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### **Note on the practices in the field of insurance, financial services and public price policies in the Icelandic CPI.**

#### **General comments**

There are often large problems involved in measuring some elements of the Consumer Price Index (CPI), both owing to the lack of reliable prices and methodological problems. Insurance, for example, is a very diverse field that relates to many parts of consumer expenditure and the methods for measuring insurance cost are different depending on whether national accounting methods or the results from the household budget surveys are used. The small size of the Icelandic economy often creates difficulties in measuring prices although more often it makes life easier for the price statisticians. The elements of the CPI that create the biggest problems in measuring prices often have small weights although causing difficult problems both as regards classification and measurement. In the Icelandic CPI most prices are measured as the price the consumer pays and the weights are based on results from household budget surveys. The household budget surveys are conducted every fifth year and such a survey is ongoing in 1995. The participants are asked to keep diaries for two weeks and are later asked about certain bigger expenses during the preceding three months. These surveys are the basic sources of weight information for the CPI.

The aim of this paper is to describe the methods used in the Icelandic CPI for measuring the types of goods and services shown in table 1.

**Table 1 - The groups of goods and services in discussed in this paper and their weight in the Icelandic CPI.**

	<b>Weights, %</b>
	<b>CPI</b>
Insurance	3,2
Lotteries	0,9
Financial services	0,1
Public fees	7,6
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Total weight in the CPI	11,8

## Insurance

The general procedure for measuring both weight and price changes of insurance in the CPI is measuring what the consumer pays for these services based on the household budget survey. There is difficulty in the itemization of sold insurance as it is common now to sell a number of insurance policies in the same packet and so their itemization is not available. In each packet there are many kinds of insurance covering such items as accident, life, home and liability insurance.

Life insurance has not been added to the CPI. The only form of life insurance in Iceland is an insurance stipulating that the insured amount is only paid out in case of death and as such the insurance is not a form of savings and therefore it should probably be included in the index.

There are three types of insurance policies included in the CPI. Firstly, there is car insurance, divided into liability insurance and hull insurance. Secondly, there is real estate insurance of which there are two types, fire insurance and property insurance. Thirdly, there are homeowner policies that cover the home in case of damages to household goods and families in case of accidents. The weights are as follows:

**Table 2 - The different groups of insurance and their weight in the CPI.**

	<b>Weights, % of CPI</b>
Car insurance total	2,2
Liability insurance	1,9
Hull insurance	0,3
Home insurance total	1,0
Fire insurance	0,1
Property insurance	0,4
Insurance of possessions	0,5
<hr/> Total insurance in the CPI	<hr/> 3,2

Concerning car insurance the weight used derives from the household budget survey. In calculating these indices on a monthly basis a model of the Icelandic insurance market is used. The results from this model and the household budget survey are very similar. The model is based on the structure of the insurance market which is dominated by two insurance companies. Their rates are used in the model and the weights are based on information about the amount of policies sold in the whole country and information about the market share of these companies and the composition of their clients. This information comes from the insurance companies and the State Insurance Control Board, which collects information about the insurance market. The structure of policies are different between these companies and that is taken into consideration in the model.

The liability insurance is calculated as a weighted average for the country. The rates of the insurance companies are used and information about discounts and bonuses are from the State Insurance Board. This information is used to calculate the average for the country and the policy amounts based on car sizes have been taken into consideration. Two companies dominate the market (71% market share) but there are four other smaller companies. Their policies are not calculated separately but usually show the same tendencies as the policies of the bigger companies. The structure of the policies differs between the companies as they offer different policies according to the age of the policy holders.

Hull insurance is measured in the same way, the average being calculated on the basis of policy and bonuses are measured on the basis of information about average bonuses for hull insurance in each company. There is a vast price difference in policies in different parts of the country and this has been taken into consideration in the model.

The monthly calculation of the rates is based on an index calculated by a private company. The total rates are collected from the companies on a quarterly basis and the series adjusted accordingly.

The estimated market price of houses that is used as a base for the calculation of imputed rent for owner occupiers in the CPI is also used as a base for the calculation of the amount for fire insurance. The rates have been nearly uniform around the country up till this year but will probably differ more in the future.

Homeowner policies are also taken into consideration and they cover mainly furniture and other possessions in the home such as TV, stereo equipment etc. The most common form of such insurance today are insurance packets which include many different policies and often the real estate insurance and accident insurance in addition, so that itemization of the cost of each policy is very difficult. The price also depends on the amount of other insurance policies the client has with the same insurance company, something which is not taken into account in the CPI. The weight of the different policies are based on information from the State Insurance Board about the total amount of policies divided among the insurance companies.

## **Gambling**

Gambling is prohibited in Iceland and has thus no weight in the CPI. Different forms of lotteries are common and the weights in the CPI amount to 0.5 per cent and are based on information of the lotteries' turnover. Prices of lottery tickets actually paid by the consumer are used in the monthly calculations of the index.

## **Financial services**

Financial services are included in the index but have little weight mainly because of insufficient information about the expenditure size. In the household budget survey in 1990 there was an inadequate collection of data about this item. The weight for financial services in the CPI is 0.1 per cent of the total expenditure and the expenses included are charges for cheque books and debit cards paid by the consumer. The charges for credit cards are not included although they probably should. In the 1995 household budget survey there is a better follow up of these items so hopefully that will lead to more precise weights. The questions in the survey are now more exact and each family member is asked about debit and credit card ownership. In addition there are questions in the quarterly questioner about the expenditure on services of the banks.

In the 1995 survey participants are allowed to return the receipts they get in the shops instead of recording separate prices into the diaries provided they contain enough information about the items bought. This was a part of the effort to lighten the response burden in the survey. This has been widely used by the participants and in the period until September 1995 nearly 40 per cent of the total entries in the survey came from those receipts. Of all the records in the survey about 60% were on food purchases and about half of these comes from the receipts. Most receipts contain information about the form of payment showing whether the amount is paid in cash, by check, debit card or credit card. This information will probably be valuable in measuring these payments as well as fees charged, and it also provides a better picture of these expenses. This is especially valuable as the users of debit cards are charged for every entry however the users of credit cards are not charged for this.

Interests is not included in the index, except in the case of imputed rent where the long-term real interest rate is used mainly to decide the weights and is not classified as a financial service. The price changes for imputed rent are measured mainly by changes in the market prices of houses. The prices collected are always cash prices and should not include any charges for interest or loan commissions. By collecting cash prices only there is minimal risk that you include interest or the cost of loans in the prices.

There is considerable difficulty in measuring the financial services and the methods are different and varying. There are also considerable problems in defining what is to be included and what price concept to use.

## Public fees

The method used in the CPI for measuring public fees is the amount paid by the consumer for each good or service and in cases where the prices are not the same for all consumers the amount is weighted accordingly. It is therefore of interest to investigate the influence of public price policy on the CPI and that perspective often tends to be very complicated. The Icelandic government, as is the case in many other countries, often sets prices in order to direct consumption into certain channels or to increase government income. The methods used take on various forms, such as customs duties on cars, taxes on petroleum or subsidies of agricultural products.

Public fees are in many forms and very often decided politically and price decisions therefore belong to the field of social politics. Different rates often apply to different social groups. Old people, for instance, pay less for the services of doctors than younger people. Another field is daycare where single parents and students pay less than other social groups. In addition, social groups can be favored in their use of certain services even if they pay the same rates as others. The public fee system in Iceland is rather complicated. This applies for example to prices for medicines or the cost of visits to the doctor where the amount paid can be dependent on what has been paid before during that year, and there is a ceiling on the total expenses.

Public services are in most cases subsidized and the consumer pays only for a part of the total cost. It is therefore of certain interest to look at the total impact of public pricing on the CPI, i.e. apart from the pricing of state monopolies on alcohol and tobacco and the post and telegraph service. At the moment there is a development going on in that field which will eventually lead to the abolition of monopoly but that development is going on at a very slow pace.

There are very few public fees in Iceland that are dependent on income. Low incomes pensioners and disabled individuals do not pay the fixed charge for telephone and have also free access to public television. The disabled get a reduction in car taxes if their incomes are low. These fees are not measured in the CPI and are not very common. Income related tax subventions are common but fall outside of the scope of the index.

Public fees can be classified into the following categories

1. The price is a fixed price or a proportion of the total price.
2. The price depends on age, occupation, state of health etc. or not.

**Table 3 - Categories of public fees after form of payment and groups and the share of total expenditure in the CPI.**

	<b>Fixed prices / type of good and service</b>	<b>Proportion of total price paid / type of good and service</b>
<b>Group 1. Prices do not depend on age, occupation, state of health, etc.</b>	Public firms: electricity, house heating (3,0%) Cultural activities: theaters, opera, symphonic orchestra, state TV (1,1%) Education: high school fees, university fees (0,6%) Cars: driver's license, parking meters, parking tickets (0,6%) Services of priests (0,1%) Total share of the CPI (5,4%)	
<b>Group 2. Prices depend on age, occupation, state of health, etc.</b>	Public firms: swimming pools, public communications (0,4%) Health care: Services of general practitioners (0,3%) Public daycare (0,6%) Passports (0,0) Total share of the CPI (1,3)	Health care: Services of specialists (0,4%) Medicines (0,5%)  Total share of the CPI (0,9)

Price changes are measured by the use of the service by different groups and the prices collected are always what the consumer pays. In the first group the rates for electricity and geothermal works are collected directly from the firms or from their published tariffs monthly. Theaters and schools are asked about their prices two times a year, at the beginning of the season in the autumn and at the beginning of each year. Rates for other services in this group are checked monthly.

In the second group the rates for public communications and swimming pools are checked every month. Prices are measured according to the use of the services by different population groups and the applying rates. The weights used are from 1994 based on information from the public transport companies.

Prices of medicines are estimated from public rates which are centrally fixed and decided by the authorities for every medicine on sale. The composition of the medicines is based on the total amount sold in the latest available year, now the year 1994. The rates apply to every medicine on sale and cover approximately 3400 different prices. The amount the consumer pays is decided by a very complicated system and is calculated for every type of medicine that is on sale. The prices paid by pensioners are different from the prices paid by others. The medicines are also classified into groups and the price is reimbursed in different ways in accordance with the use of the drugs. As an example cancer drugs are always free of charge whereas patients pay a proportion of the price for drugs against stomach ailments. This CPI calculation is done every quarter and the weights used for measuring price changes changed each year. Prices for the services of specialist doctors are also changed every quarter and calculated according to information from the State Social Security Institute about the average use of the specialists services.

The average price for daycare services checked every month and the composition is decided on the basis of the use of these services by different groups. The problem with that estimation is that information about the usage is not always available. The latest figures date from the year 1992 but then prices for these services have not changed since that time.