or approved auditor, partner, assistant
- Service groups – auditing and accounting/bookkeeping
- Customer size – large and small companies

For smaller companies, Contract pricing, Component pricing and Time based methods are used for different categories:

- Customer category – contract price for different customers
- Professional group – e.g. certified auditing consultant, SRF member, approved auditor, assistant
- Service group – fixed prices for certain services, e.g. price per receipt

These service groups are specific for each company and determined by the company's structure and working area. The idea is that this disaggregation should identify all possible price determining factors so that the price for the most homogenous possible group can be monitored over time. Companies also provide data on the size of the turnover for the categories and services provided in relation to each other. In addition, small companies receive the question on how large a part of a possible price change is due to pure price factors, and how large a part is due to changes in the content of the service.

The advantage of the current time-based pricing method is that it is very simple and easy for data providers. Often the data already exists in the company's accounting system. The disadvantage of the method is that there is a risk that improvements in productivity are reflected in the price index in the form of price increases.

4 Identified problems

4.1 Time-based pricing method

When price changes are estimated using time-based methods, there is a risk that productivity improvements are overlooked, and instead regarded as price increases. One example of this would be an accounting assistant receiving a new working tool enabling twice as many items to be processed per hour. The whole of this productivity improvement would benefit the producer and the price per hour would be doubled. This is shown as a price increase in the index, but the customer buying the service still pays the same amount for the bookkeeping. It is important to be aware of this problem and be prepared to make quality adjustments. Given the substantial price increases in the price index for legal services, it is highly possible that price changes are overestimated.

The question is to what extent productivity changes are taking place in the industry, and if this is the case whether they are reflected in our indices. Changes in personal productivity, arising from personnel gaining more experience and thus becoming more efficient, can at least be partially covered by the use of questions on prices for varying amounts of experience. One assumption made is that the distribution between groups with varying experience is constant over time.

For NA, one alternative would be to deflate by means of a wage index for the appropriate category. Critics of time-based pricing methods argue that deflating by using wage indices functions just as well as deflating by using SPPI based on hourly prices.

4.2 Sample for legal consultants

If the sample were to be drawn from 69.1, we would also have 69.103 - *Patents* in the sample, which we wish to avoid. In the current situation, the sample is drawn from 69.101 and 69.102 respectively, and this means that weighting between the groups is needed.

As of quarter 1 in 2009, an index is calculated for both subcategories in legal consultants, namely, SNI 69.101 and SNI 69.102. This requires a number of changes in the calculation files, but still it is only the total index for 69.1 that is published.

5 Measures taken

5.1 Meetings with companies and industry representative organisations

Visits to companies and industry representative organisations revealed there has actually been a major price increase and that the price index appears to provide a correct picture of this change. The

strong economic situation earlier meant that it was more expensive to bring in new staff which pushed up prices.

Both we and the data providers are in agreement that some change is occurring in productivity, but that it would nevertheless be undesirable to stop using hourly prices as the pricing method. The method is easy to use for respondents and implemented in companies' accounting systems. A new pricing method could have a significant impact on response frequency.

The assumption of a constant distribution of varying levels of experience may be too strong. The distribution shifts with changes in the economy and companies recruit more newly qualified persons during an upturn. More precise grouping with more groups has been requested. This could possibly work for the large companies that were visited, but probably not for smaller companies in the industry.

5.2 Comparison of price indices and wage indices

A comparison of changes in the price index with a corresponding wage index is complicated by the fact that it is difficult to find statistics on changes in wages on a quarterly basis. Jusek (a Swedish Union of University Graduates of Law, Business Administration and Economics) provides statistics on an annual basis which have been interpolated for the comparison. The wage index has not the same clear upward trend as the price index, and has been rejected as misleading by companies and industry representative organisations. The fact that the wage and price index are not correlated means that they do not provide the same result if they are used as deflators by NA.

5.3 Comparison of changes in large towns and other parts of the country

In a comparison of the changes in the price index between large towns and other parts of the country, it appears that changes have been remarkably similar between the two strata. There is thus no benefit to be gained from a disaggregation to two strata. However different sampling methods are used (different cut-offs) to optimise values in the respective strata, and in this way improve certainty in the survey.