

**Voorburg Group on Service Statistics**

## **Service Price Index for Legal Services**

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# **Producer Price Index for the Legal Services Industry**

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## **1. Background**

The development of a price index for legal services is a supplement to the Producer Price Indices (PPI) system. For several years, the Central Bureau of Statistics (CBS) publishes data concerning output of the trade and services industry, through its survey of trade, services, transportation and communication. This survey estimates outputs in those industries as well as the distribution of inputs. However to date there are no price indices for those industries by which output can be computed in fixed prices.

Developing a price index for legal services began on the basis of a survey of that industry in Israel. Chapter 10 in the new PPI Manual<sup>1</sup> is about the treatment of specific products and was used as the basic model for developing the index since it gives an example of the legal services case , with adaptation to the unique features of the Israeli economy.

Personal interviews were conducted with various institutions (e.g., the Israeli Bar Association) and different models of legal services, developed in countries such as Australia, New Zealand and Sweden, were examined as well.

### **1.1. The order of priority in developing a price index for the service industries**

The price index for the legal services sector is a first step towards the development of a comprehensive index for services. It was decided to initially focus on the primary industry of "business activities" since it is the largest industry of services in the economy in term of revenues. Due to considerations pertaining to industry priorities and national accounting, it was decided to begin with the group of "legal and notarial services" and to gradually expand the index until all groups are covered. This group was selected as a starting point, since it is more static and conservative, then other groups such as "computer and related services" which is rapidly changing and overall very dynamic.

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<sup>1</sup> IMF,PPI Manual, Chapter 10

<i>Code</i>	<i>Economic industry</i>	<i>Dealers</i>	<i>Revenue</i>	
-	Accommodation services and restaurants			
-	Transport, storage and communication			
-	Banking, insurance and other financial institutions			
-	Business activities, real estate and renting			
	Education			
-	Health services, welfare and social work			
-	Personal and other services			
Total				

The following table lists the different weights accorded to the various service sectors. As indicated, "Business activities, real estate and renting" is the largest sector.

## **1.2 Overview of the industry**

The population of Israel in 2003 counts for 6.6 million residents. According to the Israeli Bar Association, there are 29,037 active lawyers, among them 17,683 (60.9%) are men and 11,354 (39.1%) are women. Most law firms are located in central Israel (the broader Tel-Aviv metropolitan area). The distribution of law firms by district is as follows: Jerusalem and Southern Israel – 16.4%, Haifa and Northern Israel – 18.3%, Tel Aviv and central Israel – 65.3%.

The total population of each district is as follows:

Jerusalem and Southern Israel – 27%, Haifa and Northern Israel – 31%, Tel Aviv and central Israel – 42%.

Until 1995, approximately 500 lawyers joined the market each year. Since then, due to an opening of several new law schools in Israel, around 2,500 lawyers are added to the

market each year.

There are no effective restrictions in Israel for opening law firms. In order to do so one has to graduate from law school, clerk for one year in a court or in a law firm, pass the bar exam (which includes an oral exam and an exam in writing) and be accepted as a member of the Bar.

The group of legal services is one of the most dispersed within the service industries. According to data of “Dealers and revenue of economic industries”<sup>2</sup>, 85% of law firms have an annual revenue of up to 1 million shekels (equivalent to approximately 225,000 USD), which constitutes 30% of the entire annual revenue of the industry. 13% of law firms have an annual revenue in the range of 1-5 million shekels (equivalent to 200,000 USD to 1 million USD), which are 35% from the entire annual revenue of the industry. Only 0.1% of law firms have an annual revenue of 40 million shekels or more, which are only 9% of the entire annual revenue in the industry.

By comparison, in the computer services sector 85% of dealers earn an annual revenue of up to 1 million shekels, that are 13% of the entire annual revenue of the industry, while 0.5% of firms earn an annual revenue of 40 million shekels and more (1 million shekels equals to about 225,000\$) that are 44% of industry annual revenue.

## **2. The characters of the index**

### **2.1 The Uses of the Price Index**

The main purpose of the PPI for legal services is to deflate the series of output for legal services in order to measure the real changes.

In addition, the price index for legal services can be used for:

- different calculations in national accounts
- comparing price changes across industries and/or sectors
- comparing other indicators

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<sup>2</sup> State of Israel central bureau of statistics, Dealers and revenue of economic industries according to value added tax 1998-2000,2001

- international comparison

## **2.2 The Definition of the Price Index**

The price index of the service industries output, measures the developments in the output prices obtained by service firms for a fixed set of services, with equal qualities and quantities, sold to other firms, government or individuals, at the first stage of marketing.

## **3. Industry description**

### **3.1 The classification principles of the price index**

The classification of the prices-index should be based on the following classification principles:

The classification of the main industries will be determined according to combined classification method, called ISIC “International standard industrial classification of all economic activities 1993” after making the needed modification to the structure of the Israeli market.

One of the methods of classifying goods to sub-industries in the world is the Central Product Classification (CPC).

Another option is the Statistical Classification of Products by Activity ( CPA)- (European Economic Community, 2002 version which is a more detailed classification.<sup>3</sup>

The differences in classification between CPC and CPA, in the legal service industry, are as follows:

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<sup>3</sup> Auction services ( CPC 82199 and CPA 74.11.16 ) not included in this report.

Description	CPC code	CPA code
Legal services	821	74.11
Legal advisory and representation services in the different fields of law	8211	74.11.1
Legal advisory and representation services concerning criminal law	82111	74.11.11
Legal advisory and representation services in judicial procedures concerning other fields of law	82119	74.11.12
Legal advisory and representation services in statutory procedures of quasi-judicial tribunals, boards, etc.	8212	74.11.13
Advisory activities concerning patents and copyrights	82130	74.11.14
Legal documentation and certification services	8213	74.11.15
Other legal services	8219	74.11.17

### 3.2 Parameters which have influence on the price changes

Parameters which influence the price changes are: the complexity of the case, the amount of hours that are needed in order to complete working on the case, the degree of competition in the market, demand and supply. The proficiency of partners is higher relative to associates and clerks. Therefore, the rise in prices as well as the changes in prices in partners' work will be higher relative to associates or clerks.

Usually, the relatively complex cases are done by partners and associates. The less complex cases are done by associates and clerks. Usually, the rate for hour of work is determined every year by the firms. There is no standard degree for increasing the rate.

### 3.3 The major legal fields

The main legal fields in Israel are criminal law and civil law, while civil law is divided to sub-fields, as follows:

Civil law:

- Commercial law
- Property law
- Family law
- Labor law
- Tax law
- Intellectual property
- Tort law
- Litigation

Many law firms in Israel specialize in specific legal fields such as traffic law and intellectual property. Frequently, the large firms specialize in commercial-civil law, while smaller law firms specialize in criminal law.

### **3.4 Main pricing methodologies used in pricing legal services**

Most of the countries that develop a price index for legal services use charge-out rates methodology. This method was chosen in Israel instead of model pricing. The advantages of charge-out rate are: its ability to reflect market conditions and consideration of costs and benefits (relatively low cost and high availability).

Because charge-out rate measures labor costs, it suits the special conditions of Israeli legal service market.

### **3.5 Ways of payments and the methodology of measurement**

There are three main methods that we use:

**Hourly rates** - rates are determined per hour based on the type of the legal worker who works on the case. Legal workers are classified to partner, senior lawyer, junior lawyer and clerk. This method is abundant in Israel and among most of the countries which publish a price index for services. The methodology of measurement is based on charge-out rates. The information regarding the rates is collected by asking law firms to specify the rate for hour, depending on the legal workers who work on the case and the type of the case.

**Fixed fees – rates** do not depend on the length of the case or on other parameters. This kind of fee is abundant in law firms which deal with traffic law and property law. The methodology of measurement is based on Re-pricing of fixed fees. The information regarding the rates is collected by asking law firms to specify the rate for every service. This information provides a reliable indication with respect to the changes in rate within those fields. This method is efficient when the services are identical i.e. in an identical quality. Yet, this method is only a relatively small portion in the total revenue of the legal services industry in Israel (and the world).

**Retainer** – fixed monthly rate paid for a variety of legal services by permanent customers according to long-run contracts. This rate is determined once a year, by the law firm and the customer. The advantage of this kind of payment to the firm is that it provides it a permanent cash flow and keeps big customer for long periods. The law firms' report is in the following form:

The size of the customer	monthly rate in dollars	working's hours
Small		
Medium		
Large		

### **3.6 Difficulties in measurement**

There are difficulties in measuring legal services. The difficulties are caused by the heterogeneity of the legal workers, the customers and the cases. However, law firms provide the necessary information in a relatively simple way. Another difficulty is to achieve cooperation of the firm due to the high secrecy of the data.

### **3.7 The collection of prices**

The goal of this procedure is to ease the calculation of reliable indicators based on periodical changes in prices. At the first stage, the services price index will be published every quarter. In the future it may be published each month.

Economists from the Central Bureau of Statistics visit the law firms themselves, at least once, in order to urge the firms to report the necessary information, and in order to fully understand their ways of determining their rates.

## **4. Sample design**

Two potential frames was analyzed in order to sample law firms for the legal services index:

- a. The sample already used for the survey of Trade and Services.
- b. Dun's Guide

The sample in the “Survey of trade and services” is based on the revenues of the firms but does not give any information about the distribution of revenue among sub groups that fit lower degrees of the classification.

Therefore, it does not address all the criteria required in order to select firms into the sample of a price index to the legal service group. Another source of data is the “Dan's guide” file which is a business guide that includes data on companies in Israel and lists of big law firms and their specialization fields.

15 law firms were sampled from this combined frame where sample size is based on our experience with the sample size in the PPI of manufacturing.

The sample include principle large firms and also some small firms, because of the pricing methodology is different between small and large firms.

## **5. Methodology**

### **5.2 The calculation and weights of the price index**

The distribution of weight among the law firm will be according to total revenue of each firm . The PPI uses the Laspeyres formula. The price indexes are calculated for extended periods.

The calculation is divided in two stages. Firstly, a price index will be calculated for each law firm F.

$$P_L^F = \frac{\sum_{i=1}^n p_i^t q_i^0}{\sum_{i=1}^n p_i^0 q_i^0} \equiv \sum_{i=1}^n (p_i^t / p_i^{t-1}) s_i^0$$

Where  $P_L^F$  is the Laspeyres chained price index and  $s_i^0$  is the share of product i in the output of the firm F in period 0.

$$s_i^0 = p_i^0 q_i^0 / \sum_{j=1}^n p_j^0 q_j^0$$

The first level price indices will then be aggregated at the second stage by:

$$P_L = \sum_F w^F P_L^F$$

Where  $w^F$  is the weight of the firm F in the total index and  $P_L^F$  is the individual price index for the firm F.

One of the limitation of using a Laspeyres index is non reflection of substitution effects over time.

The basic bundle is used for extensive periods of time with the same weights. The use of these weights becomes increasingly inaccurate the more time passes from the base period. It is therefore necessary to perform frequent updates to make sure that the weights reflect the economic reality.

## 6. Conclusion

The Israeli Central Bureau of Statistics is currently within the final stage of developing a price index for legal services, within the PPI framework. Data were collected from 12 law firms while there are three more are expected to deliver data as well.

The Price Data are collected for the purpose of creating reliable indicators for periodical price changes. Initially it was decided that the price index would be published on a quarterly basis. Since the price of legal services is difficult to measure and it requires

from firms to submit detailed information it is planned to visit each firm at least once, in order to achieve an agreement on accepted methods of pricing.

The main goal is that from January 2004 the legal services price index will be calculated.

The base year will be 2003, which will be accorded 100 points.