# Selected Difficult Areas of Consumer Price Indices:

### The Finnish CPI

The Finnish consumer price index is calculated using the fixed-weight Laspeyres index formula. The weights of our CPI are mainly based on the Household Budget Survey. The price relative formula used in our CPI is currently the so-called R parameter:  $R = \Sigma_i(p_t^i/p_0^i)$ , the average of the price ratios.

#### **Insurances:**

The objective of the infomation is to measure the price development of consumer's insurance premiums.

CPI weights are calculated on the basis of the five yearly family budget survey and likewise the item group weights of insurances. The weights of insurances are gross weights. A problem when classifying insurances in different consumption categories such as housing, transportation and other consumption is that insurance companies have a large variety of different insurance packages which cover many consumption categories. Households are usually not able to divide the total premium in different insurances. The share of different insurances has been imputed on the basis of additional information received from the households concerning the coverage of the insurance package.

The weight of insurances in our current CPI 1990=100 is 24 per milles. The insurances included in our CPI are owner occupier's home insurance (3,5 per milles), insurance on movable property (2,5 per milles), compulsory third party motor insurance premiums (13,6 per milles), travel insurance (0,7 per milles) and other insurance payments (3,7 per milles) which include insurances of death risk (not life insurance deposit) and accident insurances for adults and children. Insurances are introduced as positions under the relevant main groups: Housing, transportation and other services.

The indices are updated when tariffs have changed (periodicity irregularly). The market shares of insurance companies are received from the Central Assosiation of Insurance Companies and updated every five years when the CPI is revised.

The premium prices are gross premiums of the most typical (sold) insurances. Price data is received from insurance premium tables. Data is being collected centrally by telephone interviewing the experts of the largest insurance companies (covering about 90% of the total turnover) and from insurance premium tables.

Calculation method: the different qualities of premiums of an insurance company are weighted within the item code with their quantity shares and after that regionally. Insurance companies are weighted with their market shares.

Since we don't have a separate index for insurances we don't analyse insurance item indices by region/population.

### Gambling:

In the Finnish CPI gambling is included in lottery stakes. The weight of lottery stakes is 20,8 per milles in our current 1990=100 CPI. The weights are net weights received from the five yearly family budget survey. The Consumers expenditures on pools (arranged by Veikkaus Oy), trotting-race pools (arranged by Hippos) and slot machines (arranged by the Finnish Slot Machine Association) are included in our index. Because it is impossible to include commodity lotteries in the index, their weight is given to other forms of lottery stakes. Our index measures the price development of 11 most popular games representative for the different categories. In principle we collect the prices of one lottery row or one slot machine game but also changes of profit shares are taken into account. The prices are updated when necessary and collected centrally by telephone.

#### **Financial Services:**

The weight of financial services in our current 1990=100 CPI is 16,5 per mills. Financial services include banking services (1 per mill), other insurance payments (3,7 per mills) and interest on consumer credit (11,8 per mills).

Banking services include 5 most common services used by private consumers. The prices of these services are collected separately from all the banks operating in the Finnish market and weighted by their market shares. Prices are updated when necessary.

The content of other insurances in the Finnish CPI is explained under the heading Insurances in this paper.

Interest on consumer credit (11,8 per mills) is the average interest of the stock of consumer credits calculated by the Bank of Finland and updated monthly. The weight is received from HBS.

## Public fees which depend on income:

Fees depending on income are membership fees (22,5 per mills), fines (0,8 per mills) and children's day care (5,7 per mills).

The Finnish CPI includes various membership fees in consumption. In our current CPI the fees consist of 12 national trade unions, the average of church tax rate and the membership fees of five other organisations; scientific and ideological organisations and sports clubs. In the Finnish CPI membership fees have been regarded as constituting such an essential part of Finnish consumption that they are to be included in the consumer price index.

In Finland 86,2 percentages of the population where Lutherans in year 1993, one percentage belonged to the Orthodox church and one per cent to other religious organisations.

The share of unionised labour was 81 percentages of the total labour force in 1993. 84,3 percentages of women and 77,5 percentages of men had joined a union in the year 1993.

Membership fees, fees of trade unions and the amount of church tax paid depend on income. The indices of membership fees of trade unions, church tax and fines are calculated on the basis of the index of wage and salary earnings and corresponding per centages of the various membership fees. The weight of membership fees is a weighted average of the individual fees. The frequency of price collection of membership fees and church tax is every January and quarterly. The prices of fines are collected quarterly.

The price of children's day care is calculated separately for municipal (3,8) and private (1,9) day care services. The price of municipal day care depends on the parents incomes while the price of private day care doesn't. The price of municipal day care is the yearly change of the payment weighted by different income- and age-groups. Private day care is calculated as the average of guiding prices for day care of children younger than three years and children with three years or more of age.