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An Phríomh-Oifig Staidrimh

Consumer Price Index

Introduction of Updated Series (Base: December 2006=100)

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Chapter 1 Introduction

1.1 Overview

This manual describes the regular updating, of the Consumer Price Index (CPI) and the procedures applied by the Central Statistics Office (CSO) to produce the CPI, the Harmonised Index of Consumer Prices (HICP) and associated price indices.

This manual is designed for users who wish to know the concepts and statistical methods underlying the different indices and how the data are collected. While it does not attempt to go into every detail, which would require a publication many times the size of this one, it will address many of the questions that the CSO is usually asked about consumer price indices' methodology and practice.

This manual is mostly written in terms of the CPI but most of the methods and procedures in Chapter 2 to 7 are also applicable to the HICP. The two indices are calculated from the same underlying price data, although they differ in a number of respects. These differences are described in Chapter 8.

1.2 Description and definition of the CPI

All the goods and services that consumers purchase have a price and that price may vary over time. Consumer price indices are designed to measure such changes. A useful way to understand the nature of these indices is to imagine a very large shopping basket comprising of a fixed set of goods and services bought by a typical private household (i.e. Laspeyres index formula). The quantity of each item in this basket is proportional to the average amount purchased by all private households in the country as determined by the Household Budget Survey (HBS). As the prices of individual items in this basket change, the total cost of the basket will change - the consumer price indices measure the change from month to month in this total cost.

No two households spend their money in exactly the same way. Each household's or person's experience will be different. The CPI and HICP are measures of average inflation, based on average household expenditure on the items in the shopping basket.

The CPI is technically defined as an *average measure of change* in the prices of *goods and services* bought for the purpose of *consumption* by *all private households* in the country and by *foreign tourists* on holiday in Ireland.

There are several important points to note in this definition:

- *average measure*: a single figure that combines, or averages, all of the price changes covered.
- *change*: its purpose is to measure how prices change over time, not absolute levels of prices.
- *goods and services*: it does not just measure price change for essentials like food, heating and clothing but a wide variety of things purchased by most households.
- *consumption*: not for the purpose of investment. Also, because they are not consumed, savings and taxes are excluded (section 1.8.3).
- *private households & foreign tourists*: it measures price changes affecting private households, but excludes price changes that only affect businesses or Government. People living in institutions are also excluded but foreign tourists spending money in Ireland are included (section 1.8.2). This coverage is referred to as the domestic concept.

1.3 CPI is not a Cost of Living Index

The CPI measures price change. It is specifically designed *not* to take into account changes made by households to their pattern of expenditure (e.g. switches from expensive meat cuts to cheaper cuts, or vice versa) in response to changes in prices, income levels, family composition, tastes, consumer preferences or market conditions. Furthermore, payments such as income tax and social insurance contributions, which determine disposable income, are not covered.

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

1.4 Historical Background

Despite continual changes in consumer tastes and preferences, and in the range of goods and services available on the market, household purchasing patterns generally change slowly over time. It is this relative stability in the pattern of household purchases which permits the use of fixed weighting patterns in the compilation of the CPI.

However, the basket of goods and services and the index weights must be periodically updated if they are to continue to be representative of current expenditure patterns. Nine different weighting bases have been used to date in the compilation of the index since the foundation of the State in 1922. The main features of these earlier index series are briefly described in Appendix 1. Since 1996 major updates or rebases have been undertaken on a five-year cycle.

1.5 Updating and Rebasings

From January 2007 onwards, the CPI are published to base mid-December 2006 as 100 using weights derived from the results of the 2004/05 HBS. Indices for the previous base periods continue to be calculated and made available.

The sample of goods and services surveyed by the CPI and the retail outlets where they are priced throughout the country have also been updated to ensure that they continue to be representative of current consumer tastes and retailing structures

1.6 Changes Made in Current Updating

The following are the main changes made in the current updating:

Updating of the sample of goods and services priced

The representative sample of goods and services covered by the index is updated at each re-basing to ensure that it continues to be representative of consumer tastes and purchasing practices. In the 2001 base index, there were 613 item headings covering a comprehensive range of consumer goods and services. The CSO commenced a review of the coverage of goods and services during 2006. This review process involved a significant amount of research. This research combined with results from the 2004/2005 HBS allowed a comprehensive update to be undertaken. In reviewing the coverage of goods and services, 36 new headings were added while 33 headings were removed. In addition, 48 existing headings had their definition extended to include a broader range of items. Consequently, the updated CPI basket contains 616 item headings as of December 2006.

A full list of all items added and deleted is contained in Appendix 2 and the full list of 616 item headings is contained in Appendix 3.

Updating of weights

The item heading weights were updated based on the results of the 2004/2005 HBS. This was done to ensure that the relative importance of the different categories in the CPI is in line with current consumer spending behaviour. See chapter 5 for more detail.

Updating of the sample of locations

Prices are collected for the CPI in 84 cities and towns across the state. There are at least two pricing locations in each county. During the rebase, the sample of locations was reviewed with three main considerations. The first consideration was population. The overall sample of locations is divided into 5 categories, namely:

- Dublin
- South West Region
- Border, Midland and West Regions
- Mid-West and Mid-East Regions
- South East Region

While prices are collected in Dublin and all of the regional cities (Cork, Limerick, Waterford and Galway), a sample is taken within the towns with population between 10,000 and 20,000, between 5,000 and 10,000 and less than 5,000. Based on the results of the 2006 Census of Population, a number of new towns were added while a number of others were removed from the sample in each of those three categories. The second consideration was geographical location. The sample was reviewed at the county, region and state level to ensure good geographical coverage was maintained. Finally, the sample was reviewed with regard to representativity of shopping locations.

This effort ensures that the sample continues to be representative of population and shopping behaviour trends.

Updating of the sample of outlets

Minor adjustments were made to the existing panel of retail outlets in which prices were surveyed to ensure that it remained representative of retail distribution structures (e.g. inclusion of new shopping centres and the increase in the proportion of supermarkets).

1.7 Uses of the CPI

The CPI is used in many ways by the Government, businesses, society at large and internationally. The uses fall under three broad headings.

1.7.1 Macro-Economic indicator

A measure of inflation:

There is no single definition of the word ‘inflation’. However, most consumers might think of inflation as a fall in the value of money reflecting a more or less continuous increase in the price of the goods and services that they purchase. Simplistically therefore, inflation can be thought of as the amount of extra money needed in period y to purchase the same basket of goods and services purchased with a given sum of money in an earlier period x .

Prices may also fall, but it has been many years since the overall prices, as measured by the CPI, were lower than their value 12 months earlier (i.e. negative annual inflation).

The amount of money needed to purchase a fixed basket is also known as the **internal purchasing power of the currency**, which can be expressed in two ways. Firstly, it is the amount of money needed in period y to purchase the same basket of goods and services that one euro could purchase in an earlier period x . Conversely, it is the amount of money needed in an earlier period x , which could buy the same basket of goods and services that one Euro purchases in period y .

It is also generally accepted that it is desirable for any society to measure some concept of its inflation. A fall in the value of money over time affects most households and persons, through the purchasing power of their wages, the ‘real’ value of their savings and so on. Economists regard measures of inflation as vital tools for monitoring the economy.

For international comparisons

A variant of the CPI is used to compare Irish inflation with that of other countries. Consumer price inflation is a convergence criterion given in the Maastricht treaty as a pre-requisite for joining the proposed European Monetary Union. However, problems arise because definitions and methodology vary between countries. In particular, the treatment of housing costs varies markedly between countries, so they are often excluded for international comparison purposes. For the requirements of convergence criteria, countries in the European Union have developed a HICP to improve inflation comparisons. However, the HICP is not intended to replace the CPI for domestic use. The HICP is described in more detail in Chapter 8 of this manual.

Deflation of expenditure

For many purposes, comparisons over time are more useful when the effect of price changes is eliminated. For instance, estimates are made of gross domestic product and its main components in each period and re-valued at the average prices in a selected year (called the ‘base year’). The CPI and its components are used to adjust current levels of consumers’ expenditure and other economic series to produce a constant price series. This is typically done by deflating estimates of expenditure at current prices by appropriate price indices, derived from the CPI.

1.7.2 Income adjustment

Indexation of tax allowances: Some tax allowances and thresholds are revised annually in line with changes in the CPI. For progressive taxes, inflation means that Revenue takes a growing share of a person’s income as increased money wages raise them from a lower to a higher tax bracket. This tendency is known as *fiscal drag*; to offset this, the Minister of Finance frequently raises the tax threshold to take account of changes to the CPI. Conversely, for specific taxes (i.e. taxes levied per unit of a commodity irrespective of price) such as excise duty, inflation will reduce the real tax burden. This tendency is known as *fiscal boost* and as a result, excise duties are often increased in line with inflation.

Indexation of incomes: The change in the CPI is an important factor in wage bargaining; some pay agreements explicitly link pay rises to the CPI.

Indexation of pensions and benefits: Many State benefits and some occupational pensions are revised in line with changes in the CPI.

1.7.3 Price adjustment	<p><i>Private contracts:</i> Many contracts link payments due, such as rent, to the change in the CPI.</p> <p><i>Other price regulation:</i> Many pieces of legislation refer to the CPI as a way of adjusting prices, e.g. changes in the environmental levy on plastic bags are linked to the CPI.</p>
1.8 Scope and Coverage	<p>The scope and coverage of the CPI has been defined as follows:</p> <p><i>Scope:</i> All those transactions, which one would ideally want to measure in the CPI.</p> <p><i>Coverage:</i> Those transactions within the scope, which it is possible to identify and measure in practice. This is determined by the expenditure categories for which weights are compiled.</p> <p>The different elements of the scope and coverage are outlined below.</p>
1.8.1 Geographical	The whole of the State.
1.8.2 Reference Population	<p>Since November 1975, the CPI weighting has been representative of the expenditure patterns of all private households in the State. These households include over 97 per cent of the total population. With effect from January 2002, the coverage of the CPI was extended to include the expenditure of foreign tourists within Ireland. The CPI weights do not reflect the expenditure of persons resident in institutions and other non-private households such as business and commercial enterprises.</p>
1.8.3 Expenditure Items	<p>These are the goods and services bought by the reference population for the purposes of consumption. Thus expenditure for savings and investment purposes, direct taxes, national insurance contributions, cash gifts and gambling are excluded from the scope of the CPI. Other expenditure included in the scope but excluded from the coverage is expenditure on illegal transactions.</p> <p>House purchases could represent the acquisition of a major capital asset (investment) rather than consumption, so purchase without a mortgage and capital repayments of a mortgage are excluded. Mortgage interest payments are included, since for most homeowners they are the best measure of the shelter cost of utilising their dwelling. Major home improvements, such as building an extension, are capital investments and so are excluded but re-decoration and maintenance are included.</p> <p>Most capital goods other than houses are included, such as cars, furniture and large electrical goods.</p> <p>The CPI measures the price of goods and services paid for by consumers. Anything completely free at the point of consumption is outside the scope of the CPI, even if consumers have paid for it indirectly by taxes or social insurance payments. For example, State education and visits to doctors under the medical card scheme are free, and so are excluded. For some goods and services provided or partly paid for by the State, a charge is made at the point of consumption, such as the supply of prescription medicines and dental treatment under the medical card scheme. These charges are included in the CPI, but not the full economic cost of goods or services. When deriving the weights, again only the costs paid by the consumer at point of delivery are included.</p>
1.8.4 Transaction Prices	<p>The prices used in the calculation of the CPI should reflect the cash prices typically paid by the reference population for the goods and services within the scope of the CPI. Consumption expenditure can be measured in three ways, which it is important to distinguish. These ways are:</p> <p><i>Acquisition</i> means that the total value of all goods and services delivered during a given period, whether or not they were wholly paid for during the period, is taken into account.</p> <p><i>Use</i> means that the total value of all goods and services consumed during a given period is taken into account.</p> <p><i>Payment</i> means that the total payments made for goods and services during a given period, whether or not they were delivered, is taken into account.</p>

For practical purposes, these three concepts cannot be distinguished in the case of non-durable items bought for cash and they do not need to be distinguished for many durable items bought for cash. The distinction is important for purchases financed by some form of credit, notably major durable goods, which are acquired at a certain point of time, used over a considerable number of years, and paid for, at least partly, some time after they were acquired, possibly in a series of instalments. Housing costs paid by owner-occupiers are an obvious example.

The difference between the three concepts of consumption is not just a matter of timing. If payment follows acquisition, interest may be charged on top of the equivalent of the cash price. When use extends over many years, the value of this use will reflect the price level of those years, not the price at the date of acquisition.

Which concept should we use?

Which concept is preferred depends on the uses of the CPI. If the main use is as a general indicator of inflation, an index is required that measures the change in price level of current output. Thus one would not want a retrospective element relating to prices in previous months, so the *acquisition concept* is the best. For indexation of money, incomes and benefits, it may be that the *payment approach* is the most suitable. Alternatively, some may argue that the *use* approach is better, as it is closer to the cost of living, which should take account of the flow of the good or service being consumed.

Since the CPI is used for all of these and other purposes, there is no simple answer as to which definition of consumption should be used. The CPI mostly measures the *acquisition* of goods and services, but there is one notable exception where it has been decided that this is not the most appropriate, namely mortgage interest where a *payments* approach is adopted.

Chapter 2 Sampling Procedures

2.1 Introduction

In order to construct a perfectly accurate CPI, one would need to know and record the price of every variety of every good or service available in every retail outlet in the State. This is not feasible in practice, so it is necessary to sample prices. There are four levels of sampling for local price collection: locations, outlets within location, items within outlets and product varieties.

2.2 Sampling of Locations

To ensure the State is fully represented, the country is divided into the 8 NUTS regions. The regions are combined into five areas: Dublin; South West; Border, Midland and West; Mid-West and Mid-East and South East Regions.

Purposive (or judgmental) sampling is then applied, whereby Dublin and the regional cities are automatically included in the sample while a sample of towns (locations) are selected from the remaining strata with the constraining factor that each county in the State must be represented. As of December 2006, there were 84 cities and towns in the CPI sample of locations.

2.3 Sampling of Outlets

A purposive sampling approach is also applied to select the sample of retail outlets within a location (i.e. outlets are chosen which are the most popular). As the CPI is intended to reflect only price change, the samples of shops are retained unchanged for as long as possible during the life span of the series. This ensures that extraneous factors unconnected with price change, which would otherwise affect the index calculations, are strictly controlled. However, when appropriate, new shops or locations may be added, e.g. Dundrum Shopping Centre was included in the sample at the time of its opening to ensure ongoing representativity. The number of outlets in the CPI sample, as of December 2006, was in excess of 3,000.

2.4 Sampling of Representative Items

It would be both impractical and unnecessary to measure price changes of every variety of every item bought by every household in compiling the CPI. It is necessary to select a sample of specific goods and services that give a reliable measure of price movements for a broad range of similar items. For example, price changes for an electric drill might be considered representative of price changes for other electronic tools. The selection of these representative items in the CPI is purposive.

There are two main inputs into the selection of the sample of goods and services used for the CPI. The first source is the HBS, which gives a detailed breakdown of household spending. This information is supplemented by a large scale research process. This ranges from contact with retailers, to use of market research and trade magazines. The CSO also collects information through price collectors on actual developments in retail outlets. The CSO uses this full range of information to ensure the basket of goods and services is representative of consumer spending behaviour.

As of December 2006, the CPI basket contains 616 individual goods and services (also known as item headings), which are organised according to the COICOP¹ classification (see appendix 3). The number of items chosen to represent price changes within each of the COICOP categories depends both on the weight of the category and the variability of price changes between the various items that could be chosen to represent that category (reflecting, for example, the diversity of products available). Intuitively, it makes sense to select more items in a category where spending is high as this helps to minimise volatility in estimates of price changes for high-weighted categories and therefore in the CPI overall. If price movements for all possible items in a given category are very similar, it is sufficient to collect prices for only a few. By contrast, if price movements within a category are very different, a much larger selection of representative items will be needed to get a reliable estimate of price change for the category as a whole. This explains why a very varied category such as food has a large number of items, whereas a relatively homogenous category such as tobacco contains only 3 items.

Representative items are chosen centrally for the whole of the State. Actual price observations are collected each month in the various pricing locations. Consistent with the principle of a fixed basket, the weight of the 616 goods and services are held fixed over the index reference period while the sample of individual price observations collected may vary.

¹ COICOP – Classification of Individual Consumption by Purpose. Standard EU classification of consumer spending.

The detailed contents of the CPI basket, and the ongoing changes to the sample, should not be accorded significance beyond their purpose as representative items. Indeed, within each product grouping, there is usually a point at which the number, choice of items and the precise weights attached to them become a matter of judgement. At this detailed level, it is unlikely that such choices have any significant impact on the CPI overall. For example, a selection of specific household appliances has been chosen to represent spending on small electrical goods, including irons, kettles and food processors. However, other selections would clearly be possible and equally valid.

Examples of typical item descriptions are given below:

- bread, white sliced , large (800g);
- beef, round steak (per kg);
- fresh fish, fillet of whiting (per kg);
- fresh vegetables, potatoes (per 2.5 kg)bag;
- tinned peas;
- draught stout (pint);
- doctors fees, surgery consultation;
- acoustic appliances, DVD player/recorder;
- men’s suit, 2-piece(ready made) and
- motor fuel, diesel (per litre).

2.5 Selection of Products and Varieties

For most goods, the selection of products and varieties within outlets is purposive. In each outlet, the price collectors choose one representative variety from all products matching the specification of each item heading to be priced in that outlet. To facilitate this, price collectors can seek assistance from staff in the outlet. As it is vital that the same product is priced each month, collectors must record enough detail of the product, such as make and model, to ensure that it is uniquely identified. In practice, a wide variety of brands and specific items are sampled for each item heading across the different pricing locations. This gives a better representation of the price movements of the item heading in question, than would be realised if a single narrowly defined identical variety was priced in all locations.

In order that the CPI remains representative of consumer spending patterns over time, the selection of specific items for which prices are collected in specific locations is reviewed on an ongoing basis, although, the overall selection of 616 item headings will remain constant.

For example, in the present CPI series, one of the item headings is *baked beans*. No further specifications are given and individual price collectors are free initially to select any of the different varieties of baked beans available locally for regular pricing. Over time, the price collector may change to a different brand of baked beans if a particular brand becomes more popular or an existing brand is no longer available. However, at all times the price collector will be asked to collect a price for baked beans.

Survey questionnaires

The 502 item headings priced locally are divided into three separate groups of related items corresponding generally to particular types of shops. Three separate paper questionnaires or Price Booklets are used; one for each group, namely:

- Booklet 1 (265 headings) relates to food, drink, tobacco and household non-durable goods;
- Booklet 2 (173 headings) relates to clothing, footwear and household durable goods;
- Booklet 3 (64 headings) relates to personal services, fuel, entertainment and other articles.

For price collection purposes, the overall sample of pricing books is organised by NUTS3 regions. The 8 regions have been combined into 5 groups for CPI administrative purposes. The total number of the three types of Pricing Booklets and their distribution across the 5 pricing areas is summarised in Table 1 below.

Table 1: Geographical Distribution of Pricing Booklets

Area/Regions	Number of CPI Booklets			Total
	Type 1	Type 2	Type 3	
Dublin	31	26	31	88
South West	21	13	14	48
Border, Midland and West	42	20	22	84
Mid-West & Mid-East	25	14	18	57
South East	17	8	11	36
Total	136	81	96	313

Chapter 3 Collection of Prices

3.1 Methods of Price Collection

The CPI is intended to reflect prices on the 2nd Tuesday of each month (Index Day) and thus this is chosen as the price collection day.

There are two basic price collection methods: local and central.

Local collection is used for 502 of the 616 item headings; prices are collected by approximately 200 price collectors in outlets in 84 locations around the country. Some 53,000 quotations are obtained by this method. These item headings account for 48.2% of the total weight of the CPI basket.

Centralised collection is used for 114 item headings where all the prices can be collected centrally by the CSO with minimal field work. In practice, this involves the use of postal, email and telephone enquiries and some internet price collection. These items account for 51.8% of the total weight of the CPI basket.

3.2 Local Price Collection: General Procedure

The collection is undertaken by a specially recruited team of price collectors, with prices collected on paper survey forms. The survey forms are returned to the CSO by mail.

If a particular variety is unavailable, then the price collector substitutes an alternative representative variety in its place. 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. The survey forms are designed to allow the detailed specification of the new product or outlet to be recorded. The relevant prices are excluded from the index calculations until two consecutive monthly quotations are again obtained for the substitute variety or outlet.

3.2.1 Prices observed

The price used is that for a cash transaction. This means that charges for paying by instalments or for use of credit cards, and discounts for paying by direct debit etc., are ignored. Value Added Tax (VAT) and compulsory service charges are included.

3.2.2 Treatment of price changes - Indicator Codes

Collectors are required to note if there are any special features in the prices recorded. Certain codes are used:

- 1 sale or special offer (explains a reduction in price);
- 2 multiple offer, where there is no change in the actual price, but the quantity has increased. For example, 2 for the price of 1, 20% extra free etc.;
- 3 recovery from sale/multiple/special offer (explains a price jump); is not necessarily the same price as before the sale/multiple/special offer;
- 4 verified, when a change in price has been rechecked and verified;
- 5 changed product or variety but not significantly different from old one, i.e. comparable product;
- 6 non-comparable product or variety to the variety that was previously priced.

A price should only be recorded if the exact product being priced is on display or in stock at the retail outlet.

3.3 Postal and telephone inquiries

There are 114 items for which the prices are collected centrally through postal, email or telephone inquiries plus some internet price collection. (See Appendix 4 for full list). All 114 are used in the CPI, and 106 are used in the HICP (e.g. mortgage interest is excluded from the HICP). Central price collection is typically used where national pricing applies (e.g. health insurance), or where local price collection would not be suitable.

Price data are collected from one central source (trade associations, Government departments etc) whenever possible. Where appropriate, prices are collected from a sample of retailers/service providers for the good or service in question. Frequency of enquiry varies across the range of item headings with monthly, quarterly or annual price collection being used as appropriate. In some limited number of cases, price changes will be included as necessary. Typically, this would apply to services where prices are set by one central body and change at a particular pre-announced point in time, e.g. electricity.

Example: Car Insurance

This survey is carried out monthly. Insurance companies are approached for prices for specifically identified insurance policies e.g., fully comprehensive for a person of a particular age and gender in a specific location with a particular model of car.

The previous month's premium (price) is supplied on the form sent to the companies, who, in turn, note the current price. Once these have been checked, the data are entered into the appropriate spreadsheets and an index is produced.

Chapter 4 Validation Procedures

The following validation checks are applied to all prices collected locally.

4.1 Data Checks

The data on the paper questionnaires returned by the price collectors to the CSO are visually checked to ensure the relevant data has been correctly recorded, for instance, to ensure that indicator codes (section 3.2.2) have been used sensibly and correctly. Subsequently, the data are electronically keyed. Several computer checks are then carried out. Checks are carried out to ensure that data are complete and correct. For example, checks are run to ensure that unexpected duplicate prices (i.e. for the same item, in the same shop, in the same location) are removed, and that the location, outlet and item identifier codes that accompany each price exist and are valid.

The most important test is price change. The price entered is compared (i.e. validated) with the price for the same product in the same shop in the previous month. Prices outside the relevant price range are re-checked by CPI staff to determine inclusion or exclusion for the purpose of the CPI compilation for that month.

Once the price data are correct and complete, preliminary item indices are calculated using the prices, which passed the data checks, plus those that have been manually accepted. These preliminary indices are in turn checked to ensure price changes have been correctly reflected in the calculations.

4.2 Field Audits

To check that price collections are carried out correctly, CPI personnel carry out monthly quality audits of individual local price collections. There are two types of quality audits. The first involves auditors accompanying collectors on price collections. The second consists of audits which take place no later than three days after the collection (back checks), where an auditor repeats the price collection to determine if the price collector has collected the correct prices. Multiple locations are visited each month and collectors do not know in advance which locations will be chosen for the quality control checks.

4.2.1 Supervised visits

A quality auditor who accompanies a collector on a collection examines the collection to ensure that

- suitable products are chosen;
- the correct indicator codes are used;
- the correct prices are recorded;
- the prices are collected in the correct outlet type;
- the price is only recorded when the correct variety is available; and
- any need for training of a collector is identified, to help improve the quality of the collection.

4.2.2 Back Check of Prices Collection

The back checking quality audits involve auditors visiting the retail outlet where the price was recorded by the collector, and checking to see whether the price was correctly recorded.

The back check covers accuracy of price collection and other aspects (e.g. the quality of item descriptions and the use of indicator codes) which are important to sustain the comparability of price collection across months and to better inform the validation process.

Chapter 5 Weights

5.1 Introduction

The CPI measures changes in the cost of a representative basket of goods and services. This involves weighting together aggregated price indices for different categories of goods and services so that each takes its appropriate share within household budgets. For instance, as most people spend far more on electricity than on processed fruit, a price rise for electricity must have more effect on overall price rises than a similar-sized increase for processed fruit. At the lowest level therefore, each elementary aggregate (section 6.2.1) should receive a weight equal to the proportion of total expenditure by households on goods and services represented by that aggregate.

The data used to produce the weights come from a variety of sources, the most important of which is the large-scale national HBS.

Household Budget Survey

The HBS is a survey of the expenditure patterns of private households based on a representative sample of around 7,000 households. It is currently conducted by the CSO every five years specifically for the purpose of updating the CPI. The latest HBS undertaken by the CSO refers to the period November 2004 to December 2005.

Updating is necessary so that the weights reflect the introduction of new items and the deletion of those no longer representative. Also, using up to date expenditure data ensures that the indices remain representative of current expenditure patterns over time.

The sample of 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.). Individual 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.

The responses from individual households were compiled to give overall average household expenditure for the State for a detailed list of expenditure headings. These results were the main basis for the updated item heading weights for the CPI.

5.2 Item weights

The derivation of the CPI item weights required a number of adjustments to the expenditure data provided by the 2004/05 HBS.

Expenditure excluded

Household expenditure relating to those items excluded from the CPI coverage was excluded (for example savings, charitable donations, gambling etc.)

Adjustment for understatement of tobacco, alcohol and mortgage interest expenditure

In the first instance, the HBS data referred to November 2004 to December 2005. These were price updated to 2005 price levels to allow annual data for 2005 to be used for adjustments in a consistent manner. Estimates of the average household expenditure on alcoholic drink and tobacco derived from the HBS were understated (a common phenomenon in surveys of this type), and were adjusted with reference to estimates based on fiscal duty payments for 2005. The estimate of average mortgage interest payments was also adjusted based on estimated changes in average mortgage size, using a variety of administrative data on the mortgage and housing market.

Inclusion of expenditure by foreign tourists within Ireland

The expenditure weights were adjusted to take account of the additional expenditure by tourists. This was done by increasing the expenditure weights of items typically purchased by tourists, such as accommodation, meals out, car hire, public transport, entertainment, gifts, alcohol, tobacco and other items. Again, data for 2005 was used for these adjustments.

Price updating to December 2006

Subsequently, the expenditure estimates were updated for price changes up to mid-December 2006 using the percentage changes between 2005 and mid-December 2006 in the prices of the individual item headings covered by the former index series. Accurate information was not available on any quantitative change in the detailed pattern of household consumption during this period and, therefore, no adjustments were made for this.

Final item weights

Once the above adjustments were applied to the HBS expenditure data, each CPI item was given an integer weight in parts per hundred so that the sum of the group weights is 100 (see Appendix 3).

Value of CPI basket

The average weekly value of the resulting CPI market basket was €869.20 at mid-December 2006 price levels.

5.3 Regional Weights

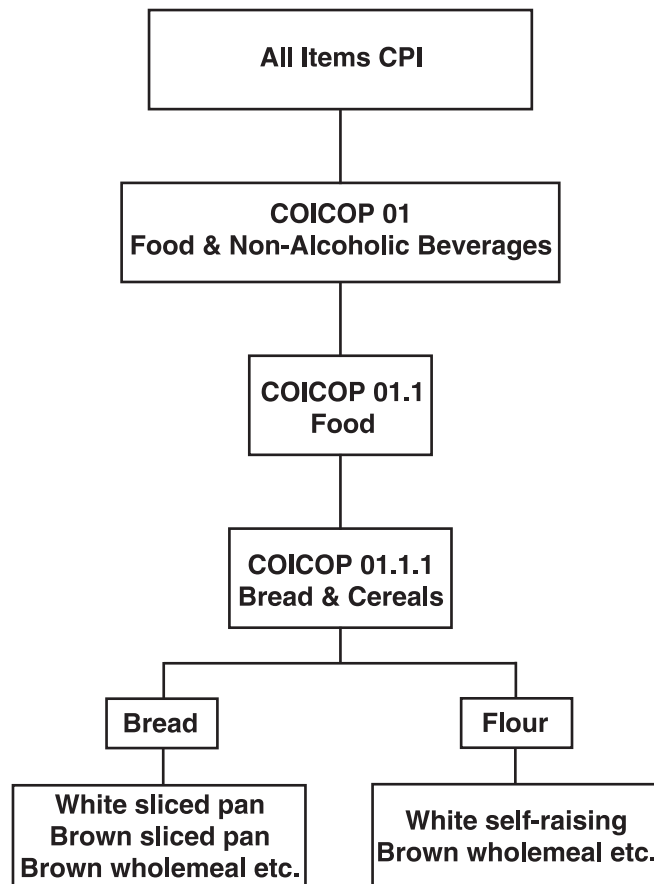
The HBS provides average household expenditure by CPI sub-group, group and Region. Regional weights are used in the compilation of the CPI. These are based on total household expenditure by region. This was estimated using HBS data on average household expenditure by region and Census of Population data on population by region.

Chapter 6 CPI Construction

6.1 Structure of the CPI

The CPI is produced in stages, with indices obtained at each stage weighted together to give higher level indices. Figure 6.1 shows how the data are combined together specifically within COICOP 01, Food & Non-Alcoholic Beverages. A similar structure is applied for all other COICOP groups. At the lowest level there are the 616 item headings. These can be combined into categories (e.g. Bread) which are in turn combined into COICOP 4, 3 and 2 digit groups. Finally the All Items CPI is the combination of all 616 item headings.

Figure 6.1: Structure of the CPI



6.2 Calculation methodologies

While the same hierarchical structure applies for all item headings, there are some differences in the calculation methodologies used at the lowest level. Specifically, different methodologies are used for the 502 directly priced item headings, as compared to the 114 special inquiries (see Appendix 4 for list of special inquiry item headings).

6.2.1 Area Average Price Calculation

The first step of the calculation process for the 502 directly priced item headings, is the calculation of area average prices. For CPI purposes, the sample of locations are divided into the 8 NUTS3 regions. Those regions are combined into 5 CPI areas as follows:

- Dublin
- South West
- Border, Midland and West
- Mid-West and Mid-East
- South East

The prices for each item heading are divided into the five areas. An area average price is calculated as the geometric mean of the prices within the given area, e.g. the average price for 1 litre of full fat milk in Dublin is the geometric mean of the prices for 1 litre of full fat milk collected in the various outlets in Dublin. The area average price is technically known as an **elementary aggregate** as it is the lowest level of calculation within the CPI. Each month, an area average price is calculated both for the current month and the previous month based only on matched price observations between the two periods.

The technical form of this calculation is explained below.

Geometric Mean

If prices $P_{i,c-1}$ to $P_{n,c-1}$ are obtained in the previous month and matching prices $P_{i,c}$ to $P_{n,c}$ are obtained for the same commodities in the current month c , then we have:

$$GM : \quad I_{c,c-1} = \frac{\sqrt[n]{\prod_{i=1}^n P_{i,c}}}{\sqrt[n]{\prod_{i=1}^n P_{i,c-1}}}$$

The GM is therefore computed for an elementary aggregate by:

- 1 Multiplying all the prices quotations collected for a particular index variety (e.g. milk) together, and then
- 2 find the n -th root of the product where n is the number of price quotations.

It is essential that matching prices are used. If, in any month, there is no price corresponding to one in previous month, then that previous month's price must be excluded from the calculations.

6.2.2 National Average Price Calculation

The next step is the calculation of a national average price for each of the 502 item headings. This is the weighted average of the area average prices with a different weight applied to each area. Each month, a selection of these national average prices (81 in total) are published (see Appendix 5 for list of item headings for which national average prices are published). Again, each month, a national average price for both the current and previous month are calculated based on matched price observations only.

6.2.3 Item Relatives Calculation

For the 502 directly priced item headings, the item relative is the ratio of the national average price for the current month to the national average price for the previous month (a price relative is the ratio of a price at a given time to the price for the same commodity at another time). This item relative is known as a ratio of averages. The technical compilation of a ratio of averages is described below:

If a national average price $NAP_{i,c-1}$ is obtained in the previous month ($c-1$) and matching national average price $NAP_{i,c}$ is obtained for the same item heading in the current month c , then we have:

$$RA : \quad I_{c,c-1} = \frac{NAP_{i,c}}{NAP_{i,c-1}} \quad (\text{ratio of averages})$$

Special Inquiry item headings

Item relatives are also calculated for the 114 special inquiry item headings, where prices are centrally collected. Prices are entered on individual spreadsheets and item relatives are calculated using either geometric or arithmetic mean formulae as appropriate.

At this point in the calculation process, a full set of 616 price relatives are available. These form the basis for the index calculations as described below.

6.3 Index Calculation

The CPI 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-December 2006. The basket undergoes a complete revision every five years since November 1996.

Over the five years, the CPI is a fixed quantity price index: it measures the change in the price of a basket of fixed composition, quantity and as far as is possible quality. (This is often summarised by saying that the CPI uses a *fixed basket*). The index $I_{t,0}$ at time t based on time 0 is a Laspeyres-type or fixed base weight index, being the price of the basket at a given time as a percentage of its price on the base date:

$$I_{t,0} = \left(\frac{\sum Q_0 P_c}{\sum Q_0 P_0} \right) \times 100$$

where:

Q_0 and P_0 are the quantity (fixed) and average price respectively, of an index item heading in the base (0) month;

P_c is the average price of the same index item heading in the current (c) month;

\sum represents summation over all index item headings.

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

$$I_{t,0} = \left(\frac{\sum (V_{c-1}) \frac{P_c}{P_{c-1}}}{\sum V_0} \right) \times 100$$

where:

V_0 and V_{c-1} are the expenditure value (weight) of an index item heading in the base (0) or previous (c-1) month;

P_c and P_{c-1} are the average price of the same index item heading in the current (c) and previous (c-1) month;

\sum represents summation over all index item headings;

i.e. the current cost of the fixed quantity of each index item heading (elementary aggregate) is calculated by updating the previous month's cost by the estimated monthly change in its average price. This index is also known as a weighted average of *price relatives*, the weight being the expenditure on an index item heading in the base period. Using the above formula, it is possible to calculate an index for any item heading or combination of item headings, all the way up to and including the All Items CPI.

Chapter 7 Special Issues, Principles and Procedures

7.1 Subsidies and Discounts

The prices used in calculating the CPI are those actually paid by households. This may appear simple, but in practice it is difficult to implement in a completely consistent way, and there are several special treatments.

The following guidelines (or principals) are applied to the CPI:

- the CPI reflects the *cash prices* commonly charged for goods and services;
- where *subsidies or discounts are available to all potential consumers* (non-discriminatory), the price taken into the CPI should reflect these; and
- where *subsidies or discounts are available only to a restricted group* of households (discriminatory), the price should be measured 'gross', i.e. the subsidy or discount is not taken into account. In particular, money off coupons and loyalty cards are ignored.
- If there is a discount for *multiple purchases*, only the price of a single purchase is recorded, i.e. a 50% extra free offer is taken into account whereas a 3 for the price of 2 offer is not. Offers, such as '50% extra free' or 'buy one get one free' are actually recorded as a price reduction as it is assumed that the price of the original quantity has actually fallen. Where a price reduction on one product is associated with the purchase of another product, this reduction is ignored.
- *Free gifts/extras* such as plastic toys in cereal boxes, 'send in 20 tokens for a free pen' and trading stamps are ignored; they are regarded as extras, which may not be wanted by consumers.
- *Sale prices* are recorded if they are temporary reductions on goods likely to be available again at normal prices or end of season reductions. Prices in closing down sales and for special purchases of end of range, damaged, shop soiled or defective goods are not recorded as they are deemed not to be of the same quality as, or comparable with, goods previously priced or those likely to be available in future.

7.2 Product Substitution, Quality Adjustments and Imputation

One of the more difficult issues, in producing the CPI, is the accurate measurement and treatment of quality change due to changing product specifications. As a measure of price change alone, the CPI should reflect the cost of buying a fixed basket of goods and services of constant quality. However, products often disappear or are replaced with new versions of a different quality or specification, and brand new products also become available. When such a situation arises, one of the following methods is adopted:

- a direct comparison;
- b direct quality adjustment; and
- c imputation.

a Direct comparison

If there is another product which is directly comparable (that is, it is so similar to the old one that it can be assumed to have the same price in the previous month). For example, an identical garment except that it is a different colour, then the new one directly replaces the old one and its base price remains the same. This is described as "obtaining a replacement which may be treated as essentially identical", and is equivalent to saying that any difference in price level between the new and the old product is entirely due to price change and not quality differences.

b Direct quality adjustment

This is the preferred method of dealing with the situation where a replacement product is of a different quality or specification. An attempt is made to place a value on the quality, or specification, difference and the previous month's price is adjusted accordingly. This section discusses the bridged overlap and hedonic regression methods. Another method of direct quality adjustment, option costing, can be used when a product changes in specification and it is possible to value separately the components that have changed. This method is used for the quality adjustment of PCs in the CPI.

Quality adjustment – Bridged overlap

When a specific variety of good or service priced in a retail outlet is no longer available, a replacement must be found in order to continue the measure of price change. Anytime a replacement occurs, the new product's price may reflect both pure price change and quality change.

When the quality of a substitute item is not comparable with the old and an overlap price or direct quality adjustment data are not available, a bridged overlap (also known as matched basket) quality adjustment technique is used. Using this technique, no price comparison is made between two varieties when the replacement is brought into the index. The price change between the two observations is imputed as the average change for the other matched price observations for the specific item heading. For a price observation to be brought into the index, it must be available for two consecutive periods.

The following table illustrates the application of the bridged overlap with monthly re-sampling quality adjustment technique in the compilation of the CPI PC Index for the period Feb'04 to Mar'04.

PC Packages		Jan-04	Feb-04		Mar-04	
		Price	Price	Relative	Price	Relative
Description						
1	H P Pavillion T 340 U.K.	1,799	1,799		1,799	
2	H P Pavillion T 330 U.K.	1,249	1,249		1,249	
3	H P Pavillion 310	<i>1,099</i>	1,099		1,099	
4	Lextreme 6052	899	n/a		n/a	
5	Imedia 5072	1,049	1,049		839	
6	Lextreme 6093	1,849	1,849		n/a	
7	Hydro Phoenix Micro Multi Media				<i>1,899</i>	
	Average of all price quotations	1,324	1,409	1.0642	1,377	0.9773
	Recalculated Average for Feb'04	1,409	1,409	1.0000		
	Recalculated Average for Mar'04		1,299		1,247	0.9596

Note: The figures in italic indicate the introduction of a new product.

In **January 2004**, price quotations for six PC packages were collected and one of the PC packages (No. 3) was not comparable to the previous period (i.e. a new product). The average price for the six PC packages is €1,324.

For **February 2004**, there are five price quotations for PC packages (i.e. No.s 1, 2, 3, 5 and 6) and there is no quotation for PC package No. 4. The average price for the five PC Packages is €1,409.

To estimate the average change from Jan'04 to Feb'04 for the PC index, the bridged overlap technique requires that only the five matched PC Packages for both Jan'04 and Feb'04 are used. There are then two stages to follow:

- 1 recalculate the average price of the PC packages for Jan'04, which becomes €1,409.
- 2 the average change from Jan'04 to Feb'04 is then estimated as the average price for PC packages in Feb'04 divided by the recalculated average for Jan'04 (i.e. €1,409 / €1,409 = 1.0000).

In this case we have indirectly imputed the value for Feb'04 of the missing PC package (i.e. No. 4) to be the same as that recorded in Jan'04.

For **March 2004**, there are five price quotations for PC packages (i.e. No.s 1, 2, 3, 5 and 7) and no quotation for two PC packages (No. 4 and 6). The average price for the five PC Packages is

€1,377. One can see that PC package No. 7 replaces No. 6 but it is not taken to be comparable. Thus only 4 matched PC models are available (No.s 1,2,3 and 5).

To estimate the average change from Feb'04 to Mar'04 for the PC index, again the bridged overlap technique requires that only the four matched PC Packages for both Feb'04 and Mar'04 are used. The two stages above are followed again:

- 1 the recalculation of the Feb'04 average price of the PC packages which becomes €1,299.
- 2 the average change from Feb'04 to Mar'04 is then estimated as the average price for PC packages in Mar'04 divided by the recalculated average for Feb'04 (i.e. €1,357 / €1,299 = 0.9596).

In this case, one has indirectly adjusted for quality change. The value of the quality change is the difference between the price updated value of the deleted PC package No. 6 (€1,849 * 0.9596 = €1,774) and the price of the PC package No. 7 (€1,899).

The value of the quality adjustment is €125. This means that the price difference of €50 between PC packages No.s 6 & 7 has been more than offset by the estimate of quality improvement between the two PC packages. In this way, one has bridged from one model to another using the prices or price trends of other models in the sample.

Quality adjustment – Hedonic regression

Hedonic regression is a technique that uses a set of ordinary least square regressions to relate the price of an item to its measurable characteristics. It has previously been used for quality adjustment of new cars. For cars, the measurable characteristics include cc, horsepower, and weight.

A hedonic regression takes the general form:

$$P = a + b_1X_1 + b_2X_2 + b_3X_3 + \dots + u$$

where:

P is a price (or its natural logarithm)

a is a constant term

b is the regression coefficient

X may either be a continuous variable, for example the weight of a car, or they may be dummy variables. Dummy variables have the values zero or one. For example, a dummy variable for a car may take the value 1 if there is ABS or zero if there is not.

u is the error term

For new cars, hedonic regressions were calculated on the basis of a single month's data, using un-weighted regressions based on list price data from car magazines. The log of price is chosen as the dependent variable in the regression for two reasons. Firstly, a log-linear model produces a multiplicative relationship between the price of a new car and its attributes, which is a better reflection of pricing in the retail market. This is because, the cost of adding a new feature tends to be related to the underlying quality and price of a vehicle. For example, the addition of air condition to an expensive car typically costs more than for a cheaper car, because a higher quality air conditioning unit will be included in the more expensive car. Secondly, multiplicative relationships are more robust to general changes in price, and so have a longer life span.

An iterative approach is used to derive the hedonic regressions. This procedure includes an element of statistical judgement and product/market knowledge to update the model on an ongoing basis. For example, weight and length are often inter-correlated, because longer cars are normally heavier. These relationships can cause the automatic methods of regression estimation to produce either sub-optimal regressions, or in some circumstances ones in which the relationships revealed are counter-intuitive.

Depending on the specific hedonic model chosen, the results can be used in a number of ways. One method is to adjust for measured quality changes between an existing and replacement model of car (or other product). Another method is to predict prices when an existing car in the sample is

no longer available and has had to be replaced by a car with a different level of quality. Prices can be compared between the predicted price in one period and the price actually recorded in the other period.

The area of quality adjustment has been the subject of significant development in recent years. It is generally taken that explicit methods, such as hedonic regression and option costing, are preferable to implicit methods such as direct comparison and bridged overlap. It is also accepted that quality adjustment represents one of the areas of greatest incomparability between measures of inflation internationally. New standards are under development for the HICP, and the CSO will be applying these standards as they develop.

7.3 Mortgage Interest

Mortgage interest was first included in the CPI at the November 1975 updating. For a particular mortgage, the interest payment at any 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 debt outstanding, in turn, depends on the original size of the mortgage, which is linked to the price of the house when the mortgage was taken out and in most cases (i.e. non-endowment) 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 which existed in the base period.

As time progresses, new mortgages are initiated at current house price levels and old mortgages are terminated early (e.g. house is sold) or paid off. The original loans in these latter instances were quite small because they were entered into when house prices were far lower 20-25 years ago. Because of this, the estimation of changes in mortgage interest costs needs a special type of price indicator adhering as close as possible to the *Laspeyres* concept of a fixed basket as used elsewhere in the index. This is done by estimating, from month to month, the mortgage interest paid by a standard set of households with mortgages of varying ages (i.e. fixed age pattern).

The interest cost for this standard set of mortgages in any month is estimated on the basis of the aggregate debt outstanding for the mortgages of varying ages. This will depend on the house price ruling when the mortgage was taken out, on the percentage advance (assumed constant) and on the amount of interest to be paid for a mortgage of that age (i.e. the amount of interest payable declines over time). In this approach, the monthly change in interest costs reflects both the change in interest rates and the change in estimated house price levels over time. Non interest cost effects are excluded by controlling (i.e. keeping constant) the factors giving rise to them.

Building Society/Bank and Local Authority mortgages are covered in the current index. Insurance endowment mortgages are not explicitly covered as the number involved is relatively low. Their weight is allocated to Building Society/Bank mortgages.

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 mortgage cost indicator is the product of:

- the index of current interest rates; and
- the index of mortgage debt outstanding for the fixed age pattern of mortgages.

The indicator of mortgage debt outstanding is estimated as the change in the weighted average of house price levels in successive monthly periods, where the relative weights decline with age of mortgage reflecting the reduction in interest payable over time.

In compiling these indicators, the house price levels were estimated by linking the following series:

- House Building Cost Index compiled by the Department of the Environment
- The Irish Permanent House Price Index.

The above described approach is known as a payments approach and is described in section 10.20 of the International Labour Organisation's *Consumer Price Index Manual* (2004).

7.4 Package Holidays

The methodology used to measure package holidays in the CPI was revised with the introduction of the mid-November 1996 as 100 series. The previous methodology treated all months' holidays as the same item. This resulted in severe seasonal patterns that did not reflect the experience of consumers - each May the index fell as skiing holidays became cheaper and unavailable, while every August the index rose. This practice also limited the coverage of holiday destinations.

Seasonal baskets approach

The revised methodology, **the seasonal baskets approach**, treats different months' holidays as different items (e.g. January holidays are not considered comparable with May holidays). This means different destinations are priced each month.

As each months' basket is not comparable with another months', they can only be compared to themselves (i.e. February must be compared to February, September with September etc.). This results in a 12 monthly change being calculated for each basket. The monthly change is derived by linking these different items or monthly baskets. This approach is referred to as pricing 'seasonal baskets'.

The prices used in the calculation of the index are brochure prices only. Obviously, these prices do not reflect the full range of prices presented to consumers. In particular, they do not take into account either possible discounts from travel agents/tour operators or the availability of last minute 'special offers'. However by using brochure prices only, this allows comparison over time, as discounts or special offers normally have restrictions imposed.

Monthly weights

By comparing holidays in January with holidays in January from the previous year, any seasonal distortions are removed. Such comparisons give an accurate 12 monthly change for each monthly basket (i.e. January, February, ... , December). Once the 12 monthly change or relative has been calculated, the baskets must be linked to each other. This link is done by applying *monthly weights*. The monthly weights are derived from expenditure on travel abroad by Irish residents. Business expenditure is excluded as it falls outside the scope of the CPI. Expenditure on visiting friends or relatives etc. is also excluded as these are private travel arrangements. This expenditure is captured by the air fare and boat fare surveys.

As expenditure data is only available on a quarterly basis, the expenditure data is distributed across the months within each quarter using numbers of Irish non-business travellers abroad as the basis for interpolation. These expenditures are then re-scaled to 100 to give a percentage monthly distribution.

The monthly weights are fixed and are not price updated each month. These weights may therefore be thought of as monthly factors or coefficients.

The monthly weights (M) M sum to unity.

$$\sum M_{Jan} + \sum M_{Feb} + \dots + \sum M_{Dec} = 1$$

Destination Weights

As each month's holidays are treated as different items, an individual basket is constructed for each month. These monthly baskets reflect, not only the different destinations typically visited during each month, but also the changing relative importance of these destinations over the year. This practice allows the coverage of holiday destinations to increase significantly.

For example, while the Canary Islands are a popular destination throughout the year, their relative importance declines during the summer months as other sunshine destinations like Greece and Turkey etc. compete for market share. Other destinations, such as Austria, Italy and Switzerland are very popular and account for a significant proportion of holiday expenditure during the late winter and early spring months. This is mainly due to the popularity of skiing holidays. By late spring, these skiing resorts are no longer included in the baskets.

The destination weights are constructed from monthly air traffic volumes (i.e. numbers of persons travelling). Only chartered flight volumes are used. Scheduled flights are excluded to avoid double counting, as these flights (i.e. privately arranged travel) are captured by the air fares survey. These volumes not only highlight which destinations should be included in each basket but also the relative importance of these destinations. In order to satisfy the *expenditure weight* criterion,

destination volumes are converted to estimated expenditures by applying average prices. These average prices are the average of the most popular resort prices at the base period and are for the most part, based on two persons on holiday for a fortnight.

As package holidays to the UK from Ireland are not as popular as tours, some further calculations are required. The basis of the UK weight was *Main Purpose of Journey* surveys taken from scheduled flights.

Calculation of the Index

The 12 monthly relative (r) is calculated by comparing the sum of the current (c) price updated destination weights (D) with the previous ($c-1$) price updated destination weights:

$$r = \frac{\left(\sum P_{c-1} D_0\right) \frac{P_c}{P_{c-1}}}{\sum P_{c-1} D_0}$$

Where:

P_c and P_{c-1} are the current (c) and previous period ($c-1$) average prices respectively of each destination.

D_0 are the expenditure weights for each destination at the base (0) period.

\sum represents summation over all destination weights for a particular month.

Unlike the monthly weights, the destination weights are price updated each period i.e. the destination weights for each individual monthly basket are price updated once a year.

Linking months

Each month, the appropriate basket is surveyed and the 12 monthly change or relative (r) is calculated as above. To link each month, the appropriate monthly weight or factor (M) is applied to the relative (r) to give the overall monthly change or relative (R).

$$R = 1 + [(r - 1) * M]$$

The monthly relative (R) is then applied to the overall *Package Holiday* expenditure weight in the standard way.

It is clear that price changes during the summer months will have a greater impact on the index than changes during the winter months.

Chapter 8 Harmonised Indices of Consumer Prices (HICP)

8.1 Development of the HICP

HICPs were developed in the European Union (EU) for the purpose of assessing whether prospective members of European Monetary Union would pass the inflation convergence criterion. It has subsequently acted as the measure of inflation used by the European Central Bank to assess price stability in the euro area. One of the main requirements, therefore, was for a measure that could be used to make reliable ‘like-for-like’ comparisons of inflation rates across EU Member States. Such comparisons are not generally possible using national consumer price indices due to differences in index coverage and construction.

The rules underlying the construction of HICP indices for EU Member States are specified in a series of European Regulations (legal documents). These have been developed by Eurostat (the Statistical Office of the European Communities) in conjunction with the National Statistical Institutes of Member States of the European Union. An initial Council Regulation, (*No 2494/95 of 23 October 1995 concerning harmonised indices of consumer prices*) establishing the framework for the HICP, was passed in October 1995. This has been followed up with a series of detailed implementing measures.

Several other pieces of legislation, covering the coverage of goods and services, have been introduced since the initial period, and have been implemented in the Irish HICP. HICPs are not intended to replace national Consumer Price Indices (CPIs). These indices are designed expressly for international comparisons within the EU. The National Statistical Institutes of the Member States and Eurostat have been collaborating closely over the last number of years to ensure comparable standards are applied in the compilation of HICPs.

8.2 Index choice

Eurostat describes the HICP as a Laspeyres-type ‘consumer inflation’ or ‘pure price’ index, “measuring average price change on the basis of the changed expenditure of maintaining consumption patterns of households and the composition of the consumer population in the base or reference period” (Report from the Commission to the Council on Harmonisation of Consumer Price Indices in the European Union, COM(2000)742). ‘Pure’ means that, strictly speaking, only changes to prices are reflected in the index.

Like the CPI, therefore, the HICP measures inflation with reference to the changing cost of a fixed basket of goods and services. The HICP in Ireland is calculated from the same basic price data as the CPI, and uses the same methodology both in compiling and aggregating the component price indices. However, it does differ from the CPI in terms of the coverage and classification of goods and services (see Appendix 6 for details of the differences). The most significant single difference is the exclusion of mortgage interest, as owner occupied housing is currently not included in the coverage of the HICP.

8.3 Reference period

When the HICP was launched, it was referenced on 1996=100. Starting with the publication of the January 2006 index, it has been referenced on 2005=100. The change of reference period was accompanied by a full re-referencing of all HICP indices back to 1996.

The HICP in Ireland is a chain-linked series with links at November 1996, December 1999, December 2000, December 2001, December 2006.

8.4 MUICP

Price stability within the Eurozone area is defined by reference to the Monetary Union Index of Consumer Prices (MUICP). The European Central Bank defines price stability as a 'year on year increase in the HICP for the Euro area of below but close to 2%'. The HICPs of each member of the Eurozone area are aggregated to calculate the MUICP. The MUICP is a weighted average of each of the countries in the Eurozone. Each country's share is based on its percentage of the total Household Final Consumption Monetary Expenditure (HFCME) in the Euro area. HFCME is defined as:

- that part of final consumption expenditure which is incurred by households, irrespective of nationality or residence status;
- in monetary transactions;
- on the economic territory of the Member State;
- on goods and services that are used for the direct satisfaction of individual needs or wants; and
- in one or both time periods being compared.

Chapter 9 Publication

9.1 Availability

The CPI, HICP and associated indices data are first issued in a publication called *Consumer Price Index* at 11.00am thirty days following the pricing day to which it refers. At the same time, an accompanying release is published giving more detail about the factors contributing to changes in the percentage change over one month and 12 months for the headline indices. The data are published simultaneously in electronic format on the CSO's website.

Revisions

Once the CPI indices are published, they are **never** revised. The HICP, on the other hand, is a revisable index although there have been no revisions to date.

9.2 Percentage change between any two months

The movement of the CPI, HICP and their sub-indices are expressed as percentage changes, rather than changes in index points, because index point changes are affected by the level of the index in relation to its base period, whereas percentage changes are not. The example below illustrates the computation of index point and percentage changes.

The All Items Index for December 2006 is 118.0 and that for November 2006 is 117.6. Therefore the *index point change* between these two months is

$$118.0 - 117.6 = 0.4 \quad \text{index point change}$$

To calculate the *percentage change* between these two months, one divides the index point change calculated above by the November index and multiply by 100, i.e.

$$(0.4 / 117.6) * 100 = 0.3\% \quad \text{percentage change}$$

Percentage changes are calculated from the published, rounded indices, and are themselves then rounded to 1 decimal place.

9.3 Annual Averages

The annual average index is defined as the arithmetic mean of the twelve monthly values for the year in question (again using published, rounded indices):

$$I_{12av} = \frac{1}{12} \sum_{t=1}^{12} I_t$$

The annual average percentage change is calculated from the annual average indices, again using rounded data. It is **not** calculated as the average of the annual percentage changes for the twelve months.

9.4 Average prices

National average prices are calculated for 81 items (mostly food) and published each month, one month in arrears. The items are those which are likely to be reasonably homogenous across all outlets and over time, so that an average price is reasonably meaningful.

9.5 Rounding Policy and the Effects of Rounding

CPI and HICP monthly indices are calculated using maximum precision, and then rounded to one decimal place for publication. All derived statistics – i.e. annual and quarterly average indices, one month and 12-month percentage changes - are published rounded to one decimal place. Very occasionally, because of the degree of precision to which decimal fractions are stored electronically, a derived statistic ending with the digit 5 may be rounded downwards.

The CPI approach is transparent in that all derived statistics can be traced back to the published monthly index levels. This is particularly important given the wide range of uses to which the CPI is put. However, when publishing rounded indices to 1 decimal place, and then calculating percentage changes from these rounded indices, which are then themselves rounded to 1 decimal place, some rounding effects can occur.

9.6 Contributions to Changes in All Items CPI

It is often of interest to estimate the effect of a group or section on the change in the CPI. The contribution of a component to a change in the all items CPI over a given period of time is defined as the change that would have occurred in the all items index if that component had undergone its observed change but all other component indices had remained frozen at their values at the start of

the period (and all weights are kept the same). The effect of each component depends on both the size of its change and its weight.

The formula for calculating the contribution of a component to the monthly change in the CPI is given below

Contribution of component i to monthly change in all items CPI =

$$\frac{(I_t^i - I_{t-1}^i)w^i}{I_{t-1}^{all}} \times 100$$

where:

I_t^i = index for component i in month t (current month)

I_{t-1}^i = index for component i in month $t-1$ (previous month)

I_{t-1}^{all} = all items index in month $t-1$ (previous month)

w^i = weight (parts per 100) of component i in all items CPI

Contributions can be calculated over any period of time. However, the process is complicated when multiple base periods are involved, as the weights will have changed.

9.7 Index Classification

The coverage and classification of the CPI indices are based on the international classification system for household consumption expenditures known as COICOP (classification of individual consumption by purpose). This is a hierarchical classification system comprising: **Divisions** e.g. 01 Food & non-alcoholic drinks, **Groups** e.g. 01.1 Food, and **Classes** (the lowest published level) e.g. 01.1.1 Bread and cereals. The COICOP classification along with the weightings are shown in Appendix 3.

Founded on National Accounts principles, the COICOP system also defines which transactions constitute household final consumption as opposed to other flows such as taxes, other transfers, or capital and financial transactions. This is the starting point for defining which expenditures, in principle, should be included in the CPI. The broad COICOP categories are listed below:

COICOP Divisions

01 Food and non-alcoholic beverages

02 Alcoholic beverages and tobacco

03 Clothing and footwear

04 Housing, water, electricity, gas and other fuels

05 Furnishings, household equipment and routine household maintenance

06 Health

07 Transport

08 Communications

09 Recreation and culture

10 Education

11 Restaurants and hotels

12 Miscellaneous goods and services

Additional indices are also published for a wide range of categories including, *Energy products, HICP, Alcohol (on and off sales), Tobacco, CPI less mortgage interest repayments, CPI less housing, CPI less tobacco etc.*

A National Classification was used up to December 2001. Indices using this classification continue to be available on request from the CSO. The full former classification and December 2006 weightings are shown in Appendix 7.

9.8 Linking CPI series with different bases

With each updating, the CPI starts with a new base reference period. For example, the previous series has a reference period of December 2001=100, and covered the period December 2001 to December 2006. The current series has a reference period of December 2006=100 and will cover the period from December 2006 to December 2011 (the date of the next planned updating). It is possible to link these two separate series together at their common month (i.e. December 2006) in order to create a continuous series that will cover the period December 2001 to December 2011. The following hypothetical example illustrates the method of linking these two series in order to produce a continuous series from December 2001 to April 2007 with a base period of December 2001=100.

Period	Dec 2001=100	Dec 2006=100	Dec 01 Linked to Dec 06 Base Dec 01=100
Jan-06	112.2		112.2
Feb-06	113.4		113.4
Mar-06	113.9		113.9
Apr-06	114.8		114.8
May-06	115.3		115.3
Jun-06	115.6		115.6
Jul-06	116.0		116.0
Aug-06	116.8		116.8
Sep-06	117.2		117.2
Oct-06	117.2		117.2
Nov-06	117.6		117.6
Dec-06	118.0	100.0	118.0
Jan-07		99.9	117.9
Feb-07		100.7	118.8
Mar-07		101.4	119.7
Apr-07		102.2	120.6

The two series are linked by multiplying each of the December 2006=100 based index numbers by the December 2006 index number with a base of December 2001=100 and dividing the result by 100. The resulting continuous series has a base of December 2001=100 and covers the period December 2001 to April 2007.

As of the December 2006 rebase, linking is undertaken using data to full decimal places. Therefore, rounding differences may be found, for example, the February 2007 index was 118.9 when linked using full decimal places and this figure (118.9) was the published figure.

9.9 Average Price Analysis: Dublin & Outside Dublin

Since May 2004, the CSO has been publishing a Bi-Annual comparison of average prices for Dublin and outside Dublin. Since December 2006, it has been possible to construct comparable average prices for the two regions (Dublin and outside Dublin) for 79 goods and services from CPI data. Previously this had only been possible for 73 goods and services. These 79 items account for approximately 21% of the total weight of the CPI basket. This comparison is published in June and December of each year based on prices collected for the CPI in May and November.

Appendices

Appendix 1 – Previous CPI Updatings

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

(i) Index with base July 1914 as 100

This was the first official index of consumer prices compiled for the State. It was introduced in respect of March 1922. The expenditure basis 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 was scheduled for revision during the late thirties, but plans for a Household Budget Survey necessary for this purpose had to be postponed because of the abnormal pattern of consumer 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

This second series was titled the *Interim Cost of Living Index (Essential Items)*. It was compiled for each quarter from mid-August 1947 to mid-August 1953. The weighting basis 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 large-scale urban Household Budget Inquiry was conducted during 1951-52 to provide up-to-date index weights.

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

This index series was introduced for 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 former 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.

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

This index series was introduced for mid-February 1969 and was compiled each quarter up to mid-November 1975. The weighting basis related to the expenditure pattern of all urban households as determined from the results of the 1965-66 Household Budget Inquiry. In addition to the introduction of revised weights, a number of other major updatings of the index were also undertaken. 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 with fifteen days intervening during November 1968.

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

This index series was introduced for mid-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) on the basis of the results of the 1973 national Household Budget Survey. No major change was made to the existing panel of local retail outlets in which these items were priced.

(vi) Index with base mid-November 1982 as 100

This index series was introduced for mid-February 1983 and was compiled each quarter up to mid-November 1989. The weighting pattern continued to relate to all households in the country based on the results of the 1980 national Household Budget Survey. Other major updatings of the index were also completed. The selection of varieties priced was substantially revised and increased in number from 685 to 722. The selection of local retail outlets in which the prices were surveyed was also extensively overhauled. As with November 1968, updating this necessitated, for continuity purposes, two separate national price collections on the old and new basis, respectively, within fifteen days of each other.

(vii) Index with base mid-November 1989 as 100

This index series was introduced for mid-February 1990 and was each quarter up to mid-November 1996. The weighting pattern was based on the results of the 1987 Household Budget Survey. The selection of varieties was reviewed and the number of varieties in the index increased from 722 to 807.

(viii) Index with base mid-November 1996 as 100

This index series coincided with the introduction of a monthly CPI. The weighting pattern used in the index was based on the results of the 1994-1995 Household Budget Survey. The selection of varieties was reviewed and their number in the index increased to 985 varieties.

(ix) Index with base mid-December 2001 as 100

This index series coincided with the changeover to the Euro and the introduction of the EU Classification of Individual Consumption by Purpose (EU COICOP - HICP) for the main sectoral analysis of the CPI. The weighting pattern used in the index was based on the results of the 1999-2000 Household Budget Survey. The selection of varieties was reviewed and their number in the index increased to 1,060 varieties.

Appendix 2 – Changes to the basket of Goods and Services from January 2007

1. Replacements - product replaces an already existing product (in brackets)

- Uncooked chicken medium size (uncooked chicken - no standard size)
- Tinned tomatoes (tinned sweetcorn)
- Tinned fruit (tinned peaches)
- Oranges and satsumas, mandarin, clementines (oranges)
- 2 litre milk (1 litre low-fat milk)
- Yoghurt drinks (yoghurt products)
- Large eggs 1/2 dozen (large eggs - dozen)
- Medium eggs 1/2 dozen (medium eggs - dozen)
- Specialised teas (loose leaf tea)
- Baby biscuits or baby rice cakes (baby biscuits)
- Fine quality wines and champagne (fine quality wines)
- Household cleaning products (household scouring or cleaning powder/liquid)
- Mens casual overjacket/rain jacket (mens casual overjacket)
- Mens overcoat (mens raincoats and macs)
- Ladies casual jacket/rain jacket (ladies casual jacket)
- Girls casual trousers (girls dress)
- Baby's sleepsuit/babygro (baby's outfit)
- Sewing accessories (spool of thread)
- Lounge suite (three piece upholstered lounge suite)
- Single armchair (kitchen chair)
- Bed (divan bed)
- MP3 player (walkman or discman)
- TV small up to 24" (portable TV)
- TV - large wide screen (colour TV)
- DVD player/recorder (DVD player)
- Electric heater (fan heater)
- Food processor/blender incl smoothie makers (food processor)
- Electrical accessory (3-pin electric plug)
- Garden implement (garden spade)
- Flower pot (plastic flower pot)
- Other outdoor power tools (electric strimmer)
- Carpet (carpet wool or wool mixture)
- Kitchen utensil (potato masher)
- Sweeping brush (sweeping brush handle)
- Dishwashing utensil (dishwashing brush)
- Umbrella (umbrella, gents)
- Baby carriage (baby buggy)
- Educational toy (Fisher price toy)
- DVD - film (DVD)
- Digital camera (autofocus compact 35mm camera)
- Film or memory card (35 mm film for ASA 100)
- Digital photo printing (express develop and print 35 mm colour film)
- Photo development of film/disposable camera (Develop and print 35 mm colour film)
- Camcorder - VHS or DVD (Camcorder or Digital camera)
- Car wash (Automatic car wash)
- Soil, peat and fertilisers (garden fertiliser)
- Weed killers (moss peat)
- Standard lunch - main course only (standard lunch - no. of courses)
- Prescribed drugs -oral and
- Prescribed Drugs - non oral (prescribed drugs)

Replacements refer to:

- (a) where a product has been directly substituted by a corresponding product or
- (b) where it has been replaced by a different item.

Appendix 2 - continued

2. Additions - the new product is brought into the index in addition to the existing products

- Other poultry
- Fresh/chilled shellfish
- Fresh/chilled ready to eat meals - indian/chinese meals
- Fresh/chilled ready to eat meals - european
- Children's yoghurt products
- Large fresh cake or fruit pies/tarts
- Cereal breakfast bars
- Other world cuisine
- Chewing gum
- Childrens fruit juices
- Multipack beer bottles (off-licence)
- Flavoured alcoholic drinks (275ml) bottle (off-licence)
- Draught cider 1pint
- Bathroom cleaning products
- Self tanning products
- Replica sports jersey
- Mattress
- Decorative home accessory
- Home cinema surround sound system
- Coffee maker
- Health grill
- Lamps
- Other DIY power tools
- Cushions
- Baby/child seat
- Children's bicycle
- Motorised toys
- Blank DVD
- Paint roller
- Ladders and steps
- DIY household maintenance products
- Concrete blocks
- Shopping bags
- Telephone equipment
- Driving tuition fees

3. A selection of deleted items

- Fillet/half leg of pork
- Streaky rashers
- Tinned pineapple
- Cooking fat
- Plain white flour 2kg
- Mens 2-piece wool suit
- Ladies raincoat
- Girls blouse
- Dress material
- Zip
- Mens working boots
- Kitchen table
- Radio CD cassette recorder
- Compact disc player
- Video recorder/player
- Bottle gas heater
- Carpet, synthetic
- Curtain material

Appendix 2 - continued

- Wool blanket
- Dinner knife
- Shoe polish brush
- Pocket calculator/organiser
- Replacement battery for watch fitted
- Bicycle tyre
- Pre-recorded cassette
- Blank cassette
- Blank video cassette
- Pre-recorded video cassette
- Car hot wash and wax
- Wallpaper border
- Paramedical services
- Public telephones
- TV repairs

Appendix 3 - COICOP Classification Percentage Expenditure Weights and constituent varieties priced

COICOP Headings		December 2006 % Expenditure Weights	Varieties Priced
01 Food and non-alcoholic beverages		11.7423	
01.1	Food	10.8076	
01.1.1	Bread and cereals	2.0242	(1) White sliced pan large (800g) (2) Brown sliced pan large (800g) (3) Brown wholemeal (4) French baguette (5) Specialised breads (6) Flour - white self-raising (7) Flour - brown wholemeal (8) Bread & cake mixes (9) Cream crackers & other cheese biscuits (10) Plain biscuits (11) Chocolate biscuits (12) Other sweet biscuits (13) Fruit cake (14) Swiss roll & chocolate logs (15) Other small cakes & buns (16) Large fresh cake or fruit pies/tarts (17) Cornflakes (18) Wheat based breakfast cereal (19) Muesli (20) Children's sugar or chocolate cereals (21) Cereal breakfast bars (22) Oatmeal (23) Noodles (24) Rice (25) Spaghetti (26) Pasta (27) Baby food biscuit (28) Pizza
01.1.2	Meat	2.6729	(1) Round steak (2) Sirloin steak (3) Striploin steak (4) Roast beef - topside/rib (5) Sliced/diced beef pieces (6) Minced beef (7) Lamb - whole leg (8) Lamb - loin chops (9) Gigot lamb chops (10) Lamb pieces (11) Lamb's liver (12) Roast loin of pork (13) Pork loin chops (14) Pork steak (15) Best back rashers (16) Ham fillet (17) Collar of bacon (18) Chicken - medium sized uncooked (19) Chicken - breast fillet (20) Chicken - cooked, whole

Appendix 3 - *continued*

COICOP Headings		December 2006 % Expenditure Weights	Varieties Priced
Food and non-alcoholic beverages - <i>continued</i>			(21) Chicken - prepared fillets (22) Other poultry (23) Cooked ham (24) Other cooked meats (25) Pork sausages (26) Black/white pudding (27) Frozen beef burgers (28) Frozen chicken products
01.1.3	Fish	0.3592	(1) Fresh fillet of whiting (2) Fresh cod fillets (3) Fresh salmon steak (4) Fresh fillet of plaice (5) Fresh/chilled shellfish (6) Frozen fish fingers (7) Frozen fish fillets (8) Smoked fillets (9) Smoked salmon (10) Tinned salmon (11) Tinned tuna
01.1.4	Milk, cheese and eggs	1.3177	(1) Milk 1 litre (full fat) (2) Milk 2 litre (full fat) (3) Fresh cream (4) Baby milk compound (5) Yoghurt (6) Yoghurt products - childrens (7) Yoghurt drinks (8) Cheese - processed (9) Irish cheddar cheese (10) Cheese - foreign (11) Cheese products (12) Eggs - large half dozen (13) Eggs - medium half dozen
01.1.5	Oils and fats	0.2734	(1) Butter (2) Butter - spreadable (3) Margarine (4) Low fat spreads (5) Cooking oil (6) Olive oil & other flavoured oils
01.1.6	Fruit	0.8597	(1) Apples, cooking (2) Apples, eating (3) Oranges, satsumas, mandarins, clementines (4) Grapes (5) Bananas (6) Kiwi (7) Melons (8) Tinned fruit (9) Sultanas (10) Nuts

Appendix 3 - continued

COICOP Headings		December 2006 % Expenditure Weights	Varieties Priced
Food and non-alcoholic beverages - continued			
01.1.7	Vegetables	1.5782	(1) Potatoes, 2.5kg (2) Potatoes, 10kg (3) Tomatoes (4) Onions (5) Cabbage (6) Broccoli (7) Cauliflower (8) Carrots (9) Mushrooms (10) Peppers (11) Lettuce (12) Garlic (13) Prepared packaged vegetables (14) Tinned peas (15) Tinned baked beans (16) Tinned spaghetti in tomato sauce (17) Tinned tomatoes (18) Frozen peas (19) Frozen sweetcorn (20) Frozen chips/french fries (21) Frozen mixed vegetables (22) Other frozen potato products (23) Potato crisps (24) Vegetarian meals/products (25) Premium quality snacks (26) Prepared green salads (27) Coleslaw & other mixed salads
01.1.8	Sugar, jam, honey, chocolate and confectionery	0.8912	(1) Sugar - white granulated (2) Artificial sweetener (3) Jam (4) Honey (5) Marmalade (6) Box of chocolates (7) Multi pack/fun size sweets (8) Chocolate bar (9) Packet of sweets (10) Prepared desserts - ready to eat (11) Ice cream (12) Ice cream cakes (13) Other ice cream products
01.1.9	Other food products	0.8312	(1) Mayonnaise (2) Pasta meal sauces (3) Ready mix sauces (4) Meat extract and gravy mixes (5) Ketchup (6) Relishes, dressings & other sauces (7) Oriental stir fry sauces & mixtures (8) Soup - fresh

Appendix 3 - continued

COICOP Headings		December 2006 % Expenditure Weights	Varieties Priced
Food and non-alcoholic beverages - continued			(9) Soup - dried
			(10) Quick soup
			(11) Custard
			(12) Baby food
			(13) Salt
			(14) Black/white pepper
			(15) Mustard
			(16) Vinegar
			(17) Mixed herbs & spices
			(18) Convenience chilled foods
			(19) Hot deli foods
			(20) Garlic bread
			(21) Fresh/chilled ready to eat meals - asian
			(22) Fresh/chilled ready to eat meals - european
			(23) Frozen meals - asian
			(24) Frozen meals - european
			(25) Other world cuisine
			(26) Chewing gum
01.2	Non-alcoholic beverages	0.9347	
01.2.1	Coffee, tea and cocoa	0.2380	(1) Specialised teas
			(2) Tea - bags
			(3) Coffee - instant
			(4) Coffee - ground/filter
			(5) Cocoa/drinking chocolate
01.2.2	Mineral waters, soft drinks, fruit & vegetable juices	0.6967	(1) Soft drink can/bottle
			(2) Sort drink large bottle
			(3) Mineral water bottled
			(4) Baby juices & drinks
			(5) Orange juice
			(6) Other fruit juices
			(7) Childrens fruit juices
			(8) Concentrated squash
			(9) Energy drinks
02	Alcoholic beverages and tobacco	6.0484	
02.1	Alcoholic beverages*	2.8725	
02.1.1	Spirits	0.5818	(1) Whiskey - take home (bottle)
			(2) Brandy - take home (bottle)
			(3) Vodka - take home (bottle)
			(4) Cream liqueur - take home (bottle)
			(5) Flavoured alcoholic drinks - take home (bottle)
02.1.2	Wine and cider	1.5258	(1) Sherry - take home (bottle)
			(2) Fine quality wines and champagne- take home (bottle)
			(3) Table wine - take home (bottle)
			(4) Cider - take home (can)

* Alcoholic beverages purchased in off licences/supermarkets. Alcohol consumed in a licenced premises is classified in 11 - Restaurants and hotels.

Appendix 3 - continued

COICOP Headings		December 2006 % Expenditure Weights	Varieties Priced
<i>Alcoholic beverages and tobacco - continued</i>			
02.1.3	Beer	0.7649	(1) Stout - take home (6 pack) (2) Lager - take home (can) (3) Lager - take home (tray) (4) Multi pack beer - take home (bottles)
02.2.0	Tobacco	3.1759	(1) Filtered cigarettes (2) Cigars (3) Tobacco - flake
03	Clothing and footwear	5.4158	
03.1	Clothing	4.4488	
03.1.2	Garments	4.2028	(1) Mens casual overjacket/rainjacket (2) Mens overcoat (3) Mens 2-piece suit (4) Mens sports jacket & blazer (5) Mens casual trousers (6) Mens formal trousers (7) Mens jumpers & pullovers (8) Mens formal shirts (9) Mens casual shirts (10) Mens tops & t-shirts (11) Mens underwear (12) Mens vests & cotton t-shirts (13) Mens pyjamas (14) Ladies casual overjacket/rainjacket (15) Ladies overcoat (16) Ladies 2-piece suit (17) Ladies blazers & jackets (18) Ladies dress - formal & informal (19) Ladies jeans & casual trousers (20) Ladies formal trousers (21) Ladies skirt (22) Ladies blouse (23) Ladies knitwear (24) Ladies tops (25) Ladies knickers & panties (26) Ladies bodyshapers (27) Ladies bra (28) Ladies nightdresses & pyjamas (29) Boys casual jacket (30) Boys tracksuits/separates (31) Boys casual trousers (32) Boys jumpers & sweatshirts (33) Boys shirts - non school (34) Boys tops & t-shirts (35) Girls casual jacket (36) Girls skirt (37) Girls casual trousers

Appendix 3 - continued

COICOP Headings		December 2006 % Expenditure Weights	Varieties Priced
Clothing and footwear - continued			(38) Girls tops
			(39) School uniform
			(40) Boys vest & white cotton t-shirts
			(41) Boys pyjamas
			(42) Girls vest
			(43) Mens socks
			(44) Ladies tights & stockings
			(45) Boys socks
			(46) Girls socks
			(47) Babies sleepsuits/babygro
			(48) Toddlers outfit
			(49) Fleeeces & similar type jackets
			(50) Swimwear
			(51) Mens tracksuits/separates
			(52) Mens sweatshirts/rugby shirts
			(53) Ladies leisure suits
			(54) Replica sports jersey
03.1.3	Other articles of clothing and clothing accessories	0.1001	(1) Neck tie
			(2) Mens clothing accessories
			(3) Ladies clothing accessories
			(4) Sewing accessories
03.1.4	Cleaning, repair and hire of clothing	0.1459	(1) Dry cleaning man's 2-piece suit
			(2) Dry cleaning ladies jacket
			(3) Dry cleaning ladies trousers
			(4) Laundry
			(5) Alteration to trousers
			(6) Dress hire
03.2	Footwear	0.9670	
03.2.1	Shoes and other footwear	0.9537	(1) Mens formal leather shoes
			(2) Mens dressy casual shoes
			(3) Mens boots - casual/hiking
			(4) Mens trainers & runners
			(5) Ladies low heel walking
			(6) Ladies classic court
			(7) Ladies other fashion shoes
			(8) Ladies boots
			(9) Ladies slippers & house shoes
			(10) Ladies sandals
			(11) Boy's shoes
			(12) Girl's shoes
			(13) Children's trainers & runners
03.2.2	Repair and hire of footwear	0.0133	(1) Mens shoe repairs
			(2) Ladies shoe repairs

Appendix 3 - continued

COICOP Headings		December 2006 % Expenditure Weights	Varieties Priced	
04	Housing, water, electricity, gas and other fuels	16.5084		
04.1	Rents and other housing costs	9.5303		
04.1.1	Rentals for housing	2.8696	(1)	Local authority rents
			(2)	Private rents
04.1.2	Mortgage interest	6.6607	(1)	Mortgage interest
04.3	Maintenance and repair of dwelling	2.4521		
04.3.1	Materials for maintenance and repair of dwelling	1.5062	(1)	Paint
			(2)	Paint brush
			(3)	White spirit
			(4)	Paint roller
			(5)	Varnish
			(6)	Floor tiles
			(7)	DIY household maintenance products
			(8)	Gravel
			(9)	Sand
			(10)	Cement
			(11)	Concrete blocks, solid
			(12)	Concrete blocks, hollow
			(13)	Paving slabs
			(14)	Wall cappings
			(15)	Timber
			(16)	Chipboard
			(17)	Hardboard
			(18)	Plasterboard
			(19)	Glass
04.3.2	Services for the maintenance and repair of the dwelling	0.9459	(1)	House maintenance services
04.4.0	Water supply, refuse and miscellaneous services relating to the dwelling	0.5117	(1)	Refuse charges
			(2)	Chimney sweep
04.5	Electricity, gas and other fuels	4.0142		
04.5.1	Electricity	1.5444	(1)	Electricity
04.5.2	Gas	0.8737	(1)	Piped gas
			(2)	Bottled gas
04.5.3	Liquid fuels	0.8538	(1)	Fuel oil
04.5.4	Solid fuels	0.7423	(1)	Firelighters
			(2)	Fire handy packs
			(3)	Coal & anthracite
			(4)	Turf & briquettes

Appendix 3 - continued

COICOP Headings		December 2006 % Expenditure Weights	Varieties Priced
05	Furnishings, household equipment and routine household maintenance	4.4221	
05.1	Furniture and furnishings, carpets and other floor coverings	1.0812	
05.1.1	Furniture and furnishings	0.9467	(1) Lounge suite (2) Dining table (3) Dining chair (4) Single armchair (5) Mattress (6) Bed (7) Kitchen units (8) Children's furniture (9) Computer & office furniture (10) Bedroom furniture (11) Garden furniture (12) Lamps (13) Decorative home accessory (14) Cushions
05.1.2	Carpets and other floor coverings	0.1345	(1) Vinyl floor coverings (2) Carpet (3) Wooden flooring
05.2.0	Household textiles	0.2424	(1) Continental quilt (2) Continental quilt cover (3) Pillow (4) Pillow case (5) Sheet (6) Bath towel (7) Tea towel (8) Ready made curtains (9) Throws & other bedspreads
05.3	Household appliances	1.0459	
05.3.1	Major household appliances	0.8435	(1) Vacuum cleaner (2) Electric cooker (3) Gas cooker (4) Fridge freezer (5) Deep freeze (6) Dishwasher (7) Washing machine (8) Tumble dryer (9) Heater - electric (10) Microwave oven
05.3.2	Small electrical household appliances	0.1285	(1) Coffee maker (2) Iron (3) Kettle (4) Toaster (5) Deep fat fryer

Appendix 3 - continued

COICOP Headings		December 2006 % Expenditure Weights	Varieties Priced
Furnishings, household equipment and routine household maintenance - <i>continued</i>			(6) Food processor/blender/smoothie maker (7) Baby monitor (8) Health grill - electric
05.3.3	Repair of household appliances	0.0740	(1) Electrical repairs (2) TV repairs
05.4.0	Glassware, tableware and household utensils	0.2577	(1) Dustbin (2) Coffee mug (3) Crockery combi-service set (4) Glass tumbler (5) Wine glass (6) Casserole dish (7) Salt & pepper set (8) Cutlery set (9) Carving knife (10) Chopping board (11) Bottle opener (12) Saucepan (13) Frying pan (14) Wok (15) Tea pot (16) Kitchen utensil (17) Baking & roasting tins (18) Ironing board (19) Bathroom accessories
05.5	Tools and equipment for house and garden	0.3627	
05.5.1	Major tools and equipment	0.0808	(1) Lawnmower (2) Power drill (3) Other DIY power tools (4) Other outdoor power tools (5) Tool hire
05.5.2	Small tools and miscellaneous accessories	0.2820	(1) Battery (2) Light bulb (3) Electrical accessory (4) Smoke alarm (5) Flashlight (6) Garden implement (7) Clothes line (8) Hammer (9) Screw driver (10) Ladders and steps
05.6	Goods and services for routine household maintenance	1.4321	
05.6.1	Non-durable household goods	0.6683	(1) Bathroom cleaning products (2) Plastic basin

Appendix 3 - continued

COICOP Headings		December 2006 % Expenditure Weights	Varieties Priced
Furnishings, household equipment and routine household maintenance - <i>continued</i>			(3) Sweeping brush (4) Dishwashing utensil (5) Household mop (6) Shopping bags (7) Automatic washing powder/liquid (8) Dishwasher detergent (9) Wash-up liquid (10) Fabric conditioner (11) Household cleaning products (12) Disinfectant (13) Air freshener (14) Other cleaning materials (15) Plastic rubbish bags (16) Shoe polish or liquid (17) Matches (18) Kitchen paper roll (19) Tin foil (20) Cling film (21) Rubber gloves (22) Food & sandwich bags
05.6.2	Domestic and household services	0.7638	(1) Domestic services
06	Health	3.1536	
06.1	Medical products, appliances and equipment	1.1764	
06.1.1	Pharmaceutical products	0.8672	(1) Prescribed drugs - oral (2) Prescribed drugs - non oral (3) Pain reliever (4) Antacid (5) Cough mixture (6) Vitamins & other supplements
06.1.2	Therapeutic appliances and equipment	0.2637	(1) Spectacles (2) Dentures (3) Therapeutic equipment
06.1.3	Other medical products	0.0456	(1) Petroleum jelly (2) First aid disinfectant (3) Adhesive dressing (4) Condoms
06.2	Out-patient services	1.0313	
06.2.1	Medical services	0.6684	(1) Doctors' fees (2) Opticians' fees (3) Alternative & complementary medicine
06.2.2	Dental services	0.3628	(1) Dentist fees

Appendix 3 - continued

COICOP Headings		December 2006 % Expenditure Weights	Varieties Priced	
<i>Health - continued</i>				
06.3.0	Hospital Services	0.9459	(1)	Hospital charges
07	Transport	13.2933		
07.1	Purchase of vehicles	5.7319		
07.1.1	Motor cars	5.6398	(1)	Motor cars - new
			(2)	Motor cars - second hand
07.1.2	Motor cycles	0.0373	(1)	Motor cycles
07.1.3	Bicycles	0.0549	(1)	Adult's bicycle
			(2)	Children's bicycle
07.2	Operation of personal transport equipment	5.9606		
07.2.1	Spare parts and accessories	0.3444	(1)	Motor car tyres
			(2)	Other motor car parts
07.2.2	Fuels and lubricants	3.7506	(1)	Petrol
			(2)	Diesel
			(3)	Motor oil
07.2.3	Maintenance and repair	0.7045	(1)	Car wash
			(2)	Car maintenance
			(3)	Puncture repairs
07.2.4	Other services	1.1611	(1)	Motor tax - motor cycles
			(2)	Motor tax - motor cars
			(3)	Parking fees
			(4)	Other vehicle costs
			(5)	Toll charges
			(6)	Car rental
			(7)	Driving licences
			(8)	Driving test fee
07.3	Transport services	1.6008		
07.3.1	Passenger transport by rail	0.2189	(1)	Rail fares
07.3.2	Passenger transport by road	0.9286	(1)	Bus fares
			(2)	School transport
			(3)	Taxi
07.3.3	Passenger transport by air	0.4009	(1)	Air fares
07.3.4	Passenger transport by sea and inland waterway	0.0290	(1)	Boat fares

Appendix 3 - continued

COICOP Headings		December 2006 % Expenditure Weights	Varieties Priced	
<i>Transport - continued</i>				
07.3.5	Combined passenger transport	0.0183	(1)	Commuter tickets - bus/rail travel
07.3.6	Other purchased transport services	0.0051	(1)	Furniture removals
08	Communication	3.4184		
08.1.0	Postal services	0.0798	(1)	Postage
08.2.1	Telephone and telefax equipment	0.0184	(1)	Telephone equipment
08.3.0	Telephone and communication services	3.3203	(1) (2) (3)	Telephones - private Telephones - mobile Internet services
09	Recreation and culture	10.1041		
09.1	Audio-visual, photographic and information processing equipment	1.0479		
09.1.1	Equipment for the reception, recording and reproduction of sound and pictures	0.2217	(1) (2) (3) (4) (5) (6) (7)	Clock Radio MP3 player Midi system Home cinema surround sound system TV small up to 24" TV large widescreen DVD player/recorder
09.1.2	Photographic and cinematographic equipment and optical instruments	0.2622	(1) (2) (3)	Camera - disposable Digital camera Camcorder
09.1.3	Information processing equipment	0.1713	(1)	Computers and accessories
09.1.4	Recording media	0.3927	(1) (2) (3) (4) (6)	DVD pre-recorded DVD blank CD single CD Album Film or memory card
09.2.1	Other major durables for recreation and culture	0.0146	(1)	Musical Instruments
09.3	Other recreational items and equipment including gardens and pets	1.5602		
09.3.1	Games, toys and hobbies	0.5606	(1) (2) (3)	Computer games console Child's doll Computer game

Appendix 3 - continued

COICOP Headings		December 2006 % Expenditure Weights	Varieties Priced
Recreation and culture - continued			(4) Model car/tractor/lorry (5) Lego & building blocks (6) Group game (7) Educational toy (8) Soft cuddly toy (9) Motorised toys
09.3.2	Equipment for sport, camping and open air recreation	0.1917	(1) Sports & recreation goods
09.3.3	Gardens, plants and flowers	0.4325	(1) Flower pot (2) Soil, peat and fertilisers (3) Weed killer (4) Flowers
09.3.4	Pets and related products	0.2570	(1) Pet food
09.3.5	Veterinary and other services for pets	0.1184	(1) Veterinary services
09.4	Recreational and cultural services	3.2243	
09.4.1	Recreational and sporting services	1.1232	(1) Sports admittance (2) Sports participation (3) Society subscription
09.4.2	Cultural services	2.1011	(1) Cinema (2) Nightclubs (3) Cultural & other admittance (4) DVD hire (5) Library charges (6) Cable & satellite TV services (7) TV licence (8) Development - passport photo (9) Digital photo printing (10) Photo development
09.5	Newspapers, books and stationery	1.7290	
09.5.1	Books	0.4724	(1) Infant books (2) Paperback books (3) Text books
09.5.2	Newspapers and periodicals	0.9333	(1) Comics (2) Magazines (3) Newspapers

Appendix 3 - continued

COICOP Headings		December 2006 % Expenditure Weights	Varieties Priced
Recreation and culture - continued			
09.5.4	Stationery	0.3233	(1) School copybook (2) Envelopes (3) Refill pad (4) Sellotape (5) Lead pencil (6) Ballpoint pen (7) Markers & crayons (8) Other stationery
09.6.0	Package holidays	2.5280	(1) Package holidays
<hr/>			
10	Education	2.0429	
10.1.0	Primary education	0.1673	(1) Private primary (2) Playschools
10.2.0	Secondary education	0.1695	(1) Second level day (2) Second level boarding
10.4.0	Tertiary education	1.0183	(1) Third level tuition (2) Third level maintenance
10.5.0	Other education & training	0.6878	(1) Other education & training (2) Examination fees (3) Driving tuition
<hr/>			
11	Restaurants and hotels	15.4247	
11.1	Catering services	13.0297	
11.1.1	Restaurants, cafes and licenced premises	11.6724	(1) Stout draught bar - 1pt (2) Lager draught bar - 0.5pt (3) Lager draught bar - 1pt (4) Lager bottled bar (5) Ale draught bar 1pt (6) Whiskey bar (7) Brandy bar (8) Vodka bar (9) Flavoured alcoholic drinks bar (10) Wine bar - small bottle (11) Cider bottle bar (12) Cider draught bar 1pt (13) Lounge bar mineral (14) Mixer/split (15) Chips small single (16) Lunch (17) Dinner (18) Fast food meal

Appendix 3 - continued

COICOP Headings		December 2006 % Expenditure Weights	Varieties Priced
<i>Restaurants and hotels - continued</i>			(19) Take away meal (20) Snacks/sandwiches/beverages (21) Meal in ethnic restaurant
11.1.2	Canteens	1.3573	(1) Canteens
11.2.0	Accommodation services	2.3950	(1) Guest houses and B&Bs (2) Hotels (3) Hostels
12	Miscellaneous goods and services	8.4260	
12.1	Personal care	2.3999	
12.1.1	Hairdressing and personal grooming	0.8844	(1) Mens dry haircut (2) Mens wash, cut & dry (3) Ladies shampoo & set (4) Ladies shampoo, cut & dry (5) Ladies perm/bodywave (6) Ladies hair colour & highlights (7) Health & beauty treatments (8) Ear piercing
12.1.2	Electric appliances for personal care	0.0130	(1) Razor (2) Hair dryer
12.1.3	Other appliances, articles and products for personal care	1.5025	(1) Toilet paper (2) Toilet soap (3) Shower gel (4) Toothpaste (5) Dental floss (6) Mouth wash (7) Shampoo (8) Hair conditioner (9) Hair gel (10) Hair colour (11) Hairspray (12) Shaving foam (13) Deodorant (14) Suntan oil/cream (15) Baby powder (16) Cleansing cream/wipes (17) Lipstick (18) Perfume (19) Aftershave (20) Hand cream (21) Moisturiser (22) Foundation - make-up (23) Mascara (24) Tampons (25) Sanitary towels/pads (26) Disposable nappies

Appendix 3 - *continued*

COICOP Headings		December 2006 % Expenditure Weights	Varieties Priced
<i>Miscellaneous goods and services - continued</i>			(27) Tissues (28) Cotton wool (29) Toothbrush (30) Razor blades (31) Baby wipes (32) Self tanning products
12.3	Other personal goods	0.4855	
12.3.1	Jewellery, clocks and watches	0.1711	(1) Wrist watch (2) Jewellery (3) Clock
12.3.2	Other personal effects	0.3143	(1) Cigarette lighter (2) Suitcase (3) Ladies handbag (4) Umbrella (5) Wallet (6) Sunglasses (7) Giftware/souvenir (8) Baby carriage (9) Baby or child seat
12.4.0	Social protection	1.0171	(1) Childcare (2) Nursing homes & nursing agencies
12.5	Insurance	3.9334	
12.5.2	Dwelling insurance	0.7502	(1) House insurance contents - service (2) House insurance contents - non-service (3) House insurance dwelling
12.5.3	Health insurance	1.7726	(1) Health insurance
12.5.4	Transport insurance	1.4106	(1) Motor cycle insurance (2) Insurance motor car - service (3) Insurance motor car - non-service
12.6.2	Financial services	0.1262	(1) Financial services
12.7.0	Other services	0.4639	(1) Newspaper advertisements (2) Union subscriptions (3) Other licences (4) Passport fee (5) Birth certificate fee (6) Funeral services (7) Weddings (8) Professional & legal services (9) Miscellaneous goods & services

Appendix 4 - Postal and Telephone Inquiries

In addition to the 53,000 prices collected directly in shops and businesses on a monthly basis, there are 114 postal or telephone inquiries conducted as part of the current CPI. On average, over 3,000 price quotations are collected each month from these inquiries. They account for the price trends of approximately 51.8% of the basket of goods and services in the all-items CPI.

A list of these files is given below:

- Fuel oil
- Mortgage interest
- Comics
- Magazines
- Newspapers
- Motor cycles
- Motor cars - new
- Motor cars – second-hand
- Motor cycle insurance
- Motor car insurance - service
- Motor car insurance - non service
- Car maintenance
- Boat fares
- Air fares
- Telephone charges - private
- Package holidays & tours
- Mobile telephones
- House insurance content - service
- House insurance content - non-service
- House insurance dwelling
- Other motor car parts
- Computers & accessories
- Car rental
- Guesthouses and B&Bs
- Hotels
- Financial services
- Piped gas
- Refuse charges
- Text books
- Motor tax - motor cycles
- Motor tax - motor cars
- Private primary
- 2nd level day
- 2nd level boarding
- 3rd level tuition
- Society subscriptions
- Library charges
- School uniforms
- Passport fee
- Birth cert fee
- Therapeutic equipment
- School transport
- Examination fees
- Electricity
- Privately owned rent
- Electrical & TV repairs
- Motor car tyres
- Sports admittance
- Other admittance
- Other education & training
- Doctors' fees
- Dentists' fees
- Prescribed drugs - oral
- Prescribed drugs - non-oral
- Postage
- Union subscriptions
- Tool hire
- Dentures
- Sports participation
- Furniture removal
- Hostels
- Musical instruments
- Condoms
- Garden furniture
- Funeral services
- Alternative & complementary medicine
- Local authority rents
- Parking fees
- Taxi fares
- Building materials
- Dress hire
- TV licences
- Driving licences
- Sports & recreation goods
- Jewellery
- Puncture repairs
- Newspaper advertisements
- Laundry
- Kitchen units
- Medical insurance
- DVD hire
- Toll charges
- House maintenance services
- Health & beauty treatments
- Domestic services
- Weddings
- Professional & legal services
- Veterinary services & animal care
- Canteens & rail dining car
- Snacks & sandwiches
- Coal & anthracite
- Other vehicle costs
- Bus fares
- Rail fares
- 3rd level maintenance
- Opticians fees
- Hospital charges
- Spectacles
- Cable & satellite TV services
- Other licences
- Driving test fee
- Chimney sweep
- Flowers
- Turf & briquettes
- Childcare & crèches
- Playschools
- Commuter tickets
- Nursing homes and nursing agencies
- Internet services
- Miscellaneous goods & services
- Telephone equipment
- Shopping bags
- Concrete blocks
- Driving tuition fees

Appendix 5 - National Average Prices

Products for which comparable National Average Prices are published for successive months

Commodity	Unit	Commodity	Unit
Beef:		Eggs:	
Round steak	1 kg	Large (grade 2)	½ doz.
Sirloin steak	1 kg	Medium (grade 3)	½ doz.
Striploin steak	1 kg	Bread:	
Roast beef - topside/rib	1 kg	White sliced (large)	800g
Sliced/diced beef pieces	1 kg	Brown sliced (large)	800g
Lamb:		Flour:	
Whole leg	1 kg	White, self-raising	2 kg
Loin chops	1 kg	Brown, wholemeal	2 kg
Gigot chops	1 kg	Sugar, white granulated	1 kg
Lamb pieces incl. neck	1 kg	Tea, bags	80
Liver	1 kg	Spaghetti	500g
Pork:		Preserves:	
Roast loin	1 kg	Jam	1 lb
Loin chops	1 kg	Marmalade	1 lb
Steak	1 kg	Orange juice	1 litre
Bacon:		Drink taken home:	
Best back rashers	1 kg	Stout, 6 pack	6 by 250 ml
Ham fillet	1 kg	Lager, single can	500ml
Collar	1 kg	Lager, tray	12 by 330 ml
Poultry:		Cider, can	500ml
Uncooked chicken, medium size	1.6 kg	Whiskey, bottle	70 cl
Other meat:		Brandy, bottle	70 cl
Cooked ham	1 kg	Vodka, bottle	70 cl
Pork sausages	1 kg	Cream liquer, bottle	70 cl
Fresh fish:		Flavoured alcopops	275 ml
Filletts of whiting	1 kg	Sherry, bottle	75 cl
Cod filletts	1 kg	Wine, table	75 cl
Salmon steak	1 kg	Drinks out:	
Filletts of plaice	1 kg	Stout, draught	1 pint
Smoked fish:		Lager, draught	½ pint
Smoked salmon	1 kg	Lager, draught	1 pint
Tinned vegetables:		Ale, draught	1 pint
Tinned tomatoes	400g	Cider, draught	1 pint
Fresh vegetables:		Lager, bottle	330 ml
Potatoes	2.5kg	Cider, bottle	330 ml
Potoates	10 kg	Flavoured alcopops	275 ml
Tomates	1 kg	Whiskey, single measure	½ glass
Onions	1 kg	Brandy, single measure	½ glass
Broccoli	1 kg	Vodka, single measure	½ glass
Carrots	1 kg	Wine, ¼ bottle	187 ml
Mushrooms	1 kg	Cigarettes:	
Fresh fruit:		Filtered, standard size	20
Grapes	1 kg	Cinema	fee
Bananas	1 kg	Night Club	fee
Milk:		Hairdressing:	
Fresh, pasteurised full fat	1 litre	Gent's haircut - dry cut	fee
Fresh, pasteurised full fat	2 litre	Gent's wash, cut and blow dry	fee
Cheese:		Ladies' wash, cut and blow dry	fee
Irish cheddar	1 kg	Motor fuel:	
Butter:	1 lb	Petrol, unleaded	1 litre
		Autodiesel	1 litre

Appendix 6 – Comparison of the CPI and the HICP

The HICP is a subset of the CPI. The main difference between the two indices is in respect of the coverage of goods and services. Certain items included in the CPI are outside the scope of the HICP or differ in respect to definition. It was necessary to make adjustments to the CPI expenditure weights to take these differences into account. To do this, the weights for the CPI had to be modified to exclude the eight items which are deemed to be outside the scope of coverage of the HICP. These items were:

• mortgage interest	6.661%
• building materials	0.752%
• concrete blocks	0.034%
• house insurance contents - non service	0.189%
• motor tax - motor cycles	0.013%
• motor tax - cars	0.825%
• motor insurance - non service	0.774%
• union subscriptions	0.238%
Total Weight of Excluded Items	9.486%

The treatment of owner occupied housing in the HICP is still under consideration at EU level. As a consequence, mortgage interest and building materials are excluded.

In respect of insurance, a distinction is made in the premium paid by a household. Insurance is split into two components (a) service charge and (b) non-service charge. The non-service charge elements are excluded from the HICP. In addition to those items excluded above, adjustments have been made to house insurance (dwelling) and health insurance to exclude insurance refunds from the HICP weights. This results in a further 1.074% being excluded from the HICP.

The total weight of the items excluded is 10.560% which means that 89.440% of the CPI basket is covered in the HICP. This compares to 90.755% in the previous series. To make things easier for calculation purposes, these HICP weights were rescaled to 10,000. The following table shows the new HICP weights compared to the CPI weights and explains the main differences between the two series.

Difference CPI vs HICP Weights

COICOP Group	CPI	HICP	Reason
01	11.742	13.129	
02	6.048	6.763	
03	5.416	6.055	
04	16.509	10.131	Mortgage Interest and Building Materials excluded
05	4.422	4.944	
06	3.154	3.526	
07	13.293	13.926	Motor Taxation excluded
08	3.418	3.822	
09	10.104	11.297	
10	2.043	2.284	
11	15.425	17.246	
12	8.426	6.877	Insurances and Trade Union Subscriptions
00	100.000	100.000	

The exclusion of the items listed above means that the HICP weights are approx 11.8% greater than the CPI weights except for the 3 categories where items are specifically excluded.

Appendix 7 - CPI Item Headings by former national classification, December 2006
Percentage Expenditure Weights and constituent varieties priced

Item Headings	December 2006 % Expenditure Weights	Varieties Priced
FOOD		
Beef	0.7179	(1) Round steak (2) Sirloin steak (3) Striploin steak (4) Roast beef - topside/rib (5) Sliced/ diced beef pieces (6) Minced beef
Lamb	0.2234	(1) Whole leg (2) Loin chops (3) Gigot chops (4) Pieces (5) Liver
Pork	0.1781	(1) Roast loin (2) Loin chops (3) Steak
Bacon	0.3906	(1) Best back rashers (2) Ham fillet (3) Collar
Poultry	0.4633	(1) Chicken, medium sized uncooked (2) Chicken, breast fillet (3) Chicken, cooked (4) Chicken, prepared fillet (5) Other poultry
Cooked meat	0.4291	(1) Cooked ham (2) Other cooked meats
Sausages	0.1568	(1) Pork sausages
Other meat	0.0609	(1) Black/ white pudding (2) Beef burgers
Fresh fish	0.1814	(1) Fillet of whiting (2) Cod fillets (3) Salmon steak (4) Fillet of plaice (5) Fresh/chilled shellfish
Frozen fish	0.0945	(1) Fish fingers (2) Fish fillets
Smoked fish	0.0332	(1) Smoked fillets (2) Smoked salmon
Tinned fish	0.0501	(1) Salmon (2) Tuna
Potatoes	0.3256	(1) Potatoes, 2.5 kg (2) Potatoes, 10 kg
Tomatoes	0.1292	(1) Tomatoes
Other fresh vegetables	0.4787	(1) Onions (2) Cabbage (3) Broccoli (4) Cauliflower (5) Carrots (6) Mushrooms (7) Peppers (8) Lettuce (9) Garlic (10) Prepared packaged vegetables
Tinned vegetables	0.0956	(1) Peas (2) Baked beans (3) Spaghetti (4) Tomatoes

Appendix 7 - continued

Item Headings	December 2006 % Expenditure Weights	Varieties Priced
FOOD - continued		
Frozen vegetables	0.1549	(1) Peas (2) Sweet corn (3) Chips (4) Mixed vegetables (5) Other frozen potato products
Bread	0.6553	(1) White sliced, large (800g) (2) Brown sliced, large (800g) (3) Brown/wholemeal (4) French baguette (5) Other specialised bread
Flour	0.0517	(1) White, self-raising (2) Brown, wholemeal (3) Bread and cake mixes
Biscuits	0.3268	(1) Cream crackers & other cheese biscuits (2) Plain biscuits (3) Chocolate biscuits (4) Other sweet biscuits
Cakes	0.3762	(1) Fruit cake (2) Swiss roll & chocolate logs (3) Other small cakes & buns (4) Large fresh cake/fruit pie
Pasteurised milk	0.6567	(1) 1 litre, full fat (2) 2 litre, full fat
Other milk products	0.2608	(1) Fresh cream (2) Baby milk compound (3) Yoghurt (4) Yoghurt drinks (5) Childrens yoghurt products
Cheese	0.2790	(1) Processed (2) Irish cheddar (3) Foreign cheeses (4) Cheese products
Eggs	0.1212	(1) Large (size 2), half dozen (2) Medium (size 3), half dozen
Butter	0.0813	(1) Butter (2) Butter, spreadable
Margarine	0.1448	(1) Margarine, hard/soft (2) Low fat spreads
Other fats and oils	0.0474	(1) Cooking oil (2) Olive & other flavoured oils
Fresh fruit	0.7731	(1) Apples, cooking (2) Apples, eating (3) Oranges, satsumas, mandarins, clementines (4) Grapes (5) Bananas (6) Kiwi (7) Melons
Other fruit	0.0866	(1) Tinned fruit (2) Sultanas (3) Nuts
Tea	0.1417	(1) Specialised teas (2) Bags
Coffee	0.0817	(1) Instant (2) Filter
Cocoa or drinking chocolate	0.0146	(1) Cocoa/drinking chocolate

Appendix 7 - continued

Item Headings	December 2006 % Expenditure Weights	Varieties Priced
FOOD - continued		
Sugar	0.0583	(1) White granulated (2) Artificial sweeteners
Breakfast cereals	0.2597	(1) Cornflakes (2) Wheat-based breakfast cereal (3) Muesli (4) Children's sugar or chocolate cereals (5) Cereal breakfast bars
Oatmeal	0.0352	(1) Oatmeal
Other cereals	0.0992	(1) Noodles (2) Rice (3) Spaghetti (4) Pasta
Sauces and meat extract	0.2028	(1) Mayonnaise (2) Pasta meal sauces (3) Ready mix sauces (4) Meat extract & gravy mixes (5) Ketchup (6) Relishes, dressing & other sauces (7) Oriental stir fry sauces & mixtures
Soups	0.1102	(1) Tinned or fresh (2) Dried (3) Cuppa
Preserves	0.0526	(1) Jam (2) Honey (3) Marmalade
Sweets & chocolate	0.5151	(1) Box of chocolates (2) Multi-pack fun size (3) Chocolate bar (4) Packet of sweets
Custard	0.0117	(1) Custard powder
Desserts & ice creams	0.2652	(1) Prepared desserts - ready to eat (2) Ice cream (3) Ice cream cakes (4) Other ice cream products
Baby food	0.0764	(1) Tin/jar/packet (2) Biscuits (3) Baby drinks & juices
Miscellaneous items	1.3418	(1) Pizza (2) Frozen meals - oriental (3) Frozen meals - european (4) Fresh/chilled ready to eat meals - oriental, indian or chinese (5) Fresh/chilled ready to eat meals - european (6) Frozen chicken products (7) Vegetarian meals/products (8) Salt (9) Black/white pepper (10) Mustard (11) Vinegar (12) Potato crisps (13) Premium quality snacks (14) Convenience chilled foods (15) Prepared green salads (16) Hot deli foods (17) Orange juice (18) Other fruit juices (19) Childrens fruit juices (20) Coleslaw & other mixed salads (21) Garlic bread (22) Mixed herbs & spices (23) Other world cuisine (24) Chewing gum

Appendix 7 - continued

Item Headings	December 2006 % Expenditure Weights	Varieties Priced
FOOD - continued		
Soft drinks	0.7874	(1) Can/small bottle (2) Large bottle (3) Bottled water (4) Concentrated squash (5) Energy drinks (6) Mineral in lounge bar (7) Mixer in lounge bar
Meals out	5.5886	(1) Chips, small single (2) Lunch in café/restaurant/hotel (3) Dinner in bistro/restaurant/hotel (4) Fast food meal (5) Take-away meal (6) Meal in an ethnic restaurant (7) Canteens (8) Rail dining car (9) Cafés - teas, coffees, sandwiches & other refreshments
Total Food	17.6660	187 varieties priced
ALCOHOLIC DRINK		
Beer	5.4736	(1) Stout - take home (6 pack) (2) Lager - take home (single can) (3) Lager - take home (tray) (4) Beer - take home multi pack bottles. (5) Stout - draught bar (1 pint) (6) Lager - draught lounge (½ pint) (7) Lager - draught lounge (1 pint) (8) Lager - bottled bar (330ml) (9) Ale - draught bar (1 pint)
Spirits	1.9594	(1) Whiskey - take home (bottle) (2) Brandy -take home (bottle) (3) Vodka - take home (bottle) (4) Cream liqueur - take home (bottle) (5) Flavoured alcoholic drinks - take home (275ml) (6) Flavoured alcoholic drinks - bar (275 ml bottle) (7) Whiskey - bar (single) (8) Brandy - bar (single) (9) Vodka - bar (single)
Wine & cider	2.5455	(1) Cider -take home (can) (2) Sherry - take home (bottle) (3) Table wine - take home (bottle) (4) Fine quality wines & champagne - take home (bottle) (5) Cider - draught bar (1 pint) (6) Cider - bar (bottle) (7) Wine - bar (187 ml. bottle)
Total Alcoholic Drink	9.9785	25 varieties priced
TOBACCO		
Cigarettes	3.1271	(1) Filtered
Cigars	0.0289	(1) Cigars
Tobacco	0.0199	(1) Flake
Total Tobacco	3.1759	3 varieties priced
CLOTHING & FOOTWEAR		
Men's outerwear	0.1140	(1) Causal over jacket
Men's waterproofs	0.0296	(1) Raincoat

Appendix 7 - continued

Item Headings	December 2006 % Expenditure Weights	Varieties Priced
CLOTHING & FOOTWEAR - continued		
Men's suits	0.1068	(1) 2-piece
Other men's outerwear	0.3803	(1) Sports jacket/blazer (2) Casual trousers (3) Formal trousers (4) Jumpers & pullovers
Men's shirts	0.2662	(1) Formal men's shirt (2) Casual men's shirt (3) Tops & T-shirts
Men's underwear	0.0394	(1) Underpants/shorts (2) Vests & white cotton T-shirts (3) Pyjamas
Ladies outerwear	0.0518	(1) Overcoat
Ladies waterproofs	0.2471	(1) Casual overjacket/rain jacket
Ladies costumes/suits	0.1315	(1) 2-piece suit (2) Blazer/jacket
Skirts/dresses/slacks	0.6522	(1) Dress (2) Jeans & casual trousers (3) Formal trousers (4) Skirt
Other ladies outerwear	0.8252	(1) Blouse (2) Knitwear (3) Tops
Ladies underwear	0.2163	(1) Knickers & panties (2) Bodysapers (3) Bras (4) Nightdress or pyjamas
Boys' outerwear	0.2331	(1) Casual jacket (2) Tracksuit/separates (3) Casual trousers (4) Jumpers & sweatshirts (5) Shirts - non-school (6) Tops & T-shirts
Girls' outerwear	0.3205	(1) Casual jacket (2) Skirt (3) Casual trousers (4) Tops (5) School uniform
Boys' underwear	0.0375	(1) Vest & white cotton T-shirts (2) Pyjamas
Girls' underwear	0.0139	(1) Vest
Hosiery	0.1524	(1) Men's socks (2) Ladies tights and stockings (3) Boy's socks (4) Girl's socks
Sports & leisurewear	0.2634	(1) Fleeces and similar type jackets (2) Swimwear (3) Men's tracksuits/separates (4) Men's sweatshirt/rugby type shirt (5) Ladies leisure suits (6) Replica sports jersey
Other clothing & accessories	0.1793	(1) Neck tie (2) Babies outfit (3) Toddler's outfit (4) Men's clothing accessories (5) Ladies clothing accessories
Material/haberdashery	0.0425	(1) Sewing accessories

Appendix 7 - continued

Item Headings	December 2006 % Expenditure Weights	Varieties Priced
CLOTHING & FOOTWEAR - continued		
Men's footwear	0.2666	(1) Formal leather (2) Casual (3) Boots (4) Trainers/runners
Ladies footwear	0.4802	(1) Low heel walking (2) Classic court (3) Fashion (4) Boots, casual/hiking (5) Slippers and house shoes (6) Sandals
Children's footwear	0.2070	(1) Boys (2) Girls (3) Children's trainers/runners
Total Clothing & Footwear	5.2566	71 varieties priced
FUEL & LIGHT		
Firelighters/handypacks	0.0580	(1) Firelighters (2) Fire handy packs
Coal and anthracite	0.3432	(1) Coal including smokeless (2) Anthracite
Turf and briquettes	0.3411	(1) Peat briquettes (2) Turf
Bottled gas	0.1177	(1) Bottled gas
Piped gas	0.7560	(1) Piped gas
Electricity	1.5444	(1) Electricity
Fuel oil	0.8538	(1) Central heating oil
Total Fuel & Light	4.0142	10 varieties priced
HOUSING		
Rents	2.8696	(1) Local Authority (2) Privately owned
Refuse charges	0.5000	(1) Refuse
Mortgage interest	6.6607	(1) Local Authority (2) Building Society/Bank
House insurance	0.7502	(1) Contents (2) Dwelling
Repairs and decorations	1.5062	(1) Paint, gloss/emulsion (2) White spirit (3) Paint brush (4) Paint roller (5) Varnish (6) Floor tiles (7) DIY household maintenance products (8) Gravel (9) Sand (10) Cement (11) Concrete blocks, solid (12) Concrete blocks, hollow (13) Paving slabs (14) Wall cappings (15) Timber (16) Chipboard (17) Hardboard (18) Plasterboard (19) Glass

Appendix 7 - continued

Item Headings	December 2006 % Expenditure Weights	Varieties Priced
HOUSING - continued		
House maintenance services	0.9459	(1) Burglar alarm maintenance (2) Gas & oil boiler services (3) Plumbing services (4) Electrical services (5) Locksmith services
Total Housing	13.2326	31 varieties priced
HOUSEHOLD DURABLES		
Furniture	0.7505	(1) Lounge suite (2) Dining table (3) Dining chair (4) Single arm chair (5) Bed (6) Mattress (7) Child's furniture (8) Computer/office furniture (9) Bedroom furniture (10) Kitchen units (11) Decorative home accessory
Acoustic appliances	0.2456	(1) Clock radio (2) Midi system (3) MP3 player (4) Home cinema surround system (5) TV, small up to 24" (6) TV, large widescreen (7) DVD player/recorder (8) Computer games console
Electrical & gas appliances	1.0098	(1) Vacuum cleaner (2) Electric cooker (3) Gas cooker (4) Fridge freezer (5) Deep freeze (6) Dish washer (7) Washing machine (8) Tumble dryer (9) Heater, electric (10) Lamps (11) Iron (12) Kettle (13) Coffee maker (14) Razor (15) Toaster (16) Hair dryer (17) Microwave oven (18) Deep-fat fryer (19) Health grill - electric (20) Food processor/blender (21) Baby monitor
Personal computers	0.1713	(1) Personal computer (2) Printer (3) Diskette (4) Laptops
Electrical repairs & parts	0.2705	(1) Battery (2) Light bulb (3) Electrical accessory (4) Smoke alarm (5) Flashlight (6) Electrical repairs (7) TV repairs

Appendix 7 - continued

Item Headings	December 2006 % Expenditure Weights	Varieties Priced
HOUSEHOLD DURABLES - continued		
Hardware/gardening/DIY	0.2750	(1) Lawn mower, powered (2) Power drill (3) Other DIY powertool (4) Garden implement (5) Hammer (6) Screw driver (7) Flower pot (8) Dust bin (9) Clothes line (10) Other outdoor power tool (11) Ladders & steps
		<i>Garden Furniture -</i> (1) Garden shed (2) Garden bench (3) Other
Floor coverings	0.1345	(1) Vinyl covering (2) Carpet (3) Wooden flooring
Soft furnishings	0.3194	(1) Continental quilt (2) Continental quilt cover (3) Pillow (4) Pillow case (5) Sheet (6) Bath towel (7) Tea towel (8) Curtains - ready made (9) Throws and other spreads (10) Cushions
Crockery & glassware	0.0986	(1) Coffee mug (2) Combination service set (3) Glass tumbler (4) Wine glass (5) Casserole dish (6) Salt and pepper set
Cutlery	0.0304	(1) Cutlery set (2) Carving knife
Kitchen utensils	0.0460	(1) Corkscrew or bottle-opener (2) Saucepan (3) Frying pan (4) Wok (5) Teapot (6) Kitchen utensil (7) Baking/roasting tin
Other household durables	0.0890	(1) Sweeping brush (2) Dishwashing utensil (3) Household mop (4) Plastic basin (5) Ironing board (6) Chopping board (7) Bathroom accessories
Total Household Durables	3.4407	100 varieties priced
OTHER GOODS		
Detergent	0.2139	(1) Powder/liquid, automatic machine (2) Dishwasher detergent
Cleaning material	0.2524	(1) Washing-up liquid (2) Fabric conditioner (3) Household cleaning products (4) Domestic disinfectant (5) Air freshener (6) Other cleaning materials (7) Bathroom cleaning products

Appendix 7 - continued

Item Headings	December 2006 % Expenditure Weight	Varieties Priced
OTHER GOODS - continued		
Other domestic non-durables	0.3418	(1) Plastic rubbish bags (2) Shoe polish/liquid (3) Toilet paper (4) Matches (5) Kitchen paper (6) Tin foil (7) Cling film (8) Rubber gloves (9) Food or sandwich bags (10) Shopping bags
Personal non-durables	0.1623	(1) Hand soap (2) Shower gel (3) Toothpaste (4) Dental floss (5) Mouth wash
Hair applications	0.2034	(1) Shampoo (2) Hair conditioner (3) Hair gel (4) Hair colour (5) Hair spray
Cosmetics	0.6554	(1) Shaving foam/gel (2) Deodorant (3) Sun tan oil/cream (4) Baby powder (5) Cleansing cream (6) Lipstick (7) Perfume (8) Aftershave (9) Hand cream (10) Moisturiser (11) Foundation (make-up) (12) Mascara (13) Self tanning products
Toilet accessories	0.3170	(1) Tampons (2) Sanitary towels/pads (3) Disposable nappies (4) Paper tissues (5) Cotton wool (6) Toothbrush (7) Razor blades (8) Baby wipes (9) Condoms
Personal goods	0.4744	(1) Cigarette lighter (2) Suitcase (3) Ladies handbag (4) Umbrella (5) Wallet (6) Wrist watch (7) Sunglasses (8) Giftwear/souvenir (9) Clock (10) Jewellery
Sports & recreation goods	0.1917	(1) Camping goods (2) Golf equipment (3) Game balls, rackets & bats (4) Fitness equipment (5) Water equipment (6) Hunting equipment
Musical instruments	0.0146	(1) Guitar (2) Violin (3) Drums (4) Piano/keyboard (5) Wind instruments (6) Parts and accessories

Appendix 7 - continued

Item Headings	December 2006 % Expenditure Weights	Varieties Priced
OTHER GOODS - continued		
Toys	0.5367	(1) Childs doll (2) Computer game (3) Model car/tractor/lorry (4) Lego set/building blocks (5) Group game (6) Educational toy (7) Soft cuddly toy (8) Motorised toys
Paper goods	0.0961	(1) School copybook (2) Envelopes (3) Refill pad
Stationery supplies	0.2272	(1) Sellotape (2) Lead pencil (3) Ballpoint pen (4) Felt markers/crayons (5) Other stationery
Comics	0.0389	(1) Infants book (2) Comics
Magazines & journals	0.1929	(1) Irish publications (2) Foreign publications
Newspapers	0.7274	(1) Daily national (2) Daily foreign (3) Provincial (4) Sunday - national (5) Sunday - foreign
Books	0.4464	(1) Paperback novels (2) Primary school (3) Second level (4) Third level
CDs, tapes and videos	0.3541	(1) CD single (2) CD album (3) DVD - blank (4) DVD - pre-recorded
Photographic goods and services	0.3848	<i>Cameras -</i> (1) Digital camera (2) Disposable camera (3) Camcorder <i>Film -</i> (1) Film, colour 35mm (2) Memory card <i>Development -</i> (1) Passport photograph (2) Colour, 35mm (3) Digital photo printing
Total Other Goods	5.8315	114 varieties priced
TRANSPORT		
Motor cycles	0.0373	(1) Motor cycles - new models
Motor cars	5.6398	(1) Motor cars - new models (2) Motor cars - second hand
Other vehicles	0.0616	(1) Baby carriage (2) Adult's bicycle (3) Children's bicycle
Motor Tax	0.8380	(1) Motor cycles (2) Motor cars

Appendix 7 - continued

Item Headings	December 2006 % Expenditure Weights	Varieties Priced
TRANSPORT - continued		
Motor insurance	1.4106	<i>Motor cycle -</i> hypothetical quotations for: (1) 3 rd party (2) comprehensive <i>Motor cars -</i> hypothetical quotations for: (1) 3 rd party (2) 3 rd party, fire and theft (3) comprehensive
Motor fuel	3.7363	(1) Petrol - unleaded (2) Diesel
Motor oil	0.0143	(1) Motor oil
Spare parts	0.3444	<i>Tyres -</i> (1) Motor car tyres - new (2) Other spare parts
Repairs and maintenance	0.7045	(1) Car wash (2) Puncture repair <i>Maintenance -</i> (1) Standard (2) National Car Test
Other vehicle costs	0.2440	(1) Parking fees (2) Parking fines (3) Motoring organisation subscriptions (4) Clamping fees
Bus fares	0.3926	(1) Dublin city services (2) Cork city services (3) Limerick city services (4) Galway city services (5) Waterford city services (6) Provincial services (7) School bus fares
Rail fares	0.2189	(1) Adult, child ticket types priced (2) Luas (adult, child) (3) DART (adult, child)
Combined travel	0.0183	(1) Combined bus/rail ticket
Other travel	1.0335	(1) Taxi fares (2) Boat fares (3) Air fares (4) Toll charges (5) Hire car
Total Transport	14.6940	42 varieties priced

Appendix 7 - continued

Item Headings	December 2006 % Expenditure Weights	Varieties Priced
SERVICES & RELATED EXPENDITURE		
Cinema	0.2026	(1) Cinema
Nightclubs	0.2299	(1) Nightclubs
Other entertainment	0.9767	<i>Sports admission -</i> (1) GAA matches (2) Soccer matches (3) Rugby matches (4) Dog racing (5) Horse racing <i>Other admittance -</i> (1) Zoos and wildlife parks (2) Historic places (3) Ballad sessions (4) Theatre and concerts <i>Sports participation -</i> (1) Golf, green fees (2) Swimming (3) Squash
Education & training	2.0429	<i>Primary level fees -</i> (1) Private primary schools <i>2nd level fees -</i> (1) Secondary day schools (2) Secondary boarding schools <i>3rd level fees -</i> (1) Universities (2) Other 3rd level institutions <i>Living away from home -</i> (1) University residences (2) Boarding houses (3) Flats & apartments <i>Other education -</i> (1) Adult education/evening classes (2) Examination fees (3) Applications fee for 3rd level institutions (4) Vocational schools (5) Play/nursery schools (1) Driving tuition fees
Medical fees	1.0313	<i>Doctors' fees -</i> (1) Surgery consultation (2) House calls (3) Specialist fees <i>Dentists' fees -</i> (1) Extraction (2) Scaling and polishing (3) Filling <i>Opticians' fees -</i> (1) Eye test <i>Alternative & complementary medicine -</i> (1) Massage therapists (2) Homeopaths (3) Chiropractors (4) Acupuncturists

Appendix 7 - continued

Item Headings	December 2006 % Expenditure Weights	Varieties Price
SERVICES & RELATED EXPENDITURE - continued		
Medicines and drugs	0.9051	(1) Pain reliever (2) Antacid (3) Petroleum jelly (4) First aid disinfectant (5) Adhesive dressing (6) Cough mixture (7) Vitamins & other supplements (8) Representative samples of prescribed drugs in the GMS - oral and non-oral
Hospital & other related charges	0.9722	<i>Maintenance -</i> (1) Public ward (2) Semi-private room (3) Private room <i>Other services -</i> (1) Operating theatre fee (2) Pathological test (blood) (3) Pathological test (urine) (4) X-ray (5) Blood transfusion (6) Other hospital charges <i>Paramedical services -</i> (1) Nursing agencies <i>Social Protection -</i> (1) Nursing homes
Other medical expenses	2.0363	(1) Spectacles (2) Dentures (3) Health insurance <i>Therapeutic equipment -</i> (1) Wheelchairs (2) Mattresses (3) Elastic hosiery (4) Hearing aids (5) Artificial limbs (6) Stair lifts
Hairdressing/Personal grooming	0.8773	<i>Men's -</i> (1) Haircut (2) Shampoo, cut and blow dry <i>Women's -</i> (1) Shampoo and set (2) Shampoo, cut and blow dry (3) Perm/Body wave (4) Hair colour/highlights in salon <i>Health & beauty treatments -</i> (1) Facial (2) Waxing (3) Make-up (4) Electrolysis (5) Sunbed/tanning
Shoe repairs	0.0133	(1) Man's shoe (2) Ladies shoe
Laundry and dry-cleaning	0.1052	(1) Laundrette, basic <i>Dry cleaning -</i> (1) Suit - mens (2) Jacket - ladies (3) Trousers - ladies <i>Laundry -</i> (1) Half bag (2) Full bag (3) Duvets (4) Ironing - shirts, trousers, sheet

Appendix 7 - continued

Item Headings	December 2006 % Expenditure Weights	Varieties Price
SERVICES & RELATED EXPENDITURE - continued		
Other services	1.9629	(1) Ear piercing (2) Alteration to trousers (3) Dress hire (4) Chimney sweep (5) Repair and maintenance services (6) Newspaper advertisement (7) Furniture removal (8) Library charges (9) DVD hire (10) Childcare <i>Domestic services -</i> (1) Shopping centre creches (2) Babysitting (3) Home help (4) Temporary agencies (5) Concierge Services
Postage	0.0798	(1) Letters, local (2) Letters, overseas (3) Parcels, local (4) Parcels, overseas
Telephone	3.3387	<i>Private -</i> (1) Local (2) National (3) International (4) Rental <i>Mobile -</i> (1) Telephone cost and first connection fee (2) Bills (3) Prepay/Pay as you go charges (1) Telephone equipment (1) Internet & other Teleservices
Society subscriptions	0.6697	(1) Golf clubs (2) Rugby clubs (3) Squash clubs (4) Heath clubs/gyms
Union subscriptions	0.2376	(1) Trade unions (2) Civil Service Associations
TV services	0.6850	<i>TV & satellite services -</i> (1) Cable TV (2) Satellite TV
Licences	0.2509	(1) TV licences (2) Driving licences (3) Other licences
Accommodation charges	2.3950	(1) Hostels (2) Guest houses and B&Bs (3) Hotels
Package holidays	2.5280	(1) Package holiday and tours

Appendix 7 - continued

Item Headings	December 2006 % Expenditure Weights	Varieties Price
SERVICES & RELATED EXPENDITURE - continued		
Other expenditure	1.1148	<ul style="list-style-type: none"> (1) Pet food (2) Garden soil, peat & fertilizers (3) Weed killers (4) Driving test fee (5) Flowers (6) Passport fee (7) Birth certificate fee (8) Bank charges (9) Baby car seat/booster <p><i>Funeral services -</i></p> <ul style="list-style-type: none"> (1) Undertaker service (2) Floral tribute (3) Coffin (4) Plot <p><i>Weddings -</i></p> <ul style="list-style-type: none"> (1) Photographer (2) Hire of car (3) Wedding cake (4) Reception <p><i>Professional and legal services -</i></p> <ul style="list-style-type: none"> (1) Auctioneers fees (2) Engineers/surveyors fees (3) Estate agents fees (4) Solicitors fees <p><i>Veterinary and animal care -</i></p> <ul style="list-style-type: none"> (1) Insertion of micro-chip (2) Neutering (3) Vaccinations (4) Boosters (5) Basic consultation fees (6) Grooming (7) Kennels (8) Tooth extraction <p><i>Miscellaneous goods and services -</i></p> <ul style="list-style-type: none"> (1) Planning fees (2) Carpet cleaning (3) Childrens' party entertainment (4) Shower units (5) Birthday cards & greeting cards
Total Services & Related Expenditure	22.6600	165 varieties priced
TOTAL ALL ITEMS	100.0000	748 varieties priced

