



**IRELAND**

**CONSUMER  
PRICE  
INDEX**

**Introduction  
of  
Updated Series**

**Base: Mid-November, 1982 as 100**

July, 1983.

---

**Central Statistics Office, Dublin**

---







**IRELAND**

**CONSUMER  
PRICE  
INDEX**

**Introduction  
of  
Updated Series**

**Base: Mid-November, 1982 as 100**

July, 1983.

---

**Central Statistics Office, Dublin**

---







# CONSUMER PRICE INDEX

## Introduction of updated series with base Mid-November, 1982 as 100

### Index Updating and Rebasings

The Consumer Price Index (CPI) is designed to measure the change in the level of the prices paid (inclusive of all indirect taxes) by private households for consumer goods and services. It is compiled by the Central Statistics Office (CSO) on a quarterly basis in respect of the middle Tuesday of the months of February, May, August and November each year. The index is released approximately five weeks after the date to which it relates. It is subsequently published in the monthly *Economic Series* and in the quarterly *Irish Statistical Bulletin*.

This article describes the latest regular updating of the index. Commencing with mid-February, 1983 the CPI is being calculated using updated national weights derived from the results of the 1980 largescale Household Budget Survey<sup>(1)</sup>. The items covered by the index and the local selections of shops in which they are priced have also been updated to ensure that they continue to be representative of current consumer tastes and retailing structures. The methodology and scope of the index remains virtually unchanged.

The updated index is being published to base mid-November, 1982 as 100. Indices calculated to the former mid-November, 1975 base are being published for continuity purposes. The *all items* index calculated to base July, 1914 as 100 is given in Appendix 3 for each quarter from 1922 to mid-February, 1983. Linked indices calculated to the other former bases are also available on request.

The price quotations on which the index is based are voluntarily provided each quarter by an extensive panel of retail and service outlets throughout the country. The quotations provided by individual concerns are treated as strictly confidential and are not divulged by the CSO to any other Government Department or outside body. The CSO wishes to place on record its appreciation of the co-operation and assistance provided by these outlets each quarter.

### Definition and Purpose of the CPI

The CPI measures, in index form, changes over time in the cost of purchasing a constant representative "basket" of consumer goods and services. The fixed quantity of each item in this basket is proportional to the amount which the average household purchases. Identical products are priced in the same shops on each occasion so that changes in the cost of this constant basket reflects only price changes. The fixed quantities (i.e. weighting pattern) are retained for as long as they are considered representative of current household purchasing patterns. The index weights are nowadays generally updated every seven years or so.

The CPI measures price change. It is specifically designed not to take into account the manner in which households change their pattern of expenditure (e.g. switch from expensive meat cuts to cheap cuts, or vice versa) in response to changes in prices, income levels, family composition, tastes, preferences, or market conditions. Furthermore, payments such as income tax and social insurance contributions, which determine disposable income and, therefore, affect most household budgets, are not covered by the CPI. In short, the

CPI is a price index, and not a cost of living index. The most important factor determining changes in the cost of living is the extent to which consumer prices of goods and services vary, and it is only this particular aspect of the cost of living which is measured by the CPI.

### Previous CPI Updatings

Despite changes in consumer tastes and preferences, standard of living, and the range of goods and services available on the market, household purchasing patterns generally change relatively slowly over time. It is this relative stability in the pattern of household purchases which permits the use of fixed weighting patterns for the isolation of price changes. However, these index weights must be periodically updated if they are to continue to be representative of current expenditure patterns. Five different weighting bases have been previously used in the compilation of the Irish index series since the foundation of the State in 1922. The main features of these five earlier index series are briefly described below.

#### (i) Index with base July, 1914 as 100 (2)

This was the first official index of consumer prices compiled for the country. It was introduced in respect of March, 1922. The weighting basis of the index represented the purchasing pattern of working class families in 1922 as derived from a Household Budget Inquiry conducted in June of that year. This index was compiled quarterly up to August, 1947. The weighting basis of this index was scheduled for revision during the late thirties, but plans for the necessary survey of household budgets had to be postponed because of the abnormal pattern of expenditure during the 1939-45 war years and subsequent period. As an interim measure an updated weighting basis was introduced in August, 1947 using alternative data sources.

#### (ii) Index with base mid-August, 1947 as 100 (3)

This second series was titled the *Interim Cost of Living Index (Essential Items)*. This index series was calculated for each quarter from mid-August, 1947 to mid-August, 1953. The weighting basis of the index related to the purchasing pattern of non-agricultural employee households. This was estimated from national income and expenditure data combined with the results of the *National Nutrition Survey* undertaken in 1946. By 1951 consumer expenditure had stabilised to what appeared to be normal post-war patterns and a largescale urban Household Budget Inquiry (4) was conducted during 1951-52 to provide up-to-date index weights.

- 
- (1) *Household Budget Survey, 1980, Volume 1 - Summary Results (Pl. 1221), December 1982.*
  - (2) *Report on the Cost of Living in Ireland, June 1922.*
  - (3) *Irish Trade Journal and Statistical Bulletin, June 1948.*
  - (4) *Household Budget Inquiry 1951-52 (Pr. 2520), 1954.*



(iii) *Index with base mid-August, 1953 as 100 (5)*

This index series was introduced at mid-November, 1953 and was compiled each quarter up to and including mid-November, 1968. While the interim index related only to non-agricultural employee households the weighting basis of the new index extended to *all urban households*. In addition, the coverage of the index was extended to include the full range of consumer goods and services. The longstanding title *Cost of Living Index* was also changed to the present official title *Consumer Price Index* to avoid any possible misunderstanding that the index measured changes in the cost of living rather than price changes only.

(iv) *Index with base mid-November, 1968 as 100 (6)*

This index series was introduced at mid-February, 1969 and was compiled each quarter up to mid-November, 1975. The weighting basis of the series related to the purchasing pattern of *all urban households* as determined from the results of the 1965-66 Household Budget Inquiry. (7) The number of separate articles priced was increased from 191 for the former series to 343. A revised national panel of retail and service outlets representative of the existing retail structure was selected. Prices were collected on both the old and new basis in two separate inquiries within fifteen days of each other during November, 1968. Careful account was taken of any price changes which occurred during this intervening period and appropriate adjustments were made to ensure that complete continuity was maintained.

(v) *Index with base mid-November, 1975 as 100 (8)*

This index series was introduced in February, 1976 and compiled each quarter up to mid-November, 1982. The weighting basis of the index was extended to *all households in the country (i.e. urban and rural)* as determined for the 1973 national Household Budget Survey (9). The number of articles priced was increased from 343 for the former series to 685. No major change was made to the panel of local shops in which these items were priced.

The updating of index weights is a long-term operation. To give adequate forewarning of changes in household purchasing patterns the CSO initiated a smallscale urban Household Budget Survey (10) in 1974 covering a random sample of about 1,600-2,000 households each year. Plans for the present index updating commenced with preparation in 1979 for a largescale national Household Budget Survey in 1980. The smallscale continuing survey was reintroduced in 1981 on a national basis, but it was suspended in 1982 as a result of economy measures.

#### Population Coverage

Since November, 1975 the CPI weighting is based on the purchasing patterns of all private households in the country. This is the segment of the population whose purchasing patterns determine the relative importance of goods and services in the index basket.

#### Coverage of Consumer Goods and Services

In principle, the CPI covers all consumer goods and services on which private households incur expenditure. This includes, for example:

house insurance; motor taxation and insurance; driving licences; subscriptions to clubs, societies, associations and trade unions; mortgage interest payments and credit purchase instalments.

Being a price index, the CPI cannot embrace goods and services which either have no price or cannot be priced and, on this basis, the following items of expenditure are excluded from the index coverage:-

- (i) church and charity donations;
- (ii) ground rent;
- (iii) personal cash allowances (11);
- (iv) lottery and betting payments.

Furthermore, since the CPI is based on the concept of household *expenditure* the following *non-cash* consumption items are also excluded:-

- (v) the value of own farm or garden produce consumed by households;
- (vi) social welfare and other benefits in kind;
- (vii) imputed rent of owner occupied dwellings.

Certain other items of expenditure are also outside the scope of the index even though they effect the living costs and budgets of many households, namely:

- (5) *Irish Trade Journal and Statistical Bulletin*. Dec. 1953.
- (6) *Irish Statistical Bulletin*, March 1969.
- (7) *Household Budget Inquiry, 1965-66 (Prl.266)*, August 1969.
- (8) *Irish Statistical Bulletin*, March 1976.
- (9) *Household Budget Survey, 1973*.  
Volume 1 - *Summary Results (Prl. 5415)*, May 1976.  
Volume 2 - *Detailed Results for All Households (Prl. 5808)*, November 1976  
Volume 3 - *Detailed Results for Urban Households (Prl. 5815)*, March 1977  
Volume 4 - *Detailed Results for Rural Households (Prl. 5816)*, March 1977
- (10) *Household Budget Survey: Annual Urban Inquiry Results for 1974 (nine months) and 1975 (Prl. 646)* July 1977  
*Results for 1976 (Prl. 6652)*, November 1977  
*Results for 1977 (Prl. 8229)*, September 1979  
*Results for 1978 (Prl. 8770)*, April 1980  
*Results for 1979 (Prl. 153)*, October 1981
- (11) *The 1980 Household Budget Survey distinguished both pocket money paid to children under fourteen years of age within the household and personal cash allowances to non-household members. The former was presumed to relate mainly to sweets, ice-cream and comics in the derivation of the index weights; the latter was excluded.*



(viii) life assurance premiums, pension contributions, mortgage capital repayments, repayments of other personal loans, capital expenditure in the outright purchase of a house, other forms of savings and investments;

(ix) social insurance contributions and income tax.

To avoid possible misinterpretation it must be emphasised that the exclusion (or inclusion) of an item from the CPI coverage does not necessarily result in the index being decreased (or increased). The CPI measures price change from one period to another; it does not measure absolute expenditure levels. The exclusion of an item is equivalent to including it in the CPI with its appropriate weight and attributing to it the *overall* price change of all other items combined (i.e. the calculated CPI change). Similarly, the inclusion of an additional item will increase (or decrease) the index only if the percentage change in its price is greater (or less) than that of the rest of the index, and then only in proportion to its weight in the fixed market basket.

#### Weighting Basis of Updated CPI

The weighting pattern of the updated CPI series now being introduced is based on the best available estimates of the current average weekly expenditure on consumer goods and services by all households in the country. These estimates were derived almost entirely from the results of the largescale national Household Budget Survey which was conducted by the CSO during 1980 specifically for this purpose. The survey covered a national representative sample of 7,185 private households throughout the country. Fieldwork commenced in December, 1979 and terminated in January, 1981.

The sample households which participated in the survey provided particulars of household composition, accommodation, facilities and regular household expenses (e.g. rent, electricity and gas expenses, etc.). Household members aged fifteen years and over also provided details of their income and regular personal expenditure (e.g. insurance premiums, motor tax, etc.) and maintained detailed records of their day-to-day expenditure over a period of fourteen consecutive days. A first report giving summary results of the survey was published in December 1982 (1).

The index weighting basis was derived from the results of the 1980 survey as follows:

- (i) Household expenditure relating to those items excluded from the CPI coverage was deleted.
- (ii) The retail value of own farm and garden produce consumed by households, summarised as both household income and expenditure in the survey, was eliminated from the headings affected. This was necessary because the CPI by definition does not cover *non-cash* household consumption.
- (iii) Estimates of the average household expenditure

on alcoholic drink derived from the Survey were replaced by figures derived from other sources. Expenditure on alcoholic drink was understated by more than 50 per cent in the survey. This is a common international phenomenon in surveys of this type. Accurate figures are, however, available from other sources for the total annual consumption of alcoholic drink in the country and, making due allowance for tourist expenditure, it was possible to derive a sufficiently reliable estimate of average weekly household expenditure for index weighting purposes.

- (iv) The survey results, which related to the calendar year 1980, were updated to mid-November, 1982 using the average percentage changes between 1980 and mid-November, 1982 in the prices of the individual items covered by the former index series. Accurate information was not available on any quantitative changes in the detailed pattern of household consumption during this period; no adjustments were made for this.

The value of the resulting CPI market basket was £183.82 at mid-November, 1982 price levels. It relates to an average household consisting of 3.72 persons.

#### Sampling Design of the CPI

The CPI is based on a pyramid of samples. As already described, the weighting basis of the index is derived from the expenditure patterns of a national representative sample of private households. Sampling procedures are also used in the quarterly collection of prices. It would be impossible to price every brand or variety of every item available in all retail and service outlets in the country on all days each quarter. In practice, it suffices to price *sample varieties* for a representative *sample of articles* in a national representative *sample of shops* on a single *sample day* each quarter. As the index is intended to reflect price change only, the samples of identical varieties and shops are retained for as long as possible during the life span of the series so that extraneous factors, unconnected with price change, which would otherwise affect the index calculations are strictly controlled.

#### Selection and Weighting of CPI Items

A fixed representative sample of specific items is chosen for regular quarterly pricing so that their price changes, appropriately weighted in combination, provide an accurate measure of the overall price movement of all consumer goods and services. In choosing the actual varieties to be priced the full range of goods and services covered by the index is first arranged into a logical system of broad commodity groups (e.g. household durable goods), and constituent categories of items (e.g. electrical appliances). At this stage, one or more of the constituent varieties (e.g. cookers, refrigerators, washing machines, etc.) is selected within each of these item categories on the basis of their relative importance, representative nature and suitability for regular pricing so that their price changes,



when appropriately weighted together, are representative of the average price change for the item category as a whole. The full index weight for an item category is distributed over the constituent priced varieties by a process of imputation whereby the weights relating to unpriced varieties are either added directly to the weight of similar varieties considered to exhibit the same price trend, or they are distributed proportionally over all priced varieties in the item category. From the statistical point of view this sampling and weight imputation approach gives as accurate an assessment of the price movement of the item category as a whole as would result if all constituent varieties were individually priced. In this fashion, the index reflects the price movements of the particular varieties priced and the related varieties which they represent - i.e. the full range of consumer goods and services covered by the CPI.

In introducing the present index the opportunity was taken to update the selection of varieties priced in the former series. Major changes were made only in the case of *clothing* and *household durable goods* where existing varieties were extensively revised largely to facilitate and improve pricing accuracy. A number of additional items (e.g. video recorders, video cassettes, digital watches, pocket calculators, diesel oil and liquid petroleum gas for cars) were also included to reflect recent market changes. The full listing of item categories covered by the present series and their corresponding percentage base expenditure weights are given in Appendix 1. A number of different varieties are priced for most items; these are listed as well. The total number of different varieties priced is 728; this is 19 more than the number priced in the former series.

In the present series a total of 374 varieties are priced locally. The remainder either involve single organisations (e.g. electricity, bus and rail services, posts and telegraphs), relate to small groups of companies (e.g. domestic gas, fuel oil, etc.), or cannot be conveniently priced at local level (e.g. doctors, dentists, opticians, regular subscriptions). These varieties are priced directly by the CSO in special postal and telephone inquiries. These direct inquiries are listed in Appendix 2.

#### Local Pricing Operation

The local pricing arrangements used for the former series has been continued without any major change. Pricing in the Dublin metropolitan area is completed by officials of the CSO. Prices for the remainder of the country are collected in 117 towns throughout the country in which local offices of the Department of Social Welfare are located; the pricing is completed by personnel attached to these local offices.

The 374 varieties priced locally are divided into three separate groups corresponding generally to particular types of shops. Three separate Price Booklets are used; one for each group, namely:-

*Booklet 1* (174 varieties) relates to food, drink, tobacco and household non-durable goods;

*Booklet 2* (143 varieties) relates to clothing and household durable goods;

*Booklet 3* (57 articles) relates to personal services, fuel, entertainment, and other articles.

The total number of these three types of Pricing Booklets and their distribution over towns of different sizes is summarised in Table 1. All towns with 10,000 or more inhabitants are covered and the number of Pricing Booklets completed in each is proportional to their population. Samples of the smaller towns are taken. Booklet 2 (i.e. clothing and household durable goods) continues to be priced only in the larger towns with more than 5,000 or so inhabitants since they account for the bulk of consumer expenditure on these items.

TABLE 1: Geographical Distribution of Pricing Booklets

Town Size (1981 population)	Towns		Number of Pricing Booklets		
	Total Number	CPI Sample	Type 1	Type 2	Type 3
Dublin and Dun Laoghaire	2	2	30	25	20
Cork, Limerick and Waterford	3	3	14	8	8
Other towns with 10,000 or more inhabitants	17	16	29	16	15
Towns with 5,000-10,000 inhabitants	35	24	20	24	17
Towns with 3,000-5,000 inhabitants	27	22	13	6	9
Towns with 1,500-3,000 inhabitants	40	19	76	-	13
Towns with under 1,500 inhabitants	435	31	17	-	14
<b>TOTAL</b>	<b>559</b>	<b>117</b>	<b>129</b>	<b>79</b>	<b>96</b>

Other than increasing the number of Price Booklet 2s for the Dublin region no significant change was made to the regional or town size distribution for the present series to avoid changing the long established existing pricing workloads of Social Welfare local offices. Town size classification is based on the 1981 Census of Population. As a result of this, towns with 3,000-5,000 inhabitants (1971 Census) completing Pricing Booklets 2 in the former series have largely been reclassified to the 5,000-10,000 inhabitants range (1981 Census) for the present series.

A fresh representative selection of local shops providing prices in each town was made to ensure that local retailing structures continue to be properly represented in the updated series. In Dublin, other cities and large towns Price Booklets were reassigned to more representative areas and some additional Booklets introduced to ensure better coverage and the proper representation of new shopping areas (e.g. suburban shopping centres). The total number of Price Booklets completed for the present series is 304. This is 7 less than the former series.

To ensure that *supermarket* and *non-supermarket* outlets are correctly represented each Price Booklet 1 is designated to one or other shop category using the results of the 1977 Census of Distribution. Price Collectors are required to price groceries and domestic supplies items in Booklet 1 in the specified shop types. Specialist items in this Booklet (e.g.



meat, fish, fresh fruit and vegetables, alcoholic drink) are priced in the most popular outlets selling these products in the locality.

### Pricing Procedures

Pricing procedures are based on the principle that an identical quality or brand of each selected variety must be priced as far as possible in the same shop on each occasion. The specifications of selected varieties are of a general nature which delineate a range of products (i.e. particular brands, qualities, sizes, etc.) from which individual Price Collectors are free initially to choose a specific product for regular pricing. For example, in the present series a selection of five different varieties is listed under the item category *toys*. One of these selected varieties is a *model car*. No further specifications are given and individual Price Collectors are free initially to select for regular pricing any of the different models marketed. The only restriction to their choice is that the particular model selected has to be popular, suitable for regular pricing and likely to be available in the long term. Once chosen initially, individual Price Collectors are obliged to price the identical product on each successive occasion. Because of the interval intervening between each such occasion and the possibility that different Price Collectors might be involved, the Price Booklets are specially designed so that the exact specification of each selected product is recorded to ensure that the identical set of articles is priced on each occasion as required.

In this system the specific products priced by different Price Collectors for a particular variety are not necessarily the same. This is not necessary since the index is concerned with measuring *price change* and not the absolute level of prices on each occasion. The method used ensures that the prices of different brands and qualities are collected in different places and, reflecting as they do local tastes and preferences, give a better representation of the price movements of the variety in question than would be realised if a single identical product was priced everywhere. A further advantage of this approach is that it facilitates the treatment of discontinuities which can occur in the quarterly sets of price quotations due to model and quality changes. If a Price Collector discovers that a particular product is no longer available an alternative popular article is substituted in its place. The Price Booklets are designed to allow the detailed specifications of this new product to be inserted. The particular discontinuity is restricted to a single Price Booklet and the relevant price is excluded from the index calculations until two consecutive quotations are again obtained for the identical product. Price Collectors are also allowed to substitute a new article in place of any original product which is in low supply or no longer in popular demand. However, the price of any particular product is used in the compilation of the index only when two consecutive price quotations are available for it.

A change in the shop surveyed is also regarded as a discontinuity and the prices for the particular products affected are not used in the index calculations until two

successive quotations are obtained from the same shop. The Price Booklets are designed so that the shop in which each particular product is priced is clearly identified. If a particular outlet can no longer be used (e.g. goes out of business, refuses to co-operate, etc.) the Price Collector replaces it with a similar popular shop in the same area.

### Price Quotations Collected

The prices collected are those which are actually paid by the consumer in cash transactions. Estimated, average or ranges of prices are not acceptable. The price quotations include indirect taxes. Credit charges are ignored and discounts are also excluded unless given to everybody. Special offer and sale prices are accepted if they were operative on the pricing day, but price quotations for shop-soiled, damaged or sub-standard articles being sold at clearance prices are not accepted. List prices are ignored unless they are actually charged to the consumer.

### November 1982 Updating of Pricing System

Two separate price collections were undertaken in November, 1982, namely:-

- (i) Tuesday, 9 November, 1982 when prices were collected for the last time on the former basis for the calculation of the final mid-November, 1982 index of the previous CPI series;
- (ii) Tuesday, 23 November, 1982 when prices were collected for the first time on the new updated basis to initiate the present CPI from mid-November, 1982 as 100.

The second price collection was necessary because prices had to be separately collected for the updated CPI item listings in revised local selections of shops. Account was taken of any general price increases during the intervening period so that the base date of the new series is Tuesday, 23 November 1982.

The representivity of the shops being used for the former series was completely reassessed. New popular shops were introduced, where necessary, to ensure that the pricing coverage for the updated CPI continued to be fully representative of local retailing structures. As mentioned earlier some existing Price Booklets were reassigned to more representative areas in the larger urban centres, and a number of additional booklets were introduced to improve the existing Dublin coverage. Changes also had to be made to ensure that the shop types used for Price Booklets 1 complied with the stipulated quotas of *supermarket* and *non-supermarket* outlets.

Price Collectors canvassed the co-operation of new shops and explained to existing shops being retained for the updated series why a second price collection was necessary within such a short period. They also had to initially choose,



in consultation with retailers, the specific locally popular and representative products to be priced for the updated set of varieties selected for the present CPI series. This was done without regard to what was priced previously so that the new products are fully representative of current consumer tastes and preferences. Price Collectors recorded the full specifications of these products, their prices and the shops in which they were priced on new Price Booklets. Approximately 3,000 retail and service outlets provide price quotations for the present series.

All Price Collectors were given full instructions on the updating arrangements at special regional conferences conducted by CSO officials. A permanent CSO representative was also appointed to give local instruction on a regular continuous basis and to build up a direct personal liaison with local Price Collectors in provincial areas.

### Postal and Telephone Pricing

The postal pricing inquiries undertaken for the present CPI series are listed and described in Appendix 2. All 31 postal inquiries conducted for the former series were retained with suitable revisions and updating. A number were amended or expanded, for example

- (i) *Education*: The existing coverage was extended to include *pre-school nurseries and play groups and examination fees*.
- (ii) *Transport*: The services covered were extended to include *school transport charges and car rental*.
- (iii) *Local Authority Charges*: With the abolition of domestic rates, water charges are surveyed separately for the current CPI.
- (iv) *Rents*: A direct rent inquiry covering a sample of 500 *privately rented dwellings* was initiated in the Dublin area using CSO staff. The existing postal inquiries were continued on an expanded basis for private rents in the rest of the country.
- (v) *TV and aerial rent*: The rental of *videos and video cassettes* was added to the existing coverage.

The following eight additional inquiries were initiated for the present CPI:

- (a) School milk charges
- (b) Milk delivery charges
- (c) School uniforms
- (d) Solid fuel bulk deliveries
- (e) Kitchen cabinets and units
- (f) Laundries (priced locally in former CPI)

(g) Credit purchase payments (methodology described later)

(h) Health insurance premiums

The inclusion of *health insurance premiums* arises from a change in the coverage of *hospital charges*. In the former CPI the weight for *hospital charges* represented the gross average weekly household expenditure on hospitalisation before deduction of any private health insurance refunds. In the present series the weight for *hospital charges* represents the net average weekly household expenditure after refunds and premiums for *private health insurance* are covered separately.

As in the former series, changes in *domestic service charges* are not reflected directly in the index because of the difficulty of obtaining representative details of the rates charged on a regular consistent bases. The relevant expenditure weight is distributed over related service items in the index.

### Correction for Seasonality in Some Prices

The prices of some fresh food items such as eggs, vegetables, fruit and some meat cuts fluctuate seasonally in varying degrees due to market forces of supply and demand. Using the *X-11 Variant of the US Bureau of the Census Method II Seasonal Adjustment Program* the quarterly trends in the prices of these items have been analysed. Taking their index weights into account, this analysis has shown that the seasonal fluctuations in the prices of only three items, namely eggs, potatoes and tomatoes, significantly affect the index. The inclusion of quarterly price changes for these items in the index calculations without adjustment would impair the use of the CPI for short-term comparisons since the sizeable seasonal fluctuations in these prices would make it unduly difficult to distinguish the underlying trends in price levels. The seasonal contributions of these three items continue, therefore, to be excluded from the CPI using the *X-11 Adjustment Program*.

There are other index items whose prices tend to change regularly at the same time each year simply because they are levied annually at that time. Examples of these items are school and university fees, annual subscriptions to clubs and societies, etc. The prices of dairy and some other agricultural products also tend to change annually as a result of EEC Common Agricultural Policy annual price reviews. Items with a high duty content (drink and tobacco) are also affected in this fashion by Budget changes. Price changes for these particular products and for other items with insignificant individual seasonal contributions are reflected in the CPI without adjustment. For this reason seasonality is not fully excluded from the CPI.

### Housing Costs

Being based on the concept of household expenditure the Consumer Price Index covers housing costs actually incurred. Specific account is taken of changes in the cost of



the following housing items:

- (i) Rent;
- (ii) Local Authority charges;
- (iii) House insurance (all dwellings);
- (iv) Repairs and decorations (all dwellings);
- (v) Mortgage interest payments (dwellings owned with mortgage);

In the case of mortgage interest the gross figure, (i.e. before deduction of income tax relief) is used. The capital element of mortgage payments is not included in the concept of household expenditure covered by the index as it is considered to relate to the acquisition of a valuable capital asset (i.e. the dwelling).

#### Price Indicator for Mortgage Interest Expenditure

Mortgage interest was first included in the CPI at the November, 1975 updating. The same methodology is continued without change for the present series. For a particular mortgage the interest payment at a given time depends on the rate of interest, which may be fixed or variable, and on the amount of the mortgage debt still outstanding. The amount outstanding, in turn, depends on the original size of the mortgage, which is linked to the level of house prices when the mortgage was taken out, and in most cases on the age of the mortgage. The fixed expenditure pattern covered by the index reflects the average mortgage interest costs of the full set of mortgages of varying ages, amounts and interest rates which existed in the base period.

As time progresses older mortgages are paid off. The original loans in these instances are quite small because they were entered into when house prices were low. They are replaced by very sizeable new mortgages being taken out at current high house price levels. By its nature mortgage interest expenditure, therefore, need a special type of price indicator. This indicator must measure the movement from one period to another of the cost of a fixed pattern of mortgages i.e. fixed in terms of age, composition, type of mortgage, etc.

The average interest cost at any time of the fixed pattern of mortgages covered by the index depends on a combination of interest rates and house prices over a long period of years prior to that time. It follows that the rate of change in the average interest cost of the fixed pattern of mortgages should reflect the rate of change in interest rates and house prices averaged over this period using appropriate retrospective weights. In practice there are three different types of mortgages, namely:

- (i) where the interest rate is variable and the loan is gradually paid off (i.e. Building Society mortgages);
- (ii) where interest rate is fixed and the loan is gra-

dually paid off (i.e. Local Authority mortgages);

- (iii) where interest rate is fixed and the full loan remains outstanding until the end of the mortgage term (i.e. Insurance Company mortgages);

Building Society and Local Authority mortgages are covered in the current index. The number of new Insurance Company mortgages has been low in recent years and they have not, therefore, been included.

Where the interest rates are variable (i.e. where the rate charged in all cases is the current rate of interest irrespective of the age of the mortgage) the appropriate indicator is the product of:

- (a) the index of current interest rates, and
- (b) the index of mortgage debt outstanding for the fixed age pattern of standard mortgages.

The latter indicator of mortgage debt outstanding is obtained as a weighted average of house price changes between successive periods where the relative weights decline with age of mortgage reflecting the gradual redemption of the mortgage over time.

For mortgages where the interest rate is fixed at the time of origin and subsequently remains unchanged somewhat similar averaging procedure is used, but in this case the change in the product of house prices and interest rates between successive periods is averaged. In applying the indicators outlined above the index used for house prices was obtained by linking the following series together:

*House Building Cost Index* compiled by the Department of the Environment from January 1975 to date;

*Wholesale Price Index* relating to the price of building and construction materials and labour rates compiled by the CSO from 1953-1975; and

*Consumer Price Index* for periods prior to 1953.

#### Credit Purchase Payments

Instalment payments on *hire purchase* and *credit sales* agreements are covered in the current CPI for the first time. These are legal contractual agreements for the purchase of a particular product. Household Budget Survey expenditure estimates for items where such agreements prevail include:

- (i) average weekly household expenditure on *outright cash purchases*;
- (ii) average weekly equivalent value per household of *down payments* made on *new* credit purchase agreements during the three months preceding the interview;



- (iii) average weekly instalment payments per household on *existing* credit purchase agreements (which are separately distinguished for major product categories).

Price indicators based on current cash prices are appropriate for cash purchases and down payments; a special price indicator is required for the credit purchase instalment payments using an extension of the methodology already being employed for mortgage interest.

In the case of credit purchase payments separate price indicators are required for

- (a) interest payments;
- (b) repayment of advances.

The price indicator used for interest payments is compiled exactly as in the case of mortgage interest using the standard life span of such agreements (2 or 3 years) and CPI price indicators for the relevant products. In a credit purchase agreement the interest rate is fixed and applies to the full advance for the duration of the agreement. A corresponding price indicator is compiled for the *repayment of advances* based on prices of the relevant products averaged over the fixed life span of credit purchase agreements for the products in question.

Credit purchase payments arise to a sizeable extent in the case of *domestic appliances, acoustic appliances, motor cars and motor cycles*. They have been distinguished for these four product categories in the present CPI series. The corresponding weights in other instances are combined with the expenditure weights relating to cash purchases and down payments for which price indicators based on cash prices are used in the normal manner.

#### Calculation of the Index

By definition the index expresses the *current* cost of a *fixed* market basket of consumer goods and services as a percentage of the cost of the *same* identical basket at the base period mid-November, 1982. (12)

Over 35,000 individual price quotations are collected, scrutinised and collated each quarter. National averages of the prices returned in respect of each sample variety are first calculated. These averages are compiled in two stages. Simple arithmetic average prices are first calculated within town size strata; these strata average prices are then combined into national averages using strata weights derived from the 1977 Census of Distribution. In the case of *Price Booklet 2 department stores* are segregated as a separate stratum so that their prices are incorporated in the national average with appropriate weighting. Complementary national average prices are recalculated for the preceding quarter using matched sets of quotations. The ratio of these directly comparable average prices gives the quarterly change in price which is used to update the previous quarter's cost of the fixed quantity of each index variety to give the current quarter's cost of the

constant basket. Indexes of price change can then be directly derived for all items or any combination of them by dividing their total current cost by their corresponding cost in the base quarter.

#### Published Results

The updated index presently being introduced with base mid-November, 1982 as 100, will, in future, be deemed the *official* Consumer Price Index. The separate indices calculated for the ten commodity groups distinguished in the former series will be continued, namely:

- (1) Food
- (2) Alcoholic drink
- (3) Tobacco
- (4) Clothing and footwear
- (5) Fuel and light
- (6) Housing
- (7) Durable household goods
- (8) Other goods
- (9) Transport
- (10) Services and related expenditure

An additional index will also be published for *energy products* covering fuel, light, petrol, motor diesel, motor gas (LPG) and motor oil. For continuity purposes each of these series will also be published to the former base mid-November, 1975 as 100.

(12) In technical terms the index is of the Laspeyres type with fixed weights, namely:

$$\frac{\sum q_0 p_c}{\sum q_0 p_0} \times 100$$

where:

- $q_0$  and  $p_c$  are the quantity (fixed) and average price of an item in the base (o) quarter;
- $p_c$  is the average price of the item in the current (c) quarter;
- $\Sigma$  represents summation over all index varieties.

A modified version of this formula is used for calculation purposes, namely:

$$\frac{\sum (q_0 p_{c-1}) \frac{p_c}{p_{c-1}}}{\sum q_0 p_0} \times 100$$

i.e. the current cost of the fixed quantity of each item is calculated by updating the previous quarter's cost by the quarterly change in average prices.



Comparable national average prices will also be published for successive quarters in respect of the specific products listed in Table 2 which are priced in all areas.

TABLE 2: CPI Products for which Comparable National Average Prices are published for Successive Quarters

Commodity	Unit	Commodity	Unit
<b>Food</b>			
<i>Beef:</i>		<i>Cheese:</i>	
Round steak	lb.	Irish cheddar	lb
Sirloin steak	"	Processed	½ lb
Rib steak	"	Butter	lb.
Leg beef (boneless)	"	Margarine (packet)	½ lb
Brisket pot roast (boneless)	"	<i>Eggs:</i>	
<i>Mutton:</i>		Large (grade 2)	doz
Whole leg	lb.	Standard (grade 4)	"
Loin chops	"	<i>Bread:</i>	
Gigot chops	"	White, sliced (large)	800g.
Neck	"	White, sliced (small)	400g.
Liver	"	<i>Flour:</i>	
<i>Pork:</i>		White, plain	2kg.
Whole leg	lb.	White, self-raising	"
Loin chops	"	Brown, wholemeal	"
Shoulder roast (boneless)	"	Sugar, white granulated	kg.
Steak	"	Jam	lb
<i>Bacon:</i>		Marmalade	"
Best back rashers	lb	<b>Other Products</b>	
Streaky rashers	"	<i>Drink taken home:</i>	
Ham, uncooked	"	Stout, 6 pack	6x½pt.
Shoulder, whole	"	Ale, 6 pack	"
Ham, cooked	"	Lager, 6 pack	"
<i>Other meat:</i>		<i>Drinks out:</i>	
Sausages, pork	lb	Draught stout (bar)	pint
Black pudding	"	Draught ale (bar)	½pint
<i>Fish:</i>		Draught lager (lounge)	½pint
Whiting fillets	lb	<i>Cigarettes:</i>	
Cod cutlets	"	Plain	20
Plaice fillets	"	Filter tipped	20
Kippers	"	Peat briquettes	Bale
<i>Fresh vegetables:</i>		<i>Motor fuel:</i>	
Potatoes	3½ lb	Petrol, grade 1	litre
Tomatoes	lb	Petrol, grade 2	"
Onions	"	Petrol, grade 3	"
Cabbage	head	Autodiesel	"
Mushrooms	¼ lb		
Milk, fresh, pasteurised	pint		

The bulk of the national average prices compiled for individual varieties covered by the index are not meaningful representative average prices for these varieties and cannot be used for such purposes. As explained earlier, individual Price Collectors are free initially to price particular popular products of their choice conforming in most instances to relatively broad variety specifications. Consequently, there is a wide variation in the qualities, brands, etc. for which prices are quoted under most variety headings. National average prices can, therefore, be published only for those varieties where the identical product is priced in all areas. Even in these cases the averages are not comparable for different dates because of changes in the number of shops providing quotations. This problem is avoided in the quarterly publications by providing *comparable* averages for both the current and previous quarters based on matched sets of quotations. The comparison of these compatible quarterly averages provides the percentage change actually used in the index calculations. This explains why the published average prices for the same quarter published at successive dates can marginally differ – i.e. they are based on different sets of quotations for the same quarter.

## Constant-Tax Price Index

The Constant-Tax Price Index, which is derived from the CPI data, has also been rebased to mid-November, 1982 as 100. This index excludes from the CPI any price movements due to changes since the base period in indirect taxation (i.e. VAT, fiscal duty, motor tax and registration). Even where an existing ad-valorem tax rate (e.g. VAT) remains fixed, a change in the pre-tax price of an item involves a proportionate change in the tax included in the final retail price. The effect of such implicit tax changes is also excluded.

The rebased Constant-Tax Price Index, therefore, measures the percentage change since mid-November, 1982 in the cost of the fixed CPI market basket excluding any increases in the indirect tax content during the intervening period.

Protective customs duties and licences are not treated as indirect tax in this context and no estimation is attempted for the effect on retail prices of changes in the indirect taxes borne directly by the business sector.

This index can be used in conjunction with the Consumer Price Index to determine how much of the overall price change in any period is due to indirect taxation (including ad-valorem effects) and how much is due to all other factors. For this purpose, absolute changes (i.e. index points) in both series expressed to the same base must be compared. Thus, for the mid-November, 1982 to mid-February, 1983 quarter, non-tax factors accounted for 0.9 index points (i.e. the change from 100.0 to 100.9 in the Constant-Tax Price Index) of the corresponding total 2.5 index points increase in the Consumer Price Index – i.e. 64 per cent of the quarterly change was due to indirect tax and the remaining 36 per cent due to other factors.

The original Constant-Tax Price Index, calculated to the former mid-November, 1975 base, is also being continued. This is a *separate series* which excludes from the former CPI series price movements due to indirect tax changes since its mid-November, 1975 base. It is calculated simply by adding to the final mid-November, 1982 index number (237.0) of the former Constant-Tax Price Index the points increase since that date in the present index (mid-November, 1982 as 100) rescaled to the mid-November, 1975 basis (by multiplying by 2.738 which is former CPI at mid-November, 1982 ÷ 100).

## Appendices

1. CPI item headings with corresponding percentage expenditure mid-November, 1982 base weights and constituent varieties priced.
2. CPI postal and telephone price inquiries.
3. CPI quarterly series, March 1922 – November 1982 (base July 1914 as 100).



## APPENDIX 1

CPI Item Headings, Percentage Expenditure Mid-November, 1982 Base Weights and Constituent Varieties Priced

Item Headings and % Expenditure Base Weights	Varieties Priced	Item Headings and % Expenditure Base Weights	Varieties Priced
<b>FOOD</b>		<b>FOOD—continued</b>	
Beef (2.5113)	(1) Round steak (2) Sirloin steak (3) Rib steak (or chuck) (4) Leg of beef (boneless) (5) Brisket pot roast (boneless) (6) Minced beef	Cheese (0.3201)	(1) Processed cheese (2) Natural cheese
Mutton and lamb (0.8244)	(1) Leg (whole) (2) Loin chops (3) Gigot chops (4) Neck (5) Liver	Eggs (0.5143)	(1) Large size (grade 2) (2) Standard size (grade 4)
Pork (0.5648)	(1) Leg (whole) (2) Loin chops (3) Shoulder roast (boneless) (4) Steak	Butter (0.7748)	Butter, creamery
Bacon (1.6069)	(1) Best back rashers (2) Streaky rashers (3) Ham, uncooked (whole) (4) Shoulder (whole)	Margarine (0.1598)	(1) Margarine, packet (2) Margarine, tub (soft)
Poultry (0.8115)	Chicken, uncooked	Other fats and oils (0.0860)	(1) Cooking fat (2) Cooking oil
Cooked meat (0.6349)	(1) Ham, cooked (2) Other cooked meat/mixture	Fresh fruit (0.7371)	(1) Apples, cooking (2) Apples, eating (3) Oranges (4) Bananas (5) Grapefruit
Sausages (0.4313)	Sausages, pork	Tinned fruit (0.1090)	(1) Tinned pears (2) Tinned peaches
Other meat (0.1339)	(1) Black pudding (2) Tinned meat (3) Beef burgers	Dried fruit (0.0946)	(1) Raisins, seedless (2) Sultanas
Fresh fish (0.2418)	(1) Whiting, fillets (2) Cod, cutlets (3) Plaice, fillets	Tea (0.3897)	(1) Tea, loose (2) Tea, bags
Frozen fish (0.1158)	(1) Fish fingers (2) Fish fillets	Coffee (0.1201)	Coffee, instant
Dried/cured fish (0.0265)	(1) Fillets, smoked (2) Kippers, smoked	Cocoa (0.0110)	Cocoa
Tinned fish (0.0616)	(1) Salmon (2) Sardines	Sugar (0.4840)	White, granulated
Potatoes (0.8432)	Potatoes	Breakfast cereals (0.3306)	(1) Cornflakes (2) Wheat - based breakfast cereal
Tomatoes (0.2047)	Tomatoes	Oatmeal (0.0528)	Oatmeal
Other fresh vegetables (0.3374)	(1) Onions (2) Cabbage (3) Cauliflower (4) Mushrooms (5) Lettuce	Other cereals (0.0615)	(1) Rice (2) Spaghetti
Dried vegetables (0.0324)	(1) Dried peas (2) Dried potatoes	Jellies (0.0459)	Jelly
Tinned vegetables (0.3139)	(1) Peas (2) Beans	Custard (0.0223)	Custard powder
Frozen vegetables (0.1066)	(1) Peas (2) Beans (3) Chips	Sauces and meat extract (0.1459)	(1) Salad cream (2) Sauce (3) Meat extract
Bread (1.3702)	(1) White, sliced (800g) (2) White, sliced (400g) (3) Brown (400g)	Soups (0.1728)	(1) Tinned soup (2) Dried soup
Flour (0.3014)	(1) White, plain (2) White, self-raising (3) Brown, wholemeal	Preserves (0.2308)	(1) Jam (2) Marmalade
Biscuits (0.6133)	(1) Cream crackers (2) Plain biscuits (3) Sweet biscuits (4) Crisp bread	Sweets and chocolate (0.9616)	(1) Box of chocolates (2) Sweets (3) Chocolate bar
Cakes (0.5079)	(1) Fruit cake (2) Swiss roll (3) Doughnut	Ice cream (0.3043)	(1) Ice cream, block (2) Ice Pop
Fresh milk (1.6305)	(1) Fresh milk, pasteurised - pint (2) Fresh milk, pasteurised - litre	Baby food (0.1011)	(1) Baby food (tin/jar) (2) Baby biscuits
Other milk products (0.2257)	(1) Condensed/powdered milk (2) Fresh cream (3) Baby milk compound (4) Yoghurt	Miscellaneous food items (0.2946)	(1) Salt (2) Mustard (3) Potato crisps (4) Fruit juice (5) Pizza, frozen
		Soft drinks (0.8768)	(1) Mineral, can (2) Mineral, large bottle (3) Concentrated squash (4) Mineral/cola, lounge bar
		Meals out (3.1086)	(1) Chips, small bag (2) School milk (3) Lunch, hotel or restaurant (4) Dining car, rail (5) Canteens
		<b>Total Food (24.9616)</b>	<b>126 varieties priced</b>



## APPENDIX 1—continued

Item Headings and % Expenditure Base Weights	Varieties Priced	Item Headings and % Expenditure Base Weights	Varieties Priced
<b>ALCOHOLIC DRINK</b>		<b>CLOTHING &amp; FOOTWEAR— continued</b>	
Beer (7.2086)	(1) Stout, 6 pack (2) Ale, 6 pack (3) Lager, <i>6 pack</i> (4) Stout, draught (bar) (5) Ale, draught (bar) (6) Lager, draught (lounge)	Boys' outer-clothing (0.3803)	(1) Casual jacket (2) Tracksuit (3) Jeans (4) Jumper
Spirits (4.2177)	(1) Whiskey, bottle (2) Brandy, bottle (3) Whiskey, 1 glass (bar) (4) Gin and tonic (lounge) (5) Vodka and white lemonade (lounge)	Girls' outer-clothing (0.4194)	(1) Duffle coat (2) Skirt (3) Dress (4) <i>BLOUSE</i> (5) School uniform
Wine (0.8498)	(1) Sherry, bottle (2) Table wine, bottle	Boys' under-clothing (0.0782)	(1) Shirt (2) Vest (3) Pyjamas (4) T-Shirt
<b>Total Alcoholic Drink (12.2761)</b>	13 varieties priced	Girls' under-clothing (0.0097)	Vest
<b>TOBACCO</b>		Hose (0.3232)	(1) Man's socks (2) Boy's socks (3) Woman's tights (4) Girl's socks
Cigarettes (3.1292)	(1) Cigarettes, plain (2) Cigarettes, filter tipped	Other clothing (0.1888)	(1) Man's handkerchief (2) Baby's nappies, cloth (3) Baby's suit
Cigars (0.0744)	Cigars	Material and haberdashery (0.2320)	(1) Dress material, woollen (2) Dress material, cotton (3) Knitting yarn (4) Thread, spool (5) Zip
Tobacco (0.2166)	Flake tobacco		
<b>Total Tobacco (3.4202)</b>	4 varieties priced	Men's footwear (0.6753)	(1) Leather uppers and leather soles (welted) (2) Leather uppers and non-leather soles (vulcanised) (3) Wellington boots (4) Casual shoes (i.e. runners)
<b>CLOTHING &amp; FOOTWEAR</b>		Women's footwear (0.7896)	(1) Casual shoe (2) Classic court shoe, leather upper (3) Fashion shoe, non-leather upper (4) Slippers, fabric uppers
<i>Men's outer-clothing—</i> Overcoats (0.1330)	(1) Heavy overcoat (2) Casual overjacket	Children's footwear (0.3729)	(1) Boy's shoe, leather (2) Girl's shoe, leather (3) Child's wellington boot (4) Child's casual shoe (i.e. runner)
Waterproofs (0.0335)	Cotton/terylene raincoat	<b>Total Clothing &amp; Footwear (8.0692)</b>	68 varieties priced
Suits (0.3995)	(1) 2-piece suit, wool (2) 2-piece suit, mixture	<b>FUEL &amp; LIGHT</b>	
Other men's outer-clothing (0.9173)	(1) Sports jacket (2) Jeans (3) Slacks (4) Pullover (5) Tracksuit	Firelighters (0.0863)	Firelighters
<i>Men's under-clothing—</i> Shirts (0.3422)	(1) Shirt, cotton/polyester (2) T-shirt	Coal (1.5060)	(1) Coal, take away bag (2) Coal, tonne (3) Anthracite, tonne
Other men's under-clothing (0.1112)	(1) Vests (2) Underpants (3) Pyjamas	Turf and briquettes (0.6224)	(1) Peat, briquettes (2) Turf, tonne
<i>Women's outer-clothing—</i> Overcoats (0.3286)	Coat	Bottled gas (0.4954)	Liquid petroleum gas (LPG)
Waterproofs (0.0410)	Showerproof, lined	Piped gas (0.3603)	Domestic piped gas
Costumes and suits (0.2755)	(1) 2-piece suit (2) Blazer/jacket	Electricity (2.2858)	Domestic electricity
Skirts and slacks (0.8765)	(1) Skirt (2) Slacks (3) Jeans	Fuel oil (0.7603)	Central heating oil
Other women's outer-clothing (0.9032)	(1) Blouse (2) Cardigan (low price) (3) Jumper	<b>Total Fuel &amp; Light (6.1165)</b>	10 varieties priced
<i>Women's under-clothing</i> Panties (0.0409)	Panties	<b>HOUSING</b>	
Slips (0.0386)	Slip	Rents (1.1777)	(1) Local Authority dwellings (2) Privately owned dwellings
Other women's under-clothing (0.1587)	(1) Girdle/pantigirdle (2) Brassiere (3) Nightdress	Local Authority charges (0.0271)	(1) Water charges (2) Other charges
		Mortgage interest (2.4938)	(1) Local Authority (2) Building Society
		House insurance (0.3235)	(1) Dwelling (2) Contents



## APPENDIX 1—continued

Item Headings and % Expenditure Base Weights	Varieties Priced	Item Headings and % Expenditure Base Weights	Varieties Priced
<b>HOUSING—continued</b>		<b>HOUSEHOLD DURABLES—continued</b>	
Repairs and decorations (1.6841)	(1) Paint, gloss (2) Paint, emulsion (3) White spirit (4) Gravel (5) Sand (6) Cement (7) Concrete block, solid (8) Concrete block, hollow (9) Paving slabs (10) Wall cappings (11) Timber (12) Chipboard (13) Hardboard (14) Plasterboard (15) Glass (16) Paint Brush	Other household durables (0.0698)	Wash-up basin, plastic
		Total Household Durables (5.1317)	70 varieties priced
<b>Total Housing (5.7062)</b>	24 varieties priced	<b>OTHER GOODS</b>	
<b>HOUSEHOLD DURABLES</b>		Household soap (0.0120)	Household soap
Furniture (1.1734)	(1) 3 - piece suite (2) Dining chair (3) Dining table (4) Kitchen table (5) Kitchen chair (6) Chest of drawers (7) Divan bed (8) Dropside cot (9) Kitchen units	Detergent powder (0.4099)	(1) Automatic washing machine (2) Dishwasher
Acoustic appliances (0.4470)	(1) Clock radio (2) Radio-cassette recorder (3) Hi-fi (4) TV, portable, monochrome (5) TV, colour (6) Video recorder/player (7) Credit purchases	Other cleaning material (0.1436)	(1) Household cleaner (2) Domestic disinfectant (3) Nappy disinfectant
Other electric/gas appliances (0.7135)	(1) Vacuum cleaner (2) Cooker, electric (3) Cooker, gas (4) Fridge - freezer (5) Deep freeze (6) Dish washer (7) Automatic washing machine (8) Tumble dryer (9) Bottle gas heater (10) Fan heater (11) Iron (12) Kettle (13) Razor (14) Toaster (15) Hair dryer (16) Slow cooker (17) Deep-fat fryer (18) Food mixer (19) Sewing machine (20) Credit purchases	Other domestic non-durables (0.5555)	(1) Plastic rubbish bags (2) Kitchen paper, roll (3) Polish, shoe (4) Toilet paper (5) Matches (6) Cling film (7) Household lubricating oil (8) Household adhesive
Electrical repairs and spares (0.5550)	(1) Battery (2) Electric plug, 3 point (3) Electric light bulb (4) Electrical repair charges (5) TV repair charges	Toilet Soap (0.0792)	Toilet soap
Other appliances (0.3612)	(1) Power drill (2) Lawnmower, powered	Toothpaste (0.0629)	Toothpaste
Other ironmongery and hardware (0.3044)	(1) Chisel (2) Garden spade (3) Flower pot, plastic (4) Dustbin	Hair applications (0.1256)	Shampoo
Floor coverings (0.5465)	(1) Vinyl (2) Carpet, wool/mixture (3) Carpet, synthetic	Cosmetics (0.3307)	(1) Shaving cream (2) Baby powder (3) Cold cream (4) Lipstick (5) Perfume (6) Deodorant
Soft furnishings, etc. (0.6624)	(1) Curtain material (2) Sheet (3) Blanket, wool (4) Blanket, synthetic (5) Continental quilt (6) Continental quilt cover (7) Bath towel (8) Tea towel	Toilet accessories (0.3351)	(1) Sanitary towels/pads (2) Disposable nappies (3) Paper tissues (4) Toothbrush (5) Razor blades
Crockery and glassware (0.1674)	(1) Coffee mug (2) Dinner service (3) Tumblers, set of six (4) Casserole dish	Personal goods (0.6001)	(1) Suitcase (2) Umbrella, man's (3) Digital wristwatch (4) Pocket calculator (5) Cigarette lighter
Cutlery (0.0162)	(1) Table knife (2) Carving knife	Sporting goods (0.1594)	(1) Golf ball (2) Tennis ball (3) Football, leather (4) Tennis racket
Kitchen utensils (0.0843)	(1) Saucepan (2) Frying pan (3) Pressure cooker	Toys (0.4732)	(1) Child's doll (2) Model car (3) Building set (4) Group game (5) Child's toy
Household brushes (0.0306)	(1) Household sweeping brush (2) Polish brush	Paper goods (0.0721)	(1) School copybook (2) Envelopes (3) Refill pad
		Stationery equipment (0.0692)	(1) Cellotape (2) Pencil, black lead (3) Felt markers (4) Ball-point pen
		Comics (0.1659)	(1) Infant's book (2-4) Comics (3)
		Magazines and journals (0.1723)	(1-4) Woman's (4) (5-11) Other (7)
		Newspapers (1.0843)	(1-7) Dailies - national (7) (8-13) Dailies - foreign (6) (14-25) Provincial (12) (26-28) Sunday - national (3) (29-35) Sunday - foreign (7)
		Books (0.3272)	(1) Primary school (selection) (2) Secondary school (selection) (3) Third level (selection) (4) Paperback (novels) (5) Encyclopaedias



## APPENDIX 1—continued

Item Headings and % Expenditure Base Weights	Varieties Priced	Item Headings and % Expenditure Base Weights	Varieties Priced
<b>OTHER GOODS—continued</b>		<b>TRANSPORT—contd.</b>	
Records, tapes and cassettes (0.3128)	(1-2) Records, LP (2) (3) Record, single (4) Cassette, pre-recorded (5) Cassette, blank (6) Video cassette, blank	Train fares (0.2095)	(1) Main line services (sample of routes/ticket types) (2) Suburban services
Photographic goods and services (0.1964)	<i>Films—</i> (1) 35 mm film for colour slides (2) 110 colour film <i>Development charges—</i> (3) Express film development (4) 110 colour prints <i>Cameras—</i> (5) Instamatic pocket camera (6) 35 mm camera	Other travel (0.3943)	(1) Taxi fares, Dublin City (2) Taxi fares, Cork City (3) Car hire charges (4-6) Boat fares (3 routes) (7-17) Air fares (11 routes)
<b>Total Other Goods (5.6876)</b>	116 varieties priced	<b>Total Transport (16.6974)</b>	92 varieties priced
<b>TRANSPORT</b>		<b>SERVICES &amp; RELATED EXPENDITURE</b>	
Motor cycles (0.0604)	(1-3) Motor cycles, new (3 models) (4) Credit purchases	Cinema (0.2268)	Cinema
Motor cars (4.7460)	(1-30) Motor cars, new (30 models) (31) Credit purchases	Dancing (0.6304)	Dance admission
Other vehicles (0.2849)	(1) Go-car or baby buggy (2) Bicycle	Other entertainment (0.6583)	<i>Sports admission charges—</i> (1) GAA matches (2) Soccer matches (3) Rugby matches (4) Dog racing (5) Horse racing  <i>Sports participation charges—</i> (6) Golf, green fees (7) Swimming (8) Squash  <i>Other admission charges—</i> (9) Dublin Zoo (10) Historic places (11) Ballad sessions (12) Theatre and concerts
Motor tax and registration (0.3994)	(1) Motor cycles (2) Motor cars	Education and training (1.0661)	<i>Primary level fees—</i> (1) Play/nursery schools (2) Private primary schools  <i>2nd level fees—</i> (3) Vocational schools (4) Secondary day schools (5) Secondary boarding schools  <i>3rd level fees—</i> (6) Universities (7) Other 3rd level institutions  <i>Living cost away from home—</i> (8) University Residences (9) Boarding houses (10) Flats  <i>Other education—</i> (11) Language course, cassette (12) Language course, classes (13) Driving lessons, day (14) Driving lessons, night (15) Music lessons (16) Commercial courses (17) Extra mural courses (18) Examination fees (19) Applications fee for 3rd level institutions
Motor insurance (1.8281)	<i>Motor cycle cover—</i> (1) Two hypothetical risks <i>Motor car cover—</i> (2) 3rd party, selection of risks (3) 3rd party, fire and theft, selection of risks (4) Comprehensive, selection of risks	Doctors', dentists', opticians' fees (0.5228)	<i>Doctors' fees—</i> (1) Surgery consultation (2) House calls, weekday (day) (3) House calls, weekday (night) (4) House calls, weekend (5) Specialists' fees  <i>Dentists' fees—</i> (6) Extraction (7) Filling (8) Scaling and polishing  <i>Opticians' fees—</i> (9) Eye test
Motor fuel (6.0932)	(1) Petrol - grade 1 (2) Petrol - grade 2 (3) Petrol - grade 3 (4) Motor gas (LPG) (5) Diesel		
Motor oil (0.1308)	Motor oil		
Spare parts (0.8088)	(1) Motor car tyres - cross ply (2) Motor car tyres - radial (3) Batteries (4) Set of spark plugs (5) Dynamo (6) Fan belt (7) Bicycle tyres (8) Set of points (9) Oil filter (10) Air filter (11) Alternator		
Repairs and maintenance (1.0077)	(1) Car service (2) Puncture repair (3) Car wash		
Other vehicle costs (0.0247)	(1) Parking fees (2) Parking fine (3) Motoring organisation subscriptions		
Bus fares (0.7096)	(1) Dublin City services (2) Cork City services (3) Limerick City services (4) Waterford City services (5) Galway City services (6) Provincial services (7) School bus fares		



## APPENDIX 1—continued

Item Headings and % Expenditure Base Weights	Varieties Priced	Item Headings and % Expenditure Base Weights	Varieties Priced
<b>SERVICES &amp; RELATED EXPENDITURE—contd.</b>		<b>SERVICES &amp; RELATED EXPENDITURE—contd.</b>	
Medicines and drugs (0.6475)	(1-74) Representative selection of 74 pharmaceutical products (75) Pain Reliever (76) Milk of magnesia (77) Petroleum jelly (78) Adhesive dressing (79) Proprietary cough mixture	Postage (0.2103)	(1) Post cards (2) Letters, local (3) Letters, overseas (4) Parcels, local (5) Parcels, overseas
Hospital Charges (0.2141) (net of health insurance refund)	<i>Maintenance—</i> (1) Public ward (2) Semi-private room (3) Private room <i>Other Services—</i> (4) Operating theatre fee (5) Pathological test (blood) (6) Pathological test (urine) (7) X-ray (8) Blood transfusion (9) Other hospital charges	Telephone and telegrams (0.8327)	(1) Private phone (2) Public phone, local call (3) Public phone, trunk call (4) Telegrams
Other medical expenses (0.7937)	(1) Spectacle lenses (2) Full dentures (3) Health insurance	Club/society contributions (0.3129)	(1) Golf clubs (2) Rugby clubs (3) Other clubs
Hairdressing (0.6494)	(1) Man's hair cut (2) Woman's shampoo and set (3) Woman's shampoo, cut and blow dry	Trade Unions/professional association contributions (0.2476)	(1) Trade union (2) Civil service associations
Shoe repairs (0.1529)	(1) Man's shoe, soling and heeling (2) Woman's shoe, heeling	TV and aerial rental (0.6165)	<i>TV Rent—</i> (1) Coloured sets - new agreements (2) Coloured sets - 2 year old agreements
Laundry and dry-cleaning (0.3153)	<i>Laundry—</i> (1) Blanket (2) Pillowcase (3) Sheet (4) Tablecloth (5) Towel (6) Shirt (7) Nightdress (8) Lady's apron (9) Handkerchief <i>Launderette—</i> (10) Washing, basic charge <i>Dry-cleaning—</i> (11) Charge for man's suit (12) Charge for woman's coat	Licences (0.3219)	<i>Video Rent—</i> (3) New agreement <i>Video Club—</i> (4) Membership fee (5) Feature film rental <i>Communal aerial—</i> (6) Subscription charge
Other services (0.2601)	(1) Dress hire - morning suit (2) Dress hire - evening suit (3) Newspaper advertisement (4) Repair of zip (5) Cleaning of watch (6) Milk delivery charge (7) Ear piercing (8) Passport photograph (9) Furniture removal (10) Chimney sweeping (11) Tool hire	Hotel and guest house accommodation charges (0.1549)	(1) Monochrome TV licence (2) Coloured TV licence (3) Provisional driving licence (4) Full driving licence (5) Dog licence (6) Gun licences (7) Fishing licences
		Expenditure abroad (1.9336)	(1) Hotels (2) Guest houses
		Other expenditure (1.1658)	Expenditure abroad (1) Dog food (2) Peat moss (3) Garden fertiliser (4) Driving test fee (5) Passport fee (6) Birth certificate fee (7) Bank charges (8) Flowers
		<b>Total Services &amp; Related Expenditure (11.9335)</b>	199 varieties priced
		<b>Total All Items (100.0000)</b>	722 varieties priced



## APPENDIX 2

## Postal and Telephone Price Inquiries

- (1) *Meals out:* Prices for canteen meals, and meals in rail dining cars are surveyed by post each quarter to supplement the prices for hotel and restaurant meals surveyed locally by Price Collectors. This enquiry has been extended for the present series to include school milk charges (take-away food has also been added to the local price inquiry).
- (2) *School uniforms:* Prices for school uniforms are obtained every November from a sample of suppliers.
- (3) *Solid fuel (bulk deliveries):* Details of prices for bulk deliveries of coal, turf, anthracite etc. are obtained every quarter from a representative sample of local fuel merchants.
- (4) *Domestic gas:* The principal gas companies are contacted by post each quarter for details of any changes in their domestic tariffs.
- (5) *Electricity:* The Electricity Supply Board provides an estimate of the overall percentage change in their domestic electricity rates each quarter.
- (6) *Domestic fuel oil:* The principal oil companies are contacted by post each quarter for details of any changes in their consumer prices for central heating fuel oils.
- (7) *Rents:* Changes in the average level of the rents paid by Local Authority tenants are incorporated in the index each quarter. Calculations are based on details of the total number of such dwellings and the aggregate rents paid obtained directly from each local administrative area. Changes in the level of rents charged in respect of privately owned dwellings are also taken into account each quarter. Details of the rent charged for a fixed selection of dwellings are obtained in a quarterly postal inquiry addressed to a sample of tenants outside the Dublin area. A special direct inquiry using CSO staff, has been initiated in the Dublin area for the present series.
- (8) *Local Authority charges:* Changes in the annual rates of water charges are obtained from Local Authorities throughout the country each May.
- (9) *Mortgage interest repayments:* The mortgage interest rates being charged by Building Societies and Local Authorities are surveyed by post each quarter for the estimation of changes in the interest cost of house purchase mortgages (as described in the text). Capital repayments are not covered.
- (10) *House insurance:* Details of the standard insurance rates per £ value for private dwellings and contents are obtained from the Irish Fire Officers' Committee. Changes in the insured value of dwellings is taken into account each quarter using the House Building Cost Index published by the Department of Local Government. The relevant component of the CPI is used to update the value of house contents for this purpose.
- (11) *House repair and decoration supplies:* The prices of a representative selection of materials for home repairs and decorations are obtained quarterly by postal inquiry from a national sample of Builder's Providers.
- (12) *Built-in kitchen furniture:* Prices for a number of built-in kitchen furniture units are obtained from a selection of specialist suppliers each quarter.
- (13) *Credit purchase:* Credit purchases of
  - acoustic appliances
  - household appliances
  - motor cars
  - motor cycles
 have been included for the first time in the present series. Details of interest rates are obtained quarterly from the relevant financial institutions.
- (14) *Electrical/TV repair charges:* Details of rates charged by the Electricity Supply Board and a selection of other firms are surveyed quarterly.
- (15) *Newspapers and periodicals:* The prices of all the principal national, provincial and foreign newspapers, and of a comprehensive selection of periodicals are obtained each quarter.
- (16) *Text books:* The prices charged for a representative selection of primary, secondary and third level text books are obtained by post each quarter from a sample of booksellers. The inquiry has been extended for the present series to cover encyclopaedias.
- (17) *Motor vehicles:* Estimates of the quarterly change in price levels are based on changes in the list prices of a comprehensive selection of new motor vehicles and of a number of new motor cycles.
- (18) *Motor insurance:* Details of the actual premium charged in respect of a representative selection of hypothetical motorists are obtained from a number of leading Motor Insurance Companies each quarter.
- (19) *Motor car tyres and parts:* The prices of a selection of crossply and radial tyres are obtained by post each quarter from a sample of specialist dealers. Prices of batteries, dynamos, fan-belts, spark plugs, points, air filters, oil filters and alternators are similarly got from a selection of motor accessory shops. These items are also surveyed in the postal inquiry addressed to garages for motor maintenance charges.



## APPENDIX 2—continued

- (20) *Motor vehicle maintenance*: A national sample of major garages is surveyed by post each quarter for details of the actual amounts charged for a standard service to specified motor vehicle models. This inquiry also covers motor tyres and a range of motor parts.
- (21) *Other motoring expenses*: Details of parking fees, parking fines, driving test fees and subscription to motoring organisations are obtained quarterly from the relevant authorities.
- (22) *Transport*: When fares change Coras Iompair Eireann (C.I.E.) provides estimates of the overall percentage changes for city and provincial bus services and suburban rail services. Changes in the fares charged for mainline rail passenger services are monitored on a regular quarterly basis using a large representative selection of routes and ticket types. Particulars of the fares charged for a representative selection of air and sea journeys are obtained each quarter from the relevant companies. Taxi fares charged for a specific journey in Dublin and Cork are also covered quarterly. The inquiry has been extended for the present series to cover the quarterly changes in the cost of school transport and the hire of self-drive cars.
- (23) *Miscellaneous admission charges*: The existing postal coverage of admission charges for sports fixtures, ballad sessions, etc. has been extended for the present series to include historic places, cabarets, theatres and concerts. Cinema and dance/disco admission charges are surveyed locally by Price Collectors.
- (24) *Education*: Details of the fees charged to students are obtained by postal inquiry each November from a representative selection of the fee-charging primary, secondary day and secondary boarding schools and from third level institutions. Particulars are also obtained of the fees charged in respect of vocational education courses not covered by the free post-primary education scheme. The inquiry also covers language courses and driving lessons. It has been extended for the present series to cover play/nursery schools, music lessons, secretarial courses and fees for examinations and application for university courses.
- (25) *Student living costs away from home*: The rates charged for a fixed selection of student boarding houses, flats and halls of residences in Dublin, Cork and Galway are obtained quarterly with the assistance of the local Universities.
- (26) *Doctors', dentists' and opticians' fees*: The fees charged by national samples of general practitioners, physicians, gynaecologists, ophthalmologists, dentists and opticians are surveyed by post each quarter.
- (27) *Pharmaceutical products*: Actual prices charged by a sample of Chemist Shops throughout the country for a representative list of pharmaceutical products are obtained by post quarterly.
- (28) *Hospital charges*: The prices charged for maintenance and representative services (e.g. X-ray, laboratory tests, etc.) by a representative sample of different types of hospitals are surveyed directly each quarter by postal inquiry. As explained in the text, the expenditure weight of this item is net of health insurance refunds. Gross expenditure weights were used in the former series.
- (29) *Miscellaneous medical expenses*: The prices of spectacle lenses and dentures are also surveyed in the quarterly postal inquiries addressed to opticians and dentists, respectively.
- (30) *Health insurance*: Details of the premiums payable for a fixed cover are obtained quarterly from the Voluntary Health Insurance Board. This item has been included for the first time in the present series because the expenditure weight for hospital cost is net of health insurance refunds (see text).
- (31) *Milk delivery charges*: Milk delivery charges, which exist only in the Dublin area at present, have been added to the index coverage.
- (32) *Miscellaneous services, etc.*: Quarterly changes in the prices charged for dress-suit hire, newspaper advertisements, bank charges and fees for birth certificates and passports are covered by this inquiry. The inquiry has been extended for the present series to cover household services such as chimney cleaning, removal services, tool hire and personal services such as ear piercing and passport photographs.
- (33) *Postage, telephone and telegrams*: Details are obtained directly from the Department of Posts and Telegraphs on the occasion of any changes in their tariffs.
- (34) *Regular subscriptions*: Details of subscription rates are obtained quarterly in respect of Trade Unions and Civil Service Associations, and annually in respect of representative samples of golf, rugby and squash clubs, together with a number of recreational and academic societies.
- (35) *Television rents*: Particulars of rental charges are obtained on a quarterly basis from a selection of TV rental companies. The inquiry has been extended for the present series to cover the rental of video recorders/players, video club membership fees and video cassette rental.
- (36) *Licences*: Changes in the cost of driving, television and dog licences are obtained from the relevant authorities when rates change. Fishing and gun licences have been added for the present series.
- (37) *Expenditure abroad*: This item covers the total cost (including travel) of foreign holidays at least four nights away from home and all other private expenditure incurred abroad (see definition in 1980 Household Budget). The quarterly price indicator used reflects changes in air/sea fares, in the cost of packaged hotel/apartment holidays abroad offered by Irish tour operators, and in the prices charged in the U.K. and popular continental tourist countries for food, drink, meals out and travelling as shown by the relevant national consumer price indices.



## APPENDIX 3

Consumer Price Index, 1922-1983  
(Base: July 1914 as 100)

Year	Periods				Average Annual Index	Year	Periods				Average Annual Index
		Mid-March	Mid-June	Mid-Oct.			Mid-Feb.	Mid-May	Mid-Aug.	Mid-Nov.	
1922	-	191	185	189	188	1951	329	348	354	360	348
						1952	364	367	389	392	378
	Mid-Jan.	Mid-April	Mid-July	Mid-Oct.		1953	392	402	399	399.1	398.0
1923	190	181	180	186	184	1954	396.4	396.8	403.1	400.7	399.2
1924	188	178	183	193	186	1955	403.5	406.7	409.5	418.7	409.6
1925	195	188	188	188	190	1956	420.7	428.7	429.9	428.7	427.0
						1957	429.5	440.2	455.0	453.8	444.6
1926	188	180	182	189	185	1958	460.2	464.9	466.1	466.1	464.3
1927	182	171	171	175	175	1959	469.3	468.9	461.0	458.2	464.4
1928	177	170	173	176	174	1960	460.2	467.3	467.3	470.9	466.4
1929	177	173	174	179	176						
1930	179	168	168	168	171	1961	474.1	479.7	480.5	482.9	479.3
						1962	491.7	504.4	502.0	500.8	499.7
	Mid-Feb.	Mid-May	Mid-Aug.	Mid-Nov.		1963	509.2	508.0	507.6	523.2	512.0
1931	164	156	157	165	160	1964	526.0	546.7	553.5	559.4	546.4
1932	162	159	153	155	157	1965	565.4	575.4	577.4	577.4	573.9
1933	151	148	149	156	151	1966	577.8	588.6	598.1	599.7	591.0
1934	152	149	152	157	152	1967	600.5	610.9	611.3	615.3	609.5
1935	153	151	156	162	156	1968	628.0	638.0	639.2	648.8	638.5
						1969	670.2	681.9	692.9	698.1	685.8
1936	159	157	159	166	160	1970	709.8	738.9	751.3	768.1	742.0
1937	167	167	170	177	170						
1938	173	171	173	176	173	1971	780.5	801.9	817.4	834.3	808.5
1939	174	172	173	192	178	1972	853.1	866.1	890.1	903.1	878.1
1940	197	204	206	214	205	1973	938.8	967.3	990.0	1,017.3	978.4
						1974	1,065.3	1,124.3	1,167.1	1,221.0	1,144.4
1941	218	220	228	237	226	1975	1,318.9	1,399.4	1,388.4	1,426.6	1,383.3
1942	237	240	250	273	250						
1943	273	275	284	294	281	1976	1,530.8	1,626.4	1,650.6	1,720.5	1,632.1
1944	296	292	296	296	295	1977	1,786.1	1,853.2	1,873.2	1,906.0	1,854.6
1945	295	292	293	298	294	1978	1,933.1	1,967.3	2,027.3	2,057.2	1,996.2
						1979	2,142.8	2,211.3	2,302.6	2,385.3	2,260.5
1946	294	287	288	293	290	1980	2,475.2	2,657.8	2,736.3	2,820.5	2,672.4
1947	295	305	319	309	307						
1948	316	319	316	316	317	1981	2,994.5	3,111.5	3,287.0	3,478.1	3,217.8
1949	316	316	319	319	318	1982	3,559.5	3,764.9	3,844.8	3,906.1	3,768.8
1950	319	325	319	325	322	1983	4,003.8				



# STATE OF NEW YORK

IN SENATE,

January 10, 1901.

REPORT

OF THE

COMMISSIONERS OF THE LAND OFFICE,

IN RESPONSE TO A RESOLUTION PASSED BY THE SENATE,

APRIL 18, 1899.

ALBANY:

WILLIAM H. SAWYER, STATE PRINTER,

1901.

Price, 50 CENTS.

For sale by the State Printer.

Entered as Second-Class Matter, May 1, 1896.

Postpaid.

Acceptance for mailing at special rate of postage provided for in Act of October 3, 1917.

Authorizes sale at special rate of postage.

Postpaid.

For sale by the State Printer.

Price, 50 CENTS.

For sale by the State Printer.

Price, 50 CENTS.

For sale by the State Printer.

Price, 50 CENTS.

For sale by the State Printer.

Price, 50 CENTS.

For sale by the State Printer.

Price, 50 CENTS.

For sale by the State Printer.

Price, 50 CENTS.

For sale by the State Printer.

Price, 50 CENTS.

For sale by the State Printer.

Price, 50 CENTS.

For sale by the State Printer.

Price, 50 CENTS.

For sale by the State Printer.

Price, 50 CENTS.

For sale by the State Printer.

Price, 50 CENTS.

For sale by the State Printer.

Price, 50 CENTS.

For sale by the State Printer.

Price, 50 CENTS.

For sale by the State Printer.

Price, 50 CENTS.

For sale by the State Printer.

Price, 50 CENTS.

For sale by the State Printer.

Price, 50 CENTS.

For sale by the State Printer.

Price, 50 CENTS.

For sale by the State Printer.

Price, 50 CENTS.

For sale by the State Printer.

Price, 50 CENTS.

For sale by the State Printer.

Price, 50 CENTS.

For sale by the State Printer.

Price, 50 CENTS.

For sale by the State Printer.

Price, 50 CENTS.

For sale by the State Printer.

Price, 50 CENTS.

For sale by the State Printer.



