

CONSUMER PRICE INDICES IN THE EUROPEAN COMMUNITY

Similarities, differences
and
proposals for harmonization

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CONSUMER PRICE INDICES IN THE EUROPEAN COMMUNITY

**Similarities, differences
and
proposals for harmonization**

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1 . INTRODUCTION

This document has been written at the request of the Statistical Office of the European Communities (SOEC). In the first place it aims at giving an update of the document by Stadlbauer (1976), which reviewed the current practices with respect to the construction of the consumer price index (CPI) in the - at that moment - nine member states of the Community. Secondly, it aims at formulating some guidelines and priorities for the harmonisation of the timing and methodology of the CPI's in the twelve member states. This last issue is particularly relevant in view of the creation of the **single market** in 1992.

Since the construction of the CPI is such a complex exercise which involves a whole range of different samples, a number of choices with respect to the emphasis on particular issues had to be made. This paper will focus particular attention to the field of observation of the family budget survey and to a number of specific problems related to the price survey. As Stadlbauer (1976) devoted an important part of his analysis to the choice of the index formula and since this analysis is still highly relevant for the present situation, this aspect of the CPI construction has received relatively less attention in the present paper. A second argument for not including an extensive analysis on the choice of index formula is that this issue does not seem to be the most urgent for purposes of harmonisation at this moment: all member states use the Laspeyres index with France and the United Kingdom the chain variant.

The present paper is a synthetic study, therefore it does not and can not pretend to cover the multitude of complex issues related to CPI construction in a comprehensive and profound manner. What has been attempted in this paper is to identify, on the basis of the information which the member states supplied to the SOEC, similarities and differences for the major methodological areas and on that basis to formulate an agenda of action which could lead to an accelerated process of harmonisation.

The plan of the study is as follows. In **chapter two** the role of the CPI in social and economic policy making is reviewed. Here attention is given to both the national and the community aspects. In **chapter three** the arguments for the need of harmonisation are elaborated. **Chapter four** is devoted to the comparison of the national indices in the Community. This chapter is based on the information provided by the member states both through the SOEC questionnaire and national publications. **Chapter five** contains some guidelines, priorities and proposals for the harmonisation of the national CPI's.

2. THE ROLE OF THE CONSUMER PRICE INDEX IN SOCIAL AND ECONOMIC POLICY

2.1 The National Context

At the national level the consumer price index plays an important role for both economic and social policy.

In the field of economic policy a number of applications are important. Firstly, the overall CPI permits to follow the inflation in a particular country and to compare this rate with other countries with an eye on the competitiveness in the world market (see section 2.2). Secondly, the CPI can be used for the adjustment of the rates of nominal direct (income) taxes. Thirdly, it is useful for the formulation of price policy and the verification of its effectiveness. In the fourth place, it is a powerful instrument for the prediction of the price effects of certain fiscal policy measures. Finally, the use of the CPI for national accounting should be mentioned. The CPI is a necessary ingredient as deflator in the calculation of the temporal development of the volume of household consumption.

The applications of the CPI for purposes of social policy are manifold. These applications mainly concern the use of the CPI in purchasing power calculations. In the sixties and seventies the CPI was frequently used for indexation of wages (collective contracts) and social security allowances. The recent economic recession has brought important changes in these practices, but the CPI remains important and has even gained importance for the formulation of social policy measures in the area of social security and welfare allowances to the most vulnerable groups in the national societies. This raises inevitably the question whether the general CPI using the entire resident population as index population is the most suitable index for this particular purpose, since it does not necessarily reflect the consumption pattern of the low income groups (see also chapter 4, section 4.2.3). Furthermore the CPI plays an important role in the wage and salary negotiations both in the private and the public sector, be it not in the same mechanistic way as in the past.

2.2 The International Context

As was already mentioned in the previous session, the CPI is often used for international comparisons of rates of inflation and of purchasing power. Although most of the national governments take the stand that the application of the CPI at national level

requires a specific national version, meaningful international comparisons require that uniform methods are applied in all countries. In this context it seems useful to make a distinction between the global international environment and the European international environment. At a global level the divergent national and international requirements have been since long the concern of the International Labour Office (ILO). The Conferences of Labour Statisticians, in the course of their work, have laid down a certain international standard for methods of calculation of the CPI which has certainly contributed to the international comparability of the CPI. However, these achievements have not led to a degree of comparability which will be required at Community level in 1992 and beyond when the single market will take effect. Given the urgency of the matter and the specific policy requirements, it seems inevitable that the twelve member states accelerate the process of harmonisation within the Community beyond the pace at global level referred to above.

The next chapter will elaborate the needs for harmonisation of the CPI within the European Community.

3. THE NEED FOR HARMONISATION WITHIN THE EUROPEAN COMMUNITY

The adoption and the forthcoming of the Single European Act (SEA) will bring fundamental changes in the structure of the European Community. The SEA highlights in particular six policy areas: the establishment of a large market without internal frontiers, economic and social cohesion, a common scientific and technological policy, the strengthening of the EMS, the emergence of a European social dimension, and a co-ordinated environmental policy.

The policy areas of immediate interest for the harmonisation of the CPI are: the large single market, the economic and social cohesion and the emergence of a European social dimension. According to the Bulletin of the European Communities, supplement 1/87,

'a large market without internal frontiers could not be completed or operate properly unless the Community had instruments enabling it to avoid imbalances interfering with competitiveness and inhibiting the growth of the Community as a whole'

It is quite obvious that the monitoring of consumer prices across the member states of the Community can only be a powerful instrument to serve the above purposes if it is based on a harmonised CPI calculation in all member states.

One of the central objectives implied in the SEA is the ability of all regions in the Community to share progressively in the benefits of the large market. Here again the harmonised CPI's can play an important role in the comparison of purchasing power parities.

The economic and social cohesion implies according to the same source:

'greater convergence as regards both the methods used and the results obtained.'

It is evident that this observation has a much broader bearing than on statistical methodology only, but again the message is quite clear: one cannot pursue a Community policy, unless one has at his disposal statistical instruments which measure the same phenomenon in the different countries in a comparable way.

The Bulletin also highlights the urgency of tax reforms in the light of the creation of the large market:

A start must be made as a matter of urgency on the harmonisation and approximation of indirect taxation, since tax controls remain a major barrier to the crossing of internal frontiers.'

Given the sensibility of the cost of level of living to indirect taxation and the necessity to have a common statistical basis for negotiations within the Community, a harmonised CPI seems more needed than ever.

Finally, the third policy area of immediate interest in this context is the 'emergence of a European social dimension'. It does not need much imagination to realise the immense social implications of a free movement of persons within the Community. It will be of paramount importance to align the social security policies within the Community. This will have important impacts on the purchasing power of the more vulnerable groups in the various countries. In this light the Third Community Poverty Programme gets an extra dimension. It goes without saying that also for these social policy issues a harmonised price measurement is indispensable.

4. THE COMPARISON OF CONSUMER PRICE INDICES

4.1 Introduction

Before embarking in a detailed analysis of the present situation this section presents a brief overview of the developments which took place in the practice of consumer price construction over more than a decade for the nine member states which were also included in the survey of Stadlbauer (1976). Over the last decade developments have not been univocally directed towards a better harmonisation of the practices of index construction.

Both Germany and France seem to have limited their index population, while Luxemburg continues to concentrate on low income households (about 3 % of the resident population). Moreover, the member states have not much progressed towards a harmonisation of the classifications. With respect to the field of observation of goods and services one can say that the same problems and difficulties which were identified by Stadlbauer persist at present. There is still no uniformity in the treatment of (imputed) rent and the treatment of insurances and taxes did not converge significantly over the decade. There was little progress in the alignment of base years and periodicity of family budget surveys across the nine. Finally, the way in which quality change, substitution and seasonal products are treated by the nine member states does not show much convergence over the last ten years.

Obviously, the above remarks are only a very global bird's eye view and more detail analysis of the present situation will follow, but at this place it can already be noted that, given the fact that so little progress has been made in the past and in view of the introduction of the single market in 1992, it is paramount to design urgently an agenda for harmonisation of consumer price indices of the twelve member states.

4.2 The Present State of Art for the Twelve

4.2.1 Type of Index

From table A.3 in the Annex A it can be seen that all twelve member states employ the Laspeyres index. France and the United Kingdom use the Laspeyres Chain Index with annual linking, whereas the remaining countries use the standard Laspeyres index, retaining a market basket for several years. As Stadlbauer (1976)

provided an extensive discussion on the type of index, with the majority of his arguments still applicable to the present situation, this paper will be brief on the subject and will instead concentrate more in detail on the other aspects of index construction. For the sake of completeness a number of his observations will be reproduced here (see Stadlbauer(1976), pp.35-46):

- a) The simplest way of obtaining comparable results without changing the type of index would thus be for the chain index countries to calculate Laspeyres indices as well, since they have all the necessary material for this purpose.
- b) There are two opposing standpoints: according to one, frequent changing of the market basket is suitable for the calculation of "more realistic" index number, since the weighting and composition of the market basket are closer to reality. According to the other, the conventional Laspeyres index is said to be the "pure price comparison" without which reliable economic interpretation is impossible.
- c) The confusion in the discussion of the index problem arises from the discrepancy between the defined and interpreted capability of the index; different methods are needed for different purposes. This implies that harmonisation may require different types of index to be calculated simultaneously.
- d) The normal method of discussing the suitability of the various index formulae is to subject them to tests and other requirements. The following requirements are important for the assessment of fixed-base and chain indices:
suitable weighting means that the weights should be closely related to the weighted quantities, i.e. the prices;
unbiasedness means that an index may not deviate from actual conditions as a result of unsuitable weighting;
circularity is required to enable chain calculations to be made and bases changed; the requirements for suitable weighting and circularity can not be satisfied simultaneously;
homogeneity is intended to ensure that the index results in the same value when calculated in two different points in time under identical market and price conditions.
- e) Assuming homogeneous cyclical developments in the countries on the Community and provided that a uniform base year is used (linking base for chain indices), the direct comparison between the Laspeyres index and the Laspeyres chain index should not lead to any biases.

4.2.2 Field of Observation

4.2.2.1 Consumer Goods and Services

The choice of the commodities and services to be included in the calculation of the consumer price index is for a majority of

countries based on the national accounts concept of household consumption. A minority of the countries employ the so-called expenditure concept. Obviously the choice of the goods and services to be included in the index depends on what one wants to measure with the index. If the index is supposed to measure the development of the cost of level of living of households irrespectively of who is financing it, the consumption concept should be the basis for the choice; if, however, the index is supposed to measure the development of the price level of household purchases, the expenditure concept should be the basis for the choice of goods and services.

At a national level both approaches are defensible (see also Turvey, 1986 for the case of the expenditure concept), but when it comes to questions of international comparison the situation looks different. If one aims at the harmonisation of consumer price indices in the European Community, one should select a criterion for the field of observation of goods and services which guarantees minimal conditions for comparability. Obviously, the expenditure concept is not such a criterion since it depends heavily on national policies and practices, which vary widely across member states and within member states over time. One can never hope to achieve comparability using the expenditure concept if in one country the health service is free of charge while in the other country households have to pay for it. The same reasoning applies to educational services, social housing, rented vs owner-occupied dwellings, etc.

Alternatively, the consumption concept, as used in national accounting, guarantees much better the minimal conditions for comparability of price indices, since by its very nature it allows in principle the achievement of comparable fields of observation of goods and services. It would, of course, be naive to ignore a number of variations in the application of a common (SNA or ESA) household consumption definition in the different countries, but it can be argued that these variations are small compared to variations due to an application of the expenditure concept. Moreover, it seems that there exist good chances to eliminate gradually discrepancies in national account definitions.

In this report the definition of household consumption as established by the SOEC (European System of Integrated Economic Accounts, ESA, 2nd Edition, 1979) will be taken as the reference point. This definition reads as follows:

Final (household) consumption represents the value of goods and services for the direct satisfaction of (household) human needs.

According to the same source final consumption of households includes the following items:

- a) *purchases on the market of new durable and non-durable goods, except for houses, apartments, etc. and for purchases by households of tools equipment or special clothing needed*

- for their work
- b) purchases of market services, including the transfer costs incurred when purchasing antiques and existing consumer durables
 - c) agricultural and food products for own consumption by farmers and also the produce of private gardens
 - d) benefits in kind provided by employers to their employees
 - e) clothing and food provided for the armed forces and purchased by general government
 - f) social benefits in kind granted to households by general government or private non-profit institutions under social security or social assistance arrangements
 - g) the imputed rent of owner-occupied dwellings
 - h) gifts in kind made by the rest of the world to households, less gifts in kind made by households to the rest of the world
 - i) domestic services produced for themselves by households in so far as they are employers of paid domestic staff
 - j) net purchases by households of antiques and existing consumer durables
 - k) incidental sales treated in the accounts as direct deliveries to households from the non-market branches of general government and private non-profit institutions

The determination of the field of observation with respect to consumer goods and services by the twelve member states is not at all uniform as can be seen from the overview presented in table A.6. Even if all the member states would follow their national account definitions, there would still be a problem of coverage resulting from the fact that the national account definitions of the member states are not all in accordance with the ESA. It seems therefore more fruitful to investigate the items separately. This section will concentrate on the main items listed above under c) to k) and in section 4.2.3 the market purchases as listed under a) and b) will be reviewed.

The following items will be considered in detail:

- 1) Accommodation
- 2) Insurance
- 3) Interest
- 4) Direct Taxes
- 5) Own Consumption and Benefits in Kind
- 6) Hospital Costs
- 7) Existing Commodities

Accommodation

According to the ESA the following items should be included under the heading of accommodation: gross rent, imputed rent of owner-occupied dwellings and maintenance and repair costs. Table A.7 gives the basic information how the twelve member states treat

this issues. In the overview below a synthetic picture is given:

TABLE 4.1: Accommodation, Included Items

Included Items	D	F	I	NL	B	L	UK	IRL	DK	G	E	P
gross rent	x		x	x		x	x		x	x	x	
net rent		x			x			x				x
imputed rent	x			x			x		x		x	x
maintenance/repair	x	x	x	x	x	x	x	x	x	x	x	x

From this table it can be seen that all member states include rents (either gross or net), although the situation is far from homogeneous: France, Belgium, Ireland and Portugal include **net** rents, thus deviating from the ESA norm. With respect to the imputed rent the situation is also heterogeneous: France, Italy, Belgium, Luxemburg, Ireland and Greece do not include this consumption item. For the countries which do include imputed rents there exists a high degree of heterogeneity with respect to the pricing; this issue will be taken up again in section 5.3.

Insurances

For the purpose of this exercise the insurances will be classified into three main categories:

- a) obligatory social security insurances
- b) capital insurances
- c) other risk insurances

The expenditures on insurances are composed of the following elements: a part which is the compensation to the insurance companies for the services rendered (insurance charges), a part which is meant to cover reimbursements (net premiums) and, in the case of capital insurance, a part which represents savings (savings component).

The social security premiums paid by households or households members should be considered as non-consumptive expenditures and treated the same way as direct taxes. The charges for this type of insurance are paid by the government or the social security institution.

The expenditures on capital insurances, of which life insurance is the most common, are composed of three parts. The insurance charges which should be classified as consumption of financial services (ESA, main group 8) and the net premiums which return to the households as the risk component of reimbursements. In the

case where the entire resident population is covered, these expenditures net out against reimbursements and should therefore not be included as consumption. If the index refers to a sub-population, these expenditures do not net out within the sub-population but the net outflow or inflow can be treated as a household remittance to or from abroad and thus stays outside consumption. Obviously, the latter case would imply problems for the determination of income of the sub-population, but this issue is outside the scope of this study. Finally, the saving component should also not be taken into account in the consumption. In conclusion, only the charges of the capital insurance should be counted as consumption and accordingly allocated.

The expenditures on other risk insurances also contain charges to be treated as consumption of financial services. Furthermore, the net premiums of this type of insurance need some careful consideration. In the case that the entire resident population is included in the index, these premiums are equal to the reimbursements to the households. If these reimbursements finance actual household expenditure for replacement or repair related to the incurred damage, both the premiums and the reimbursements should be treated as income transfers. If on the other hand the reimbursements are made directly to the producer of the goods and/or services which the household acquires as the compensation for incurred damage, the net premiums should be treated as consumption expenditures related to these goods and/or services. Information from insurance companies will be necessary for the determination of the proportion of reimbursements which is made directly to the producer and for the allocation of this part of the reimbursements to the specific goods and/or services. The same proportion of the net premiums can then be allocated as consumption expenditure on these goods and/or services. The remainder of the net premiums is considered as income transfer and stays outside the consumption.

The present situation with respect to the treatments of insurances in the twelve member states is globally reviewed in table A.8. With the exception of the Netherlands there seem to be no countries which split insurance expenditure into its various components (i.e. charges, net premiums and the savings component). Moreover, the coverage of the various countries of the different type of insurances is far from homogeneous as can be seen from Table 4.2:

TABLE 4.2: Treatment of Insurances

Included Type	D	F	I	NL	B	L	UK	IRL	DK	G	E	P
Motor Vehicle Liability	x		x	x	x	x	x	x		x	x	
Motor Vehicle Comprehensive	x			x				x				
Family Liability				x	x							
Building/Glass/Fire					x		x	x				
Home Content	x			x			x	x				
Life				x								
Other Capital				x								
Health (Private)	x			x	x			x			x	
Health (Public)				x				x				

Interests

Although interests are clearly household expenditures, they are not consumption expenditure in the sense of national accounts, therefore they should be excluded from the index calculation. This is apparently the view of 11 out of 12 member states, the exception being Ireland which includes installment payments (capital and interest) on hire purchase and credit sales (see table A.9). The United Kingdom takes into account mortgage interests as a cost indicator for owner-occupied dwellings; this issue will also be given attention in section 5.3.

Direct Taxes

The term "direct taxes" as it has been interpreted in answering the questionnaire of the SOEC raises some definitional problems. It seems useful before proceeding any further to adopt clear definitions of both indirect and direct taxes, which correspond to common practice:

indirect taxes are defined as taxes that are levied against *goods and services* and thus only indirectly on people.

Direct taxes are defined as taxes levied directly on people.

The 14th International Conference of Labour Statisticians (Geneva, 1987) suggested to replace the term "direct taxes" by "income taxes", but this interpretation would be too narrow: direct taxes include, apart from income taxes also inheritance and poll taxes. Given the above definitions, it seems natural to include all indirect taxes which are related to the consumption of particular goods or services, such as the VAT and import duties which are automatically implied if retail prices are used in the calculation of the CPI. But there exist other indirect taxes which satisfy the above description: motor vehicle tax, tax related to the use

of dwellings, refuse collection tax, sewerage tax, etc. The basic difference between these taxes on the one hand and the VAT and import duties on the other is that the former are collected from the consumer, whereas the latter are collected from the producer or importer. Therefore, taxes like motor vehicle tax, taxes related to the use of dwellings, refuse collection tax and sewerage tax will be labelled "Indirect Consumer Taxes" and it is this type of taxes which is reviewed in table A.10. According to this table seven out of twelve member states do not include any indirect consumer taxes in the calculation of the CPI. Motor vehicle tax is included by FR Germany, United Kingdom, Ireland and Spain, whereas Luxemburg includes certain local taxes corresponding to specific public services.

Own Consumption and Benefits in Kind

Own consumption or auto-consumption and benefits in kind are part of consumption in the national accounts and should therefore be included in the field of observation for the calculation of the CPI. The fact that a number of countries refrain from including these items in the field of observation is explained by two factors:

- a) this type of consumption does not carry a price
- b) it is difficult to capture these items in the family budget survey

Table A.6 gives an indication about the countries which include the own consumption and benefits in kind in the field of observation. Below follows a synthesis of this information.

TABLE 4.3: Consumption in Kind

Included Items	D	F	I	NL	B	L	UK	IRL	DK ¹	G	E	P
Own Consumption	x			x			?		x	?	x	x
Benefits in Kind	x			x			?		x	?	?	x

¹ Except produce of private garden.

From this synthesis it can be seen that the available information is incomplete and that on the basis of this information only five countries include own consumption for sure and three include benefits in kind. The pricing aspect for these items will be discussed in section 4.2.4.

Hospital Costs

The consumption of hospital services, even if the associated expenditures are covered for the greater part by health insurance, constitute an important share of total household consumption, e.g. France 6.9%, Netherlands 6.8%, Spain 4.4% and Belgium 4.6%. In spite of its relative importance the treatment of the consumption of hospital services is far from uniform. France does not include hospital costs in the index with the argument that most of these costs are not at the household charge but covered by social security and insurance, Ireland takes the hospital costs into account but net of health insurance refund, Spain includes in the hospital costs the directly related health insurance premiums and the Netherlands reports that it includes hospital costs integrally. For other countries it is not clear whether the hospital costs include the proportion paid by health insurance. Obviously, harmonisation for this item is closely related to the harmonisation of the treatment of insurances (see section 5.3.2).

Existing Commodities

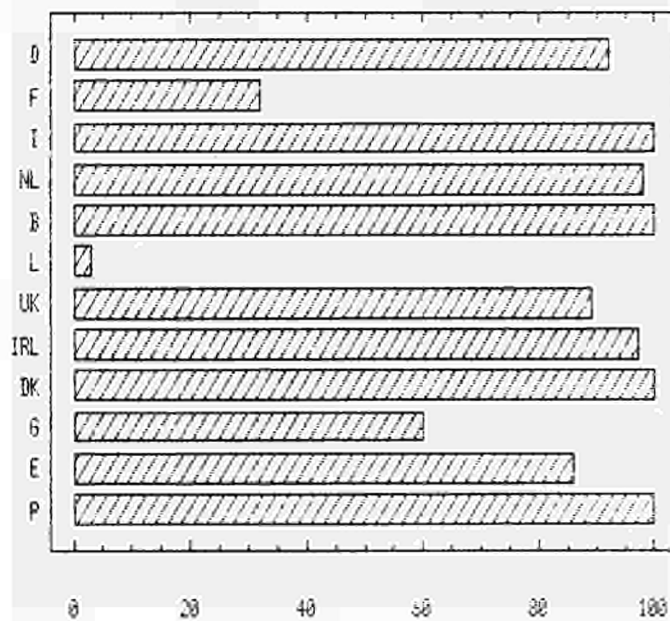
According to the ESA norm the so-called costs of transfer should be taken into account for purchases of existing commodities. The logic of this norm is clear: the purchase of an existing commodity, or second-hand good, is a transaction between households with or without the mediation of an agent, hence the net consumption of the household sector consists only of the mediation service if any. It should be noted that this logic only applies if all households are part of the field of observation. If, on the contrary, one deals with an CPI for a sub-population it is not evident that the purchases of existing commodities net out apart from the mediation service: a certain household sub-population may well face a net in- or outflow of existing commodities. Finally, it should be stressed that the above logic does not apply to imported existing commodities, here the full retail price should be taken into account for the determination of the weight. The information on this subject is rather scattered, and no attempt is made to present a synthetic overview of the treatment by the member states.

The discussion on the field of observation concerning consumer goods and services will be concluded with some remarks on the proportion of private consumption in the national accounts which is included in the CPI (see table A.11). The percentages presented in table A.11 only refer to the coverage of goods and services in the index calculation. The reported proportions range from 66.5% (Greece) to 96% (Italy). The high variation in proportions between countries only confirms the lack of uniformity in the coverage and treatment of consumer goods and services in the twelve member states.

4.2.2.2 The Index Population

The harmonisation of the index population is as important as the harmonisation of the coverage of consumer goods and services as discussed in the previous section. In order to achieve a high degree of comparability it is necessary that all member states calculate the CPI for all households, i.e. without applying demographic, geographical or socio-economic selection criteria. Moreover, the rapid aging of the population in many countries in the Community may render the inclusion of institutional households necessary. The present picture for the twelve member states as provided in the tables A.12 and A.13 shows that there is still a long way to go towards harmonisation of this aspect of the CPI. Only Belgium, Italy, the Netherlands, Ireland, Denmark and Portugal cover all private households. Consequently, the proportion of the total population which is covered by the index population shows a very high dispersion between the member states as is pictured in figure 4.1 for those states which have provided quantitative information.

Figure 4.1: Index Population as % of the Total Population



4.2.3 The Market Basket

4.2.3.1 Sources and Methods

For the construction of a Consumer Price Index the weighting is important. The data which are used for the weighting are most suitably obtained from samples of family budgets. The quality of the weighting obviously depends on the number of "items" which enter separately in the weighting scheme. A detailed overview of the number of items used by the various countries for the calculation of the weights for each of the main groups is given in table A.27; the totals are reproduced here in figure 4.2. The absolute number of items is obviously not an appropriate criterion for the comparison of the quality of the obtained index, this depends amongst other things on the minimum weight-norm which is applied for the grouping of goods and services. This issue will be taken up in section 5.3.3.

4.2.3.2 Nomenclature and Structure

As was already noted by Stadlbauer (1975), the ILO recommendations have led to considerable progress in bringing the market baskets of the various countries in line. In many cases it is possible to compare main groups by appropriate rearrangements of national data. Only a limited number of member states, however, provided the SOEC with a weighting scheme according to the ESA 1-digit classification (8 main groups). On the basis of the national data it has been possible to derive the weighting schemes of all countries except the United Kingdom, for which no data were available. For those countries for which rearrangements were necessary, the details of these operations are given in annex B. The weighting of the eight main groups by the various countries is presented in table A.28 which is the basis for the synthetic graphical illustration in figure 4.3 below. For a more detailed graphical display one is referred to the figures A.1 to A.8 in the annex. The differences in the weighting patterns, which are nothing else than budget shares, can be attributed to three main factors: country characteristics (average household income level and tastes), lack of uniformity with respect to the field of observation of goods and services and lack of uniformity with respect to the index population. Evidently, important differences caused by country characteristics will remain as long as the income inequality between the member states persists. But the differences in patterns due to a lack of uniformity should be eliminated. In order to give an impression of the effects of the lack of uniformity the member states have been grouped into high, medium and low income countries on the basis of GDP per head in terms of \$I (see Comparaisons Mondiales du Pouvoir d'Achat et du Produit Réel en 1980, EUROSTAT, theme 2, serie D), so as to eliminate to some extent income effects. From the figures A.1 to A.8 it can be seen that even within these three groups important

Figure 4.2: Published Number of Items
in the CPI

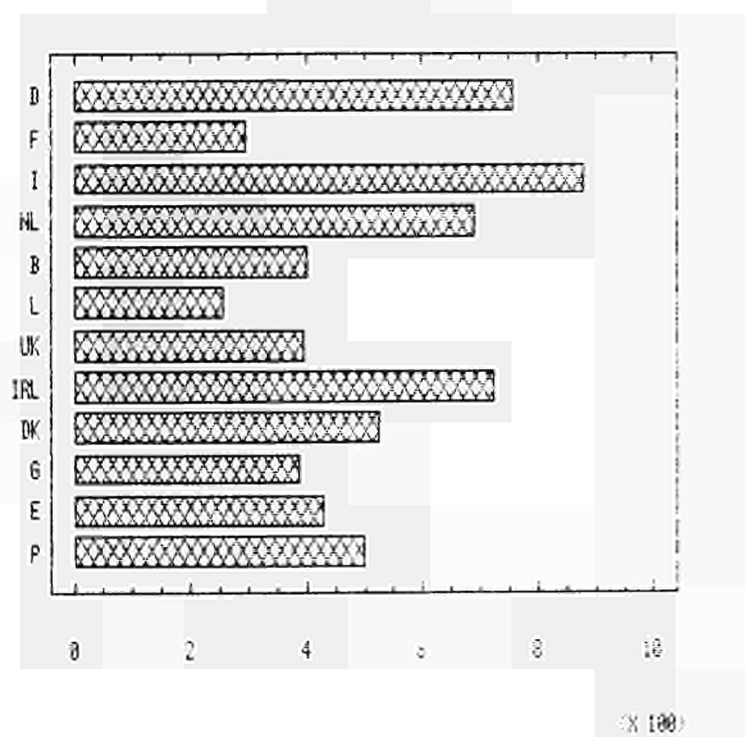
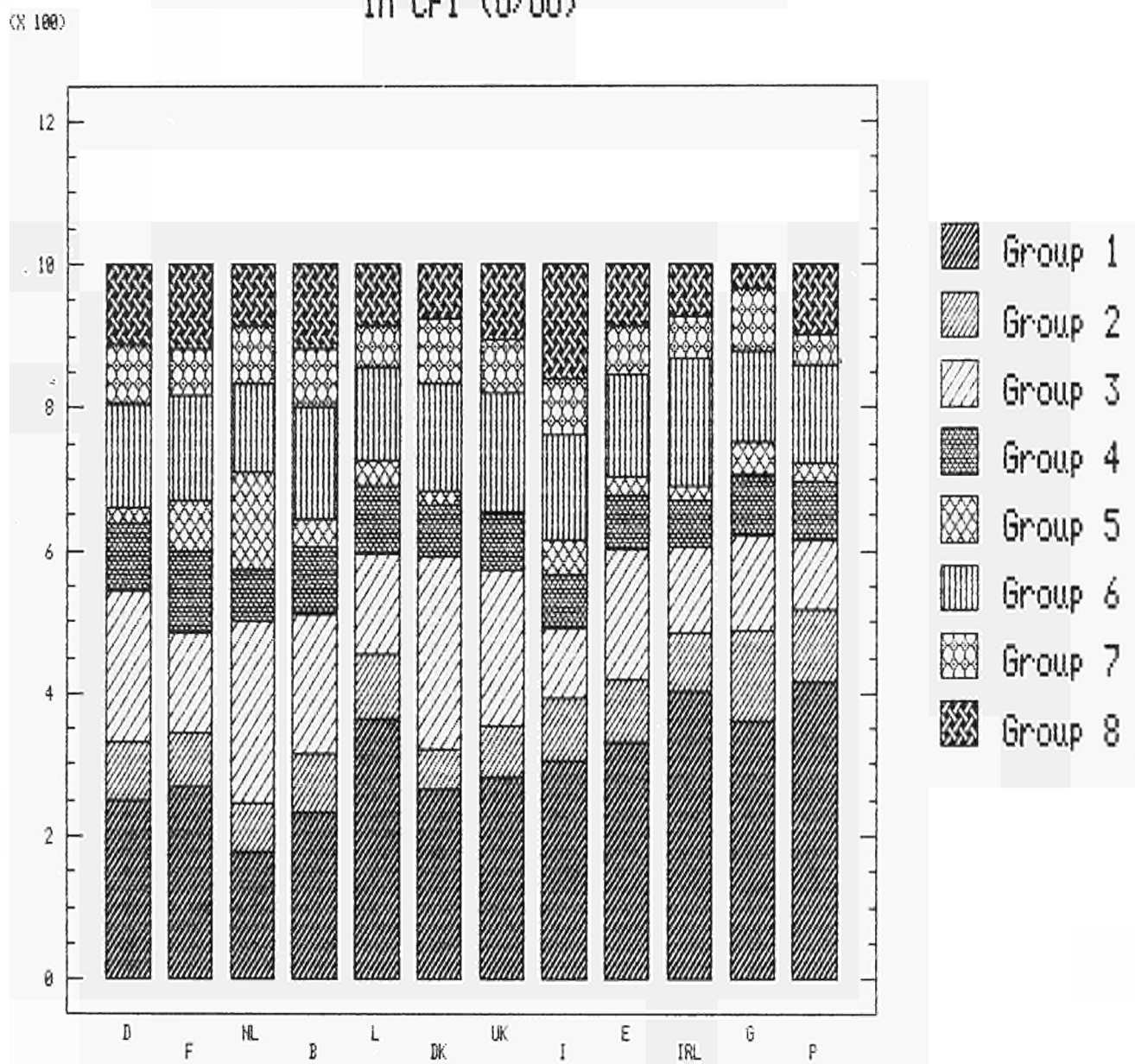


FIGURE 4.3: Weights of Main Groups
in CPI (o/oo)



differences in weighting patterns persist. In the first place some attention should be given to figure A.1 which depicts the budget share for Food, Beverages and Tobacco (Group 1). From Engel's Law it is well known that this budget share (or rather the food share) is a decreasing function of income. This tendency is confirmed by figure A.1, but what is more interesting in this context is the within group variation. Within the 'high' income group Luxemburg behaves as a low income country, since its budget shares are based on the basket of the poorest 3% of its population. The other countries in this group show rather similar shares except for the Netherlands which is below average for this set of countries for all the main groups except for Medical Care and Health Expenses (Group 5; figure A.5), where it is way above the other countries. This is due to its comprehensive treatment of this last group which causes the weights for the other main groups to be lower. Figure A.3 gives a clear indication of the lack of uniformity in the treatment of house rents: it confirms immediately that France, Luxemburg, and Italy do not include the imputed rent of owner-occupied dwellings.

4.2.3.3 The Frequency of Family Budget Surveys

The frequency of the surveys in the various countries is not at all aligned (see table A.14). At present three countries have a yearly family budget survey: the United Kingdom, Italy and the Netherlands. For the rest the table speaks for itself; an alignment among member states concerning the interval and the survey year is still far away.

4.2.3.4 The Market Basket Base Year

From table A.16 it can be seen that the base year selection of the countries which do not have a yearly survey is not at all co-ordinated. This issue will be considered again in section 5.3.3.

4.2.4 The Price Survey

4.2.4.1 Introduction

Before embarking in a comparative analysis of the various practices in the member states, it might be worthwhile to make a number of preliminary remarks concerning the methodology of the price surveys.

All countries surveyed use **purposive** selection both of the commodity items to be priced and of the outlets for the pricing. Since the price index should be related to the specific aggregate "consumption expenditure", it is generally agreed that the selection of items should be purposively directed at the aggregate. The case of selection of outlets is quite different. Here there are strong arguments for probability sampling of outlets stratified by area and type. Once use is being made of probability sampling one is able to control the error in the index calculation and one is able to attach an (estimate of) a measure of precision to the index. As remarked by Balk and Kersten(1986), *'The current situation is that most official price index numbers are published without an explicit statement about their accuracy.'* Moreover, for the purpose of international comparison one should not only strive for maximum representativeness, but also for equal representativeness. This can only be achieved if the surveys are based on probability samples. At this stage the data submitted by the SO's of the member states do not allow an assessment with respect to the suitability of selection procedures and the appropriateness of sample sizes.

4.2.4.2 Sampling Method and Coverage

The tables A.17 to A.21 provide basic information on the definition of reporting units, the number of prices surveyed, the number of reporting units, their geographical distribution, the mode of the survey (direct or postal), procedures followed for a change of reporting unit and the frequency of the price surveys. In the first place some attention shall be given to the definition of the reporting units. From the information received during 1987 it is not clear whether mail order trade units are included in the survey recently.

For most of the countries the selection of the reporting units corresponds to the coverage of the index. Exceptions are Greece, where only sales outlets in urban areas are selected, while the index has a national coverage and Luxemburg, where outlets are selected from Luxemburg town and surroundings while the index does not have that geographical coverage.

In the majority of the countries the selection of the reporting units is achieved on the basis of two- or three-stage sampling: communities, types of outlet and turnover. Since for most of the countries details on the selection procedures are lacking, no effort is made for a comparative analysis.

The number of prices, reporting units and surveyed communities as reported in table A.18 have been summarized in the figures 4.4, 4.5 and 4.6. As information on the methodology is scattered, these figures are given without further comment, except that the number of recorded prices is particularly low in Luxemburg and Greece. The same qualification can be made for the number reporting units and the number of surveyed communities. While this can be justified for Luxemburg given the size of this country, it raises some doubt with respect to reliability and representability for the Greek case. The practice with respect to the mode of price survey is quite heterogeneous. From table A.19 it can be seen that six out of twelve countries work with direct surveys, except for fixed-scale charges, standard prices, etc. Moreover a number of countries carry out a separate rent survey. All countries which report on the procedure followed for a change of reporting unit follow the rule that the new unit should have the same characteristic as the removed one. The frequency of the survey is, apart from seasonal products which will be considered in section 4.2.4.4 and rents (section 4.2.4.5) and some durables, monthly for all countries except Ireland which has a quarterly survey.

FIGURE 4.4: Number of Recorded Prices

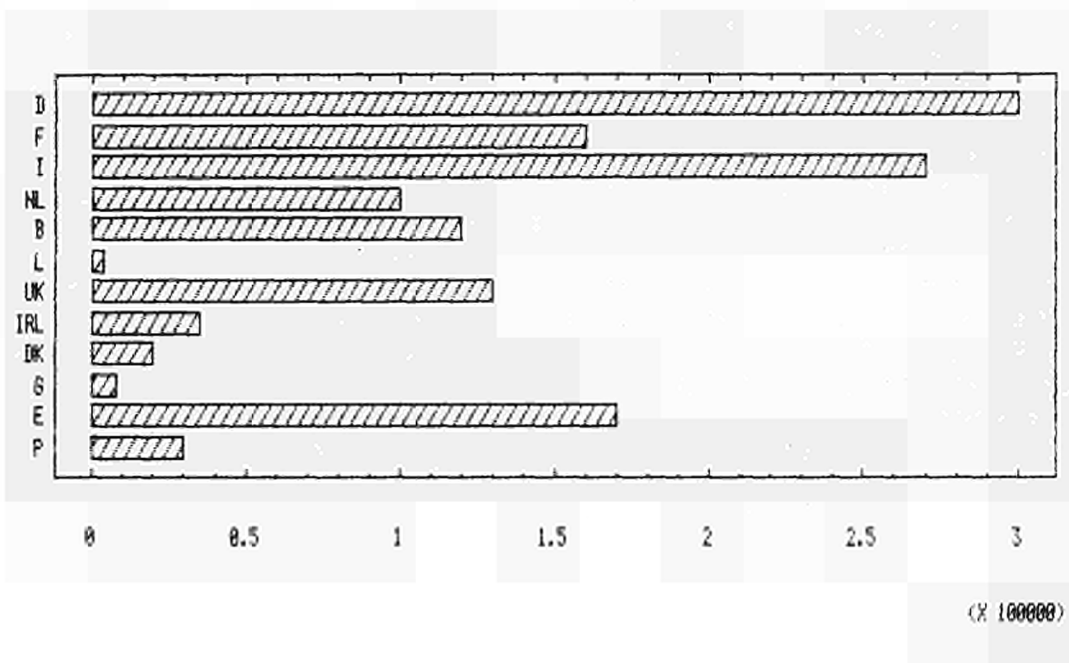


FIGURE 4.5: Number of Reporting Units

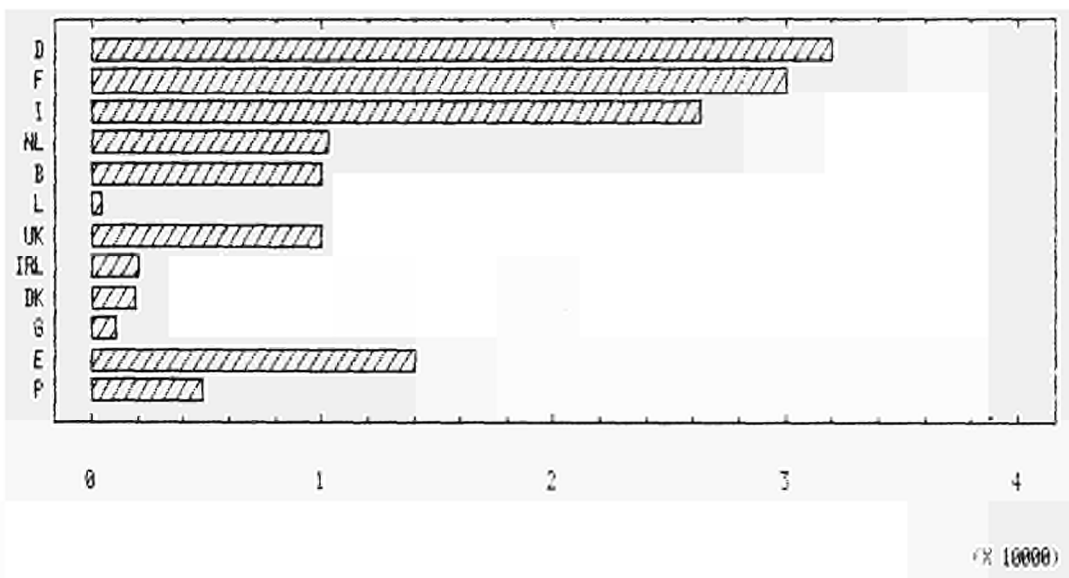
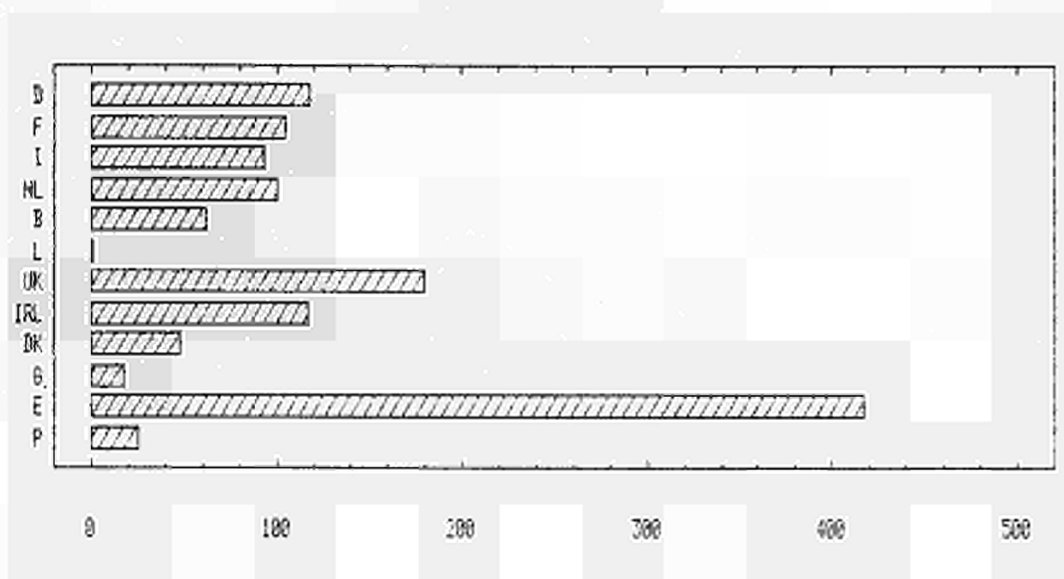


FIGURE 4.6: Number of Surveyed Communities



4.2.4.3 Substitution and Quality Changes

One of the major biases which may creep into the CPI is due to disappearance of products and their subsequent substitution and to quality changes. These two phenomena are of the same nature but differ in degree. The basic problem related to quality change originates from the fact that an increase (decrease) of the CPI should only occur when the consumers are facing an increase (decrease) of the cost of the **same bundle of commodities and services**, since *'An increase in the costs of living occurs only to the extent that households have to pay more for the same standard of living'* (Fry and Pashardes, 1986). There is thus a strong argument for excluding quality changes from the CPI. Yet there is no fully satisfactory way of handling quality changes due to the difficulty of its perception. In spite of the fact that the countries report in a very global manner on this issue (see table A.22), it turns out that one may single out five different methods to cope with quality changes which in use in the Community. They are listed below.

1) The **Heuristic** method.

The interviewer takes the decision at the spot whether an old and a new product are equivalent or not. If they are, the entire price change is included in the index, if not, it is assumed that the new product has faced the same price movement since the base year as the old product (chain-linking).

2) The method of the **Single Quality Indicator**.

In this case the price of the old and the new product is related to a single quantitative characteristic of the product. This can be the weight or the volume (unit price) or another quantitative characteristic like fat content for milk or cheese, volume percentage of alcohol in alcoholic beverages, etc.

3) The **Hedonic Index Approach**.

If the quality of a product can not be expressed properly with the help of a single indicator, which is often the case for durables like cars, washing machines, etc., one may rely on an econometric approach, which consists basically of the design of a regression equation in which the prices of a set of a set of similar commodities is the dependent variable which is expressed as a function of a selection of quantifiable quality characteristics by which the above mentioned commodity set can be described (for details, see Muellbauer, 1975 and Polak, 1983). These regressions are developed for several commodity sets and if one or more of the characteristics change the new base price can be derived immediately.

4) The method of **Equivalence Classes**.

The commodities within a certain set (video players or ovens) are classified into a number of categories (equivalence

classes) which may, for instance, depend on the degree of technological sophistication. At the moment of a substitution the fictitious base price of the new commodity is simply equal to average base price of the equivalence class to which it is attached.

5) The **Resource Cost** method.

Here the adjustment for quality change is based on the cost to the supplier of providing it. It implicitly assumes an equivalence between quality and production costs.

The way to harmonisation with respect to the treatment of quality changes needs in the first place to be cleared by the provision of systematic and detailed information by the member states on which method is applied to which commodity group (see section 5.3.4 for more detailed suggestions).

4.2.4.4 Seasonal Products

Information about the type of commodities and services which get a 'seasonal product' - treatment is given in the tables A.23 and A.24. Not all countries provide the same detail with respect to the weighting proportion of seasonal products in the CPI, as can be seen from figure 4.7 which gives a bar chart representation of the data presented in table A.24. From this figure it can also be seen that the weight given to seasonal products varies quite strongly between the twelve member states with France, Greece and the Netherlands scoring highest (around 60 o/oo) and Ireland and Denmark scoring lowest (around 17 o/oo). One of the reasons for this high variation is the coverage: only Belgium and the Netherlands report to include travel, on top of that the Netherlands report to include clothing and various other items. The other reason may be found in differences in income levels. The majority of the seasonal products are foodstuffs and since the food budget shares vary significantly between the countries (mainly due to differences in income levels), it would be more illuminating to determine the weights of the seasonal food products in the food basket. These weights are given in figure 4.8. The picture which emerges now is rather different from figure 4.7: particularly Italy and to a lesser extent France show very high percentages (27 and 16 per cent respectively) compared to the other countries which rate between 5 and 12 per cent. Ireland, Denmark and Belgium show the lowest rates (about 5 to 6 %). One of the reasons for the marked differences in weight as pictured in figure 4.8 may be found in different nutrition habits across the Community: in some countries the proportion of processed food (canned and frozen) in the total food budget may be higher than in others. Nevertheless the differences remain quite big and it might be worthwhile to screen the methodologies for the selection of seasonal products in the different countries. Finally, some attention will be given to the methodology used to

eliminate seasonal influences from the CPI. Table A.23 lists briefly the information about the current practices in the twelve member states. All countries have made a provision for the

FIGURE 4.7: Weight of Seasonal Products
(o/oo)

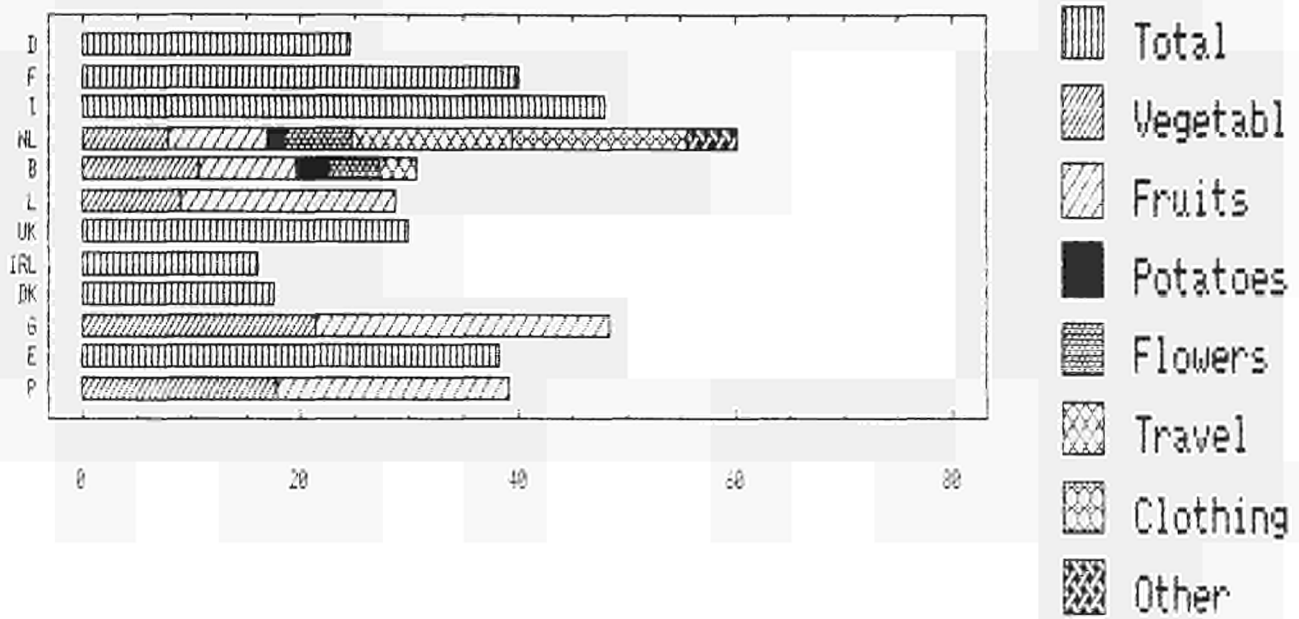
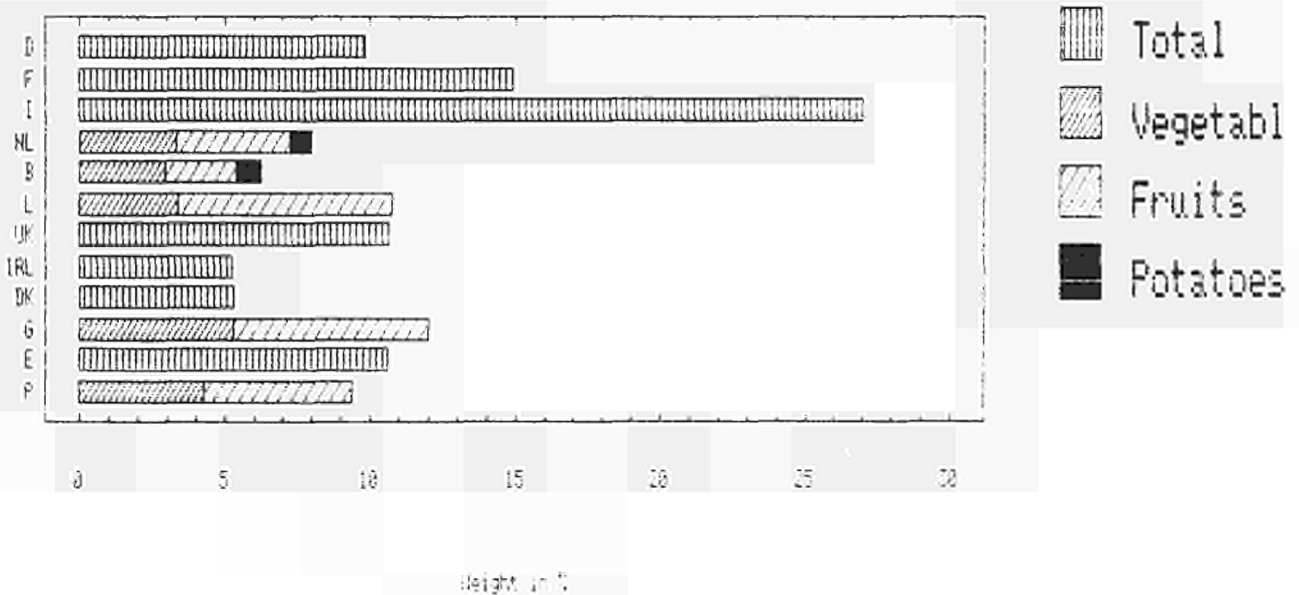


FIGURE 4.8: Weight of Seasonal Food in
the Group 'Food, Beverages and Tobacco'



treatment of seasonal products. Most of the countries report that their methodology consists of the use of variable items and weights within groups with constant weighting, where for the calculation of the index of each of the groups moving averages are being used, varying from 3 to 13 months. Some countries report a different methodological set up: Belgium, Germany and Ireland. In conclusion it can be said that both the coverage and the methodology are in need of standardisation.

4.2.4.5 Paid and Imputed Rents

The collection of price statistics on housing costs takes place in all countries on the basis of specific housing surveys. As can be seen from table A.7 the coverage, sample size and frequency of these surveys vary from country to country. A synthesis of this information is given in table 4.4 below.

TABLE 4.4: Characteristics of Housing Surveys

Country	Coverage Dwellings		Sample Size	Frequency (number of times per year)
	Rented	Owner-Occ.		
D	x		11 300	4
F	x		3 000	4
I	x		13 500	4
NL	x		12 000	1
B	x		1 800	12
L	x		300	2
UK	x		3 000	2
IRL ¹	x		800	4
DK	x		4 000	2
G	x		800	2
E	x	x	3 000+2 000	4
P	x		8 000	12

¹ Ireland separately surveys social dwellings once a year.

It appears from this table that, according to the received information, only one of the six countries which include imputed rent of owner-occupied dwellings, Spain, surveys these dwellings. For the United Kingdom and Ireland this can easily be explained, since these two countries use mortgage interest data. For two other countries, FR Germany and Denmark, the available information did not allow an explanation. The Netherlands reports that it uses for these dwellings official rent index figures.

The scattered character of the information about the methodology of the construction of the index for rents (both paid and imputed) does not allow a comprehensive analysis at this stage.

4.2.5 Calculation of the National Index

As shown by table A.26 the methods used in the various countries differ considerably. A number of countries pass through the calculation of regional indices: Germany, Italy, Belgium, Spain, and Portugal, while others, France, the Netherlands, Luxemburg, the United Kingdom, Ireland, Denmark, and Greece do not calculate regional indices. Obviously, these differences in approach reflect different national needs, which *inter alia* depend on the size of the country concerned. The passage from the regional indices to the national index is usually been carried out on the basis of regional household expenditure shares. Not all countries give sufficient information on this issue.

4.2.6 Revision and Validation

In order to achieve an improved comparability between the index calculations of the twelve member states it is absolutely necessary to align the base year revisions. From table A.25 it is clear that this objective is far from being reached. Apart from France and the United Kingdom which have an index with annual linking, there are only four countries (Germany, Italy, Netherlands and Belgium) which are aligned at 1990 as base year, but it is not clear whether all of these four countries will effectuate future revisions at the recommended interval of five years.

The accuracy of the index is affected by both procedural and sampling errors. Comparability of the national indices requires that these errors are not only as small as possible, but also that they are of the same order of magnitude across countries. The procedural error can be equalised on as a consequence of the adoption by the member states of the recommendations of the SOEC. It should be noted here that it may not always prove feasible to 'minimize' this error simultaneously, at least on the short term. With respect to the sampling error some remarks have already been made in section 4.2.4.1.

The data which are used for the computation of the CPI are almost entirely derived from - various - sample surveys: the family budget survey, samples of commodities, samples of reporting units, and samples of points-of-time. The sampling of the commodities, the reporting units and the points-of-time is generally judicious. This constitutes a major barrier for the calculation of sampling errors. But even if this barrier were removed, it seems impossible to design an integrated measure of sample variability for the CPI. This is due to the immense complexity of the related sample designs. But efforts should be made to come to a co-ordinated effort to calculate at least partial accuracy measures.

5. TOWARDS HARMONISATION

5.1 Guiding Principles

Consumer price indices are playing an important role in national policy making, both in the economic and in the social sphere. Therefore, in each country there will exist, at least on the short term, a certain inertia to changes in the methodology of the index calculation which may not be in line with the national requirements. It should be realised, however, that with the increasing integration of the regions of the Community the need for common uniformly defined instruments will grow. Hence national and community requirements for the index calculation will converge.

It has been in this spirit that the proposals laid down in this chapter have been formulated. On the one hand one cannot expect to introduce basic changes in the national indices overnight, on the other it is high time to initiate a concerted effort of all member states to bring about the necessary changes in the national indices leading to harmonisation.

It may very well be that in a number of instances member states may wish, at least during a transition period, to maintain their national index side to side with a 'community oriented' CPI.

Finally some remarks should be made about the more technical principles which have been guiding the choice of methodological reforms proposed in this chapter. It can easily be observed from reading the proposals below that the choice of methodology has not always been based on the principle 'what is theoretically best', if such a principle exists. For most cases a compromise had to be made between what is desirable and what is feasible. Here feasibility should be understood in terms of both financial and human resource constraints.

5.2 Objectives and Priorities

The analysis in chapter four has revealed a multitude of areas where the practices of CPI construction in the twelve member states diverge. In setting the objectives for a harmonisation programme it should be realised that these divergences, numerous as they may be, are being caused by the absence of a common view on a few basic principles. Below the basic objectives of a harmonisation exercise which are at the basis of the detailed proposals in section 5.3 have been formulated:

- i) The use of a common type of index.
- ii) The adherence to the national accounts concept of household consumption as defined by European System of Integrated Economic Accounts.
- iii) As a consequence of the previous point the acceptance of the consumption principle instead of the expenditure principle.
- iv) The inclusion of the entire resident population in the CPI calculation.
- v) The alignment of the frequency of Family Budget Surveys, base year selection and revisions of the market basket.
- vi) Uniformity of the sampling method and coverage of the price surveys.
- vii) Alignment with respect to the valuation methods for the consumption of housing services and non-marketed goods and services.

Obviously, there are still many difficulties to overcome in the process leading to the achievement of these objectives and it will be necessary to determine a number of priority areas. In this context it is suggested to give the objectives as listed under 1 to 4 the highest priority in the short term and to make long term commitments on the objectives listed under 5 to 7.

5.3 Detailed Proposals

5.3.1 Type of Index

- (1) It is proposed that all countries calculate the Laspeyres index, thus retaining a market basket for several years. France and the United Kingdom which use the Laspeyres chain index have all the necessary material for this calculation.

5.3.2 Field of Observation

In this area the following general proposals are put forward:

- (2) Adoption of the ESA definition of household consumption,

implying the acceptance of the consumption principle rather than the expenditure principle.

- (3) As a consequence of proposal (2) the inclusion of the items listed in section 4.2.2.1, page 8 and 9.

The above proposals have a number of specific implications which will be listed below as specific proposals for the field of observation:

- (4) Accommodation; the following items should be included: gross rent, imputed rent of owner-occupied dwellings and maintenance and repair costs; the methodology of rent imputation should be harmonised on the basis of the consumption principle.
- (5) Insurances; the obligatory social security insurance premiums paid by the households should be considered as non-consumptive expenditures and treated the same way as direct taxes; only the charges of capital insurance should be counted as consumption and accordingly allocated; the treatment of the net premiums of other risk insurances, by definition equal to the reimbursements, should depend on the allocation of the reimbursement. That part of the net premium which corresponds to direct monetary reimbursement to households for the compensation of incurred damage should be treated as income transfer and the part of the net premium which corresponds to the reimbursements made directly to the producer of the goods and/or services which the household acquires as compensation for incurred damage should be treated as consumption of these goods and services; the charges for the risk insurances should be treated as consumption of financial services.
- (6) Interests should be excluded from the calculations; whether mortgage interest is to be included as a parameter for the imputation of rents of owner-occupied dwellings depends on the final decision with respect to the methodology to be adopted in this area.
- (7) Direct taxes, in the strict sense of the term (see the section 4.2.2.1, pp. 12-13), should be excluded from the calculations.
- (8) Indirect taxes, both levied on the producer/supplier and on the consumer, should be included as consumption; this implies specifically the inclusion of motor vehicle tax (in the ESA main group 6), taxes related to the use of dwellings and sewerage tax (in group 3)and refuse collection tax (in group 4).
- (9) Own consumption of agricultural and food products and benefits in kind should be included at retail prices of

the representative item.

- (10) Existing commodities; for the purchase of existing imported commodities the total expenditure should be taken into account; for the purchase of other existing commodities only the so-called cost of transfer should be included.
- (11) Index population; in order to achieve comparability it is necessary that all countries include all resident households in the calculation of the CPI.

5.3.3 The Market Basket

Apart from the proposals made in the previous section which are aimed to ensure a uniform coverage of the goods and services, it is important to give some attention the actual weighting procedures. The quality of the weighting procedures obviously depends on the number of items taken into account. Furthermore, the international comparisons of partial indices would be greatly facilitated if countries would adopt a common nomenclature, align the frequency of their surveys and choose identical base years. These observations lead to the following proposals.

- (12) The methodology used for the determination of the number of items should be harmonised on the basis of an agreed minimum weight-norm.
- (13) The ESA nomenclature should be universally applied for the publication of partial indices.
- (14) The frequency of family budget surveys should be set at a 5-year interval and a starting year (1995 ?) should be agreed on soon.

5.3.4 The Price Survey

With respect to the price survey a number of proposals have been formulated, ranging from the standardisation of the sampling methodology to the treatment of a number specific issues, like quality changes and substitution, seasonal products and rents.

- (15) The price survey should be carried out once per month and the items excluded from this survey frequency, like seasonal products, durables and rents should be well defined.
- (16) A specific study aimed at formulating proposals with

respect to a common standardised sampling methodology and coverage for the member states should be carried out in the near future.

- (17) With respect to substitution and quality changes the methodology should also be standardised. It is proposed that for each of the five methods which have been reviewed in section 4.2.4.3 a detailed list of items is prepared for which these methods apply.
- (18) For standardisation purposes a detailed listing of the seasonal products has to be designed and used by all countries.
- (19) A specific study aimed at investigating the possibilities of harmonisation of housing surveys is needed before any further progress can be made in the area of paid and imputed rents.

5.3.5 Validation

The comparability within the Community of the CPI's of the member states does not only require a harmonisation of definitions, sampling and calculation procedures but it also requires a co-ordinated effort to the validation of CPI's.

- (20) In order to serve better the international comparability of CPI's it is necessary to co-ordinate efforts to calculate at least partial accuracy measures.

5.4 Some Final Remarks

It is hoped that this study has contributed to systematise to a certain extent the complex issue of consumer price indices and to identify the major areas which deserve particular attention in the harmonisation exercise.

From the analysis it appears that a number of fields need further study before concrete recommendations can be made. This concerns in particular the methodology for rent imputation, the standardisation of housing surveys and the sampling methodology for price surveys.

Pending these studies, which should be carried out in the immediate future, there seem to remain enough issues which are sufficiently clarified to allow meaningful and concrete discussions leading to the harmonisation of consumer price indices to start soon.

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ANNEX A

**THE CPI'S IN THE MEMBER STATES
AROUND 1987**

TABLE A.1

Country	Name of the Index, Widest Field of Observation
D	Cost-of-Living Index for all Private Households (Preisindex fuer die Lebenshaltung aller Privaten Haushalte) published items of expenditure: 755
F	Consumer Price Index for Urban Households of Workers and Employees (Indice des Prix à la Consommation des Ménages Urbains dont le chef est ouvrier ou employe) published items of expenditure: 296
I	National Consumer Price Index (Prezzi al Consumo per l'intera Collettività Nazionale) published items of expenditure: 878
NL	Consumer Price Index for the Whole Population (Prijsindexcijfer van de Gezinsconsumptie voor de Totale Bevolking) published items of expenditure: 690
B	Consumer Price Index (Indice des Prix à la Consommation) published items of expenditure: 401
L	Consumer Price Index (Indice des Prix à la Consommation) published items of expenditure: 255
UK	General Index of Retail Prices published items of expenditure: 394
IRL	Consumer Price Index published items of expenditure: 722
DK	Consumer Price Index (Forbrugerprisindeks) published items of expenditure: 523
G	Consumer Price Index published items of expenditure: 386
E	Consumer Price Index (Indice de Precios de Consumo) published items of expenditure: 428
P	Consumer Price Index (Indice de Precos no Consumidor) published items of expenditure: 500

TABLE A.2

Country	Other Household Index Numbers
D	(a) 4 person h.h.'s of workers and employees in middle income group (b) 4 person h.h.'s of employees and officials in upper income group (c) 2 person h.h.'s of recipients of pensions and welfare benefits
F	households of different professional categories
I	workers and employees in towns
NL	(a) workers and employees, with in 1985 income lower than the wage limit for compulsory sick-fund insurance (CSFI) (b) workers and employees with 1985 income higher than CSFI (c) as (a) with reduced weighting for health care and excluding influence of changes in indirect taxes/subsidies.
B	None
L	
UK	one and two person pensioner households, whose income consists for at least three quarters of state pensions and social security benefits.
IRL	Constant Tax Price Index (since 1975)
DK	None
G	None
E	None
P	(a) Urban area, Lisbon, Porto; (b) Urban and Rural Continent (aggregated)

TABLE A.3

Country	Formula
D	Laspeyres
F	Laspeyres chain index with annual linking in December
I	Laspeyres
NL	Laspeyres
B	Laspeyres
L	Laspeyres
UK	Laspeyres chain index with annual linking in January
IRL	Laspeyres
DK	Laspeyres
G	Laspeyres
E	Laspeyres
P	Laspeyres

TABLE A.4

Country	Publication, (a) Method, (b) Results
D	(a) Statistisches Bundesamt, Wirtschaft und Statistik 1983, 3 (b) see (a)
F	(a.1) INSEE, Economie et Statistique, No 65, March 1978 (a.2) INSEE, Pour Comprendre l'Indice des Prix, 2ème éd. (b) Ministère de l'Economie et des Finances, Bulletin Mensuelle de Statistique
I	(a) ISTAT, Metodi e Norme, Serie A, No 23, 1987 (b) ISTAT, Bolletino Mensile de Statistica; Notizario ISTAT-serie 3, foglio 32
NL	(a) Statistisch Magazine 1986 jaargang 6 nr 3; Maandstatistiek van de prijzen september, oktober 1988. (b) Maandstatistiek van de prijzen; Statistisch Bulletin.
B	(a) Institut National de Statistique, Le Nouvel Indice des Prix à la Consommation, Base 1981 = 100", Janvier 1984. (b) Communiqué Hebdomadaire, INS
L	(a) STATEC, "La Reforme de l'indice des Prix a la Consommation (Cahier Econ. No 69, April 85) (b) Bulletin du STATEC(annual); Indicateur Rapide (mensuel) and "Annuaire Statistique" (yearly)
UK	(a) "A Short Guide to the Retail Prices Index", Employment Gazette, August 1987 (b) Press Notice and Employment Gazette, The Dept of Employment
IRL	(a) CSO, Irish Statistical Bulletin, March 1983 (b) Statistical Release (quarterly), Economic Series (monthly)
DK	(a) Statistiske Efterretninger, Indkomst, forbrug og priser 1984: 17 Indeksberregninge i Danmarks Statistiks 1985; (b) Danmarks Statistik, Statistiske Efterregninger
G	(a) "Revised Consumer Price Index", Z:16 Methodological Studies, 1985(Base 1982) (b) "Monthly Statistical Bulletin", National Statistical Service of Greece.
E	(a) "Indice de Precios de Consumo", Fuentes y Metodos, 1, base 1983; (b) "Indice de Precios de Consumo", Boletín Informativo, INE
P	(a) Serie Estudos, No 58, 1987, INE (b) Boletim Mensal de Estatística, INE

TABLE A.5

Country	Frequency of Publication
D	monthly
F	monthly
I	monthly
NL	monthly
B	monthly
L	monthly
UK	monthly; pensioner index quarterly.
IRL	quarterly
DK	monthly
G	monthly
E	monthly
P	monthly

TABLE A.6

Country	Field of Observation: Consumer Goods and Services
D	Consumption concept; assessment of own consumption and allowances in kind at retail prices.
F	All goods and services purchased by index population, also data from national accounts; excluded: own consumption, imputed rents for owner-occupied dwellings, hospital costs, insurances, domestic services, financial and legal advice, maritime and air transport.
I	Based on integrated national accounts concept; own consumption and imputed rents excluded.
NL	Definition of private consumption agrees with national accounts; imputed rents and own consumption included.
B	Combination of market and consumer concepts; imputed rents partially included for weighting.
L	Expenditure concept; own consumption and imputed rent excluded.
UK	Combination of market and consumer concepts; all goods and services purchased by households except for expenditures on hotels and holidays; gifts and betting excluded.
IRL	All consumer goods and services for which private households incur expenditure; combination of market and consumer concepts; own consumption, imputed rent, social welfare and other benefits in kind excluded.
DK	Based on Danish national accounts ; corresponds to new SNA.
G	General stores, super markets, special stores, etc; only 'cash prices' are taken into account.
E	All goods and services purchased by index population for consumption; included: own consumption; excluded: professional expenditure.
P	All goods and services consumed by the reference population; own consumption included; free transfers included.

TABLE A.7

Country	Accommodation
D	Rented and owner-occupied dwellings; weight for imputed rent is contained in the overall weight for rent; five rent series, broken down by size and age of dwelling, and financing; quarterly survey of 11 300 dwellings; water consumption included.
F	Rent quotations are obtained during the first month of each quarter survey of 3 000 dwellings); owner-occupied dwellings excluded.
I	Rented dwellings covered but not owner-occupied dwellings; quarterly survey of 13 500 dwellings; basic indexes of main provincial towns are aggregated and weighted by the population in rented dwellings (1969); the four regional indexes are averaged in accordance with information from the regional integrated accounts; also incidental expenses included for owner-occ. dwellings.
NL	Rent inquiry by mail (12 000 dwellings in a yearly survey); rents for owner-occupied dwellings: official rent indexation.
B	Rented dwellings covered; owner-occupied dwellings not covered, determination of weights: 2/3 of interest charges included; monthly survey 1 800 rented dwellings in 62 communes; since 1980 a refinement with respect to social housing has been introduced.
L	Rents included since 1987; owner-occupied dwellings not covered; sample of 300 dwellings in Luxemburg town; survey twice a year; 50% of the sample quarterly.
UK	Rented dwellings included; weight: gross rent (before deduction of subsidies or rebates); owner-occupied dwellings included; weight: payments of mortgage interest net of tax relief; information from local authorities on their rented dwellings; half-year survey 3 000 private rented dwellings; repairs, taxes and water consumption included.

TABLE A.7 (Continued)

Country	Accommodation
IRL	Rented dwellings included; weight: expenditure on rent from family budgets; owner-occupied dwellings: mortgage interest payments; publicly owned: information local authorities; privately owned, rented: direct surveys (Dublin 500, large towns 100 + postal inquiry
DK	Rented dwellings covered; weight: net rent, including imputed rent for owner-occupied dwellings, which are represented by rented dwellings; one rent series, half yearly survey of 5000 dwellings; decorating work and materials included.
G	Rents based on a random sample of 800 rented dwellings; collection upon renewal of contract but in any case twice a year.
E	Rents obtained from sample of 3 000 rented and 2 000 owner-occupied dwellings; controlled rent is collected quarterly.
P	Rents included.

TABLE A.8

Country	Insurance
D	Included: motor vehicle comprehensive insurance, health insurance (private), home content insurance.
F	No insurances included; expenditure on medical supplies and car repairs recorded directly.
I	Included: motor vehicle liability insurance.
	For health and other types of risk insurances only the portion of the premium representing administrative costs is included in the the weighting, the remainder of the premiums is considered as expenditure to compensate damages, allocated to the appropriate category (exception: social health insur., where administrative costs are considered as government expenditure and not included); capital insurance: savings component excluded.
B	Included: motor vehicle liability insurance, family liability insurance and fire insurance.
L	Included: motor vehicle liability insurance.
UK	Included: motor vehicle liability insurance, insurance of owner-occupied dwellings and house contents.
IRL	Included: total premium of house insurance (dwelling and contents), motor vehicle and private health insurance.
DK	Excluded
G	Car insurance
E	Car insurance; non-obligatory health insurance.
P	Motor vehicle liability insurance.

TABLE A.9

Country	Interest
D	Nil
F	Nil
I	Nil
NL	Nil
B	Nil
L	Nil
UK	Mortgage interest used as cost indicator of owner-occupied dwellings.
IRL	Installment payments (capital and interest) on hire purchases and credit sales as well as mortgage interest included.
DK	Nil
G	Nil
E	Nil
P	Nil

TABLE A.10

Country	Indirect Consumer Taxes
D	Included: motor vehicle tax.
F	Nil
I	Nil
NL	Nil
B	Road tax, radio and television licence
L	Included: certain local taxes corresponding to specific public services.
UK	Included: annual motor vehicle tax, driving licence, local taxes (rates).
IRL	Included: motor vehicle road tax, driving and other licences and rates (currently abolished).
DK	Nil
G	Nil
E	Included: car taxes
P	Nil

TABLE A.11

Country Proportion of Private Cons. in Nat. Acc's Included in the Index

D approx. 85%

F 86.9%

I 96%

NL Field of observation the same as national accounts, except private non profit organisations and population living in institutions.

B The definitions of product and service groups for the index are not comparable to the ones used in the national accounts (expenditure vs consumption concept), hence no quantification.

L CPI: Expenditure concept.

UK 91% ; remaining 9% :
 coverage of index: 5%
 imputed rent - mortgage: 2%
 non-profit organisations: 2%

IRL no quantitative information; below 100% since national accounts include non-profit institutions.

DK Private consumption on the Danish territory excluding Greenland and the Faroe Islands; for the rest field of observation is the same as national accounts.

G 66.5%

E 85%

P No information

TABLE A.12

Country	Field of Observation: Index Population
D	All private domestic households, excl. institutional households, foreigners households and those with a net monthly income of DM 20 000 and over;
F	Urban households which head is worker or employee.
I	All private households.
NL	All private households.
B	All private households.
L	Workers and employees households with two children and average to low incomes.
UK	All private households apart from those in the top 4% of the income distribution and pensioner households as defined in Table A.2.
IRL	All private households (urban and rural);
DK	All private households.
G	Urban Households.
E	Households of two or more persons in the national territory within the income range: 322 575 - 2 000 000 Pta (survey 81/82).
P	The population of the continental territory.

TABLE A.13

Country	Index Population as a Proportion of the Total Population
D	92% (appr.)
F	32%
I	
NL	98% (appr.)
B	Entire resident population included.
L	3%
UK	89%
IRL	97%
DK	Entire resident population is included.
G	60%
E	86%
P	100%

TABLE A.14

Country	Frequency of Family Budget Surveys
D	1973, 1978, 1983 moreover, yearly surveys of the three more narrowly defined households (for checking purposes)
F	Family budget surveys at 4 year intervals; food expenditure survey at 2 year intervals.
I	once a year; based on monthly sample surveys; since 1968.
NL	Every year; each year a specific group is over-represented to allow detailed analysis; every 5 years for the c.p.i.
B	At intervals: 1978/79,1987/88.
L	1963/64, 1977, 1986/87
UK	Continuous Family Expenditure Survey.
IRL	At 7 year intervals: 1965/66, 1973, 1980, 1987
DK	At intervals: 5-6 years
G	1957, 1966, 1974, 1982
E	At regular intervals.
P	1973/74, 1980/81

TABLE A.15

Country	Computation of Weights
D	Derived from the 1978 family budget survey (about 48 000 households) and adjusted to the 1980 level on the basis of expenditure information of about 1 000 selected households.
F	Weight are revised annually; national accounts and surveys of total consumption and food consumption; weight of year n: consumption of year n-2 adjusted for the price fluctuation between year n-2 and December n-1; family budget survey: 10 000 households
I	National accounts 1984; family budget surveys for the index of workers and employee households.
NL	Family budget survey 1985 (2 852 households)
B	Family budget survey 1978/79 (2 443 h.h.'s); national weighting at product level, actualised to national accounts 1981; geographical weighting, actualised to 1981 census.
L	Family budget survey 1977, sample of 676 households (see also Table A.12)
UK	Weights revised at beginning of each year on the basis of Family Expenditure Survey for the 12 months (few cases 36 months) ending in the middle of the previous year.
IRL	Family budget survey 1980 of 7 185 households adjusted for price changes between '80 and '82 to give weights for mid-Nov 1982 (base).
DK	Weights derived from national accounts 1981, adjusted for price changes up to April 1984.
G	Weights derived from the 1982 Household Expenditure Survey.
E	Weights derived from Family Budget Survey 1981/1982; sample of 24 000 households.
P	Weights derived from Family Budget Survey 1980/1981 adjusted for price changes up to mid-1983.

TABLE A.16

Country	Market Basket Base (since)
D	1980 average (since 1984), calculated back to January 1980
F	(a) December of the previous year; (basis of publication: average 1980 prices)
I	1985 average (since 1986)
NL	1985 (since 1985)
B	1981 (except for fresh fruits, vegetables and flowers)
L	1984 (since 1985)
UK	16 January 1987; items are reselected at the beginning of each year.
IRL	Mid-November 1982, based on 1980
DK	base : 1980 basket: 1981
G	base : 1982 basket: 1982
E	base: 1983
P	base: 1983

TABLE A.17

Country	Price Survey: Definition of Reporting Units
D	All sales outlets, including mail order trade; excluding luxury stores; selection based on size of turnover.
F	All sales outlets; representativeness based on geographical dispersion or concentration, depending on the article.
I	Reporting units selected by local councils; all sales outlets in provincial capitals.
NL	Outlets in 100 communes over 10 000 inhabitants; all communes over 100 000 inhabitants represented sample from remaining communes; selection based on turnover, type and branch.
B	All sales outlets in 62 communes; selection based on turnover and local distribution.
L	All sales outlets representative for consumer expenditure; mainly in Luxemburg town and surroundings.
UK	Retail shops and other outlets; representative selection.
IRL	All sales outlets, excluding mail order trade.
DK	All sales outlets; selection taken from commercial register, based on turnover.
G	All sales outlets in urban areas; selection based on size of town and representativeness of each area's consumption; prices weighted according to urban population of that area.
E	Sample of representative sales outlets, except co-operative and discount stores; selection on the basis of turnover.
P	Prices preferably collected in self-service sales outlets; if not present: specialised outlets with high turnover; outlets have to be well spread over survey area; excluded: luxury stores, co-operatives, mobile stores.

TABLE A.18

Country	(a) Number of Prices,	(b) Reporting Units,	(c) Communities Surveyed
D	Prices :	300 000	
	Reporting Units :	32 000	
	Communities surveyed:	118	
F	Prices :	160 000	
	Reporting Units :	30 000	
	Aglomerations surveyed:	105 (over 2 000 inhabitants)	
I	Prices :	270 000	
	Reporting Units :	26 300	
	Communities surveyed:	93 (provincial capitals)	
NL	Prices :	85 000 - 115 000 (excl. rents)	
	Reporting Units :	9 500 - 11 000 (excl. rents)	
	Communities surveyed:	100(see also Table A.17)	
B	Prices :	120 000	
	Reporting Units :	10 000 (appr.)	
	Communities surveyed:	62	
L	Prices :	3 500	
	Reporting Units :	400	
	Communities surveyed:	Luxemburg town and surroundings	
UK	Prices :	130 000	
	Reporting Units :	10 000 (appr.)	
	Communities surveyed:	180	
IRL	Prices :	35 000	
	Reporting Units :	2 000	
	Communities surveyed:	117 towns	
DK	Prices :	20 000	
	Reporting Units :	1 900	
	Communities surveyed:	Metropolitan area and rest of the country	
G	Prices :	7 675	
	Reporting Units :	1 016	
	Communities surveyed:	17 urban centers	
E	Prices :	170 000	
	Reporting Units :	14 000	
	Communities surveyed:	417 commercial zones	
P	Prices :	30 000 (appr.)	
	Reporting Units :	4 800 (appr.)	
	Communities surveyed:	25	

TABLE A.19

Country	Direct or Postal Survey
D	direct: 90% by interviewers (apart from fixed-scale charges etc.) postal: 10%
F	direct: 100% by interviewers (apart from fixed-scale charges etc.) postal:
I	direct: 100% by interviewers (apart from fixed-scale charges etc.) postal:
NL	direct: 54% ; incl. 16% for rents postal: 46%
B	direct: 89% by interviewers 11% by central service: gas, electricity, pharmaceuticals, various insurances, road tax, technical (car) inspection, public transport; postal: rent survey
L	direct: 100% by interviewers (apart from fixed-scale charges etc.) postal:
UK	direct: prices which vary locally postal: some standard prices
IRL	direct: mainly; by interviewers postal:
DK	direct: appr. 36% (630 shops) postal: appr. 64% (1 200 shops)
G	direct survey, except for prices fixed by government (official invoices).
E	direct: 100% postal:
P	Direct and postal.

Table A.20

Country	Change of Reporting Unit
D	Considered as quality change and adjusted.
F	No special provisions.
I	Considered as quality changes and adjusted; the new units have to be of the same category as the old old ones.
NL	Changes are made in such a way that the proportions among different types of outlets remains constant.
B	The new units have to be of the same category as the old ones, i.e. they have to be representative in their category.
L	Reporting unit is replaced if necessary by one which has the same characteristics; otherwise considered as quality change and adjusted.
UK	Shops which cease trading or refuse to co-operate are replaced with comparable outlets of the same type.
IRL	Strict observance of type of reporting units; outlets replaced by similar popular shop in the same area; prices only used after two successive new quotations in replacement outlet.
DK	Reporting units selected for a three years period, after which will be exempted if they ask for it.
G	No information
E	Change when unit is no longer representative or has ceased to exist; new unit: same type, same price level.
P	outlets replaced by another unit of the same type and same area.

TABLE A.21

Country	Frequency of Surveys
D	General: monthly, around day 15 (apart from fixed charges, etc.) Fruit and vegetables: bi-weekly (from May to October) rent: quarterly
F	General: monthly Some foodstuffs and seasonal goods: bi-monthly
I	General: monthly, day 15 fruits and vegetables: every 10 days (day 5, 15 and 25) durables and public services: quarterly
NL	General: monthly, day 13-19 some seasonal goods: weekly note: not all products surveyed each month, depending on expected price fluctuations.
B	General: monthly, day 1-20
L	General: monthly, day 1-15 seasonal goods: 4 times in period 1-15
UK	General: monthly, day 16-22 alcohol, beverages, tobacco, coal, petrol and important household goods: quarterly
IRL	General: quarterly, month 2, 5, 8 and 11
DK	General: monthly, day 15-21
G	General: monthly (first week from 1st establ., second week from 2nd establ., etc) Seasonal products and fresh fish: weekly.
E	General: monthly perishable food: weekly in provincial capitals and 6 other large cities, twice a month in the rest of the country.
P	General: monthly (last full week of month) fresh products: 3 times a month durables: quarterly

TABLE A.22

Country	Substitution and Quality Changes
D	Chain linking; correction factors.
F	Substitution of the 'Varieties' both at the annual change of weights and within a year; no fixed rules when quality change leads to substitutions; chain-linking, correction factors.
I	If a commodity is no longer available, it is substituted by a similar commodity; chain linking.
NL	New products included in weighting at next change of base year; when article disappears, a similar article is introduced (linking); correction factors for eliminating quality change.
B	No fixed rules; new products have to be representative, or, in case of substitution, have maximum correspondence with the old ones; no correction in case of quality change.
L	If a commodity is no longer available, it is substituted by a similar commodity (linking); effect of quality changes eliminated as far as possible.
UK	Substitution at annual change of the market basket; no fixed rules when quality change leads to substitution; adjustments made on the basis of expert information.
IRL	If the quality of a variety changes, the new price is not included in calculations until after two successive surveys.
DK	When product is no longer available, it is substituted by new product of approximately the same quality; in case of quality change adjustments are made.
G	Substitution when a variety is no longer on offer or lost importance; chain-linking.
E	Substitution when an article disappears or changes quality; new item: same quality and characteristics; new items only when index revised.
P	In case of quality change, a quality coefficient is used to adjust its influence; new product is given a series of imaginary prices according to the price development of similar products from base year until integration.

TABLE A.23

Country	Seasonal Products
D	seasonal products: potatoes, fresh fruit, fresh vegetables, fresh fish, flowers method: index calculated and published with and without seasonal products.
F	seasonal products: fresh goods flowers and plants method: variable items and weights within 5 groups with constant weighting; monthly prices related to reference month of previous years; moving averages of the last 12 months.
I	seasonal products: fresh fruit, vegetables, flowers (excl.: potatoes, lemons, grapefruits, bananas, decorative plants) method: monthly prices adjusted for seasonal influences; by minimum price method and moving 13-month average.
NL	seasonal products: (a) fresh fruit, vegetables, flowers, (b) items of clothing (winter and summer basket) holidays and some miscellaneous items. method: (a) variable items and weights within groups with constant weighting; monthly base prices adjusted for seasonal influences; moving quarterly averages. (b) other methods.
B	seasonal products: fresh fruit, fresh vegetables, travel('formule club') method: variable items and weights within groups with constant weighting; fresh fruits and vegetables: monthly prices average of 1980, 1981 and 1982; 3-months moving averages; flowers: average of three years, no mov.av; travel: only July and August indexes calculated, latter valid until June next year.
L	seasonal products: fresh fruit and vegetables, fresh fish, poultry, flowers and rabbit; method: variable monthly items and weights within 2 groups with constant weighting; monthly prices related to reference month base year; moving average of last 12 months; method only applied to fresh fruit and vegetables.
UK	seasonal products: home-killed lamb, eggs and fresh fish, fruit and vegetables method (from Febr. 1975): variable monthly weights within the groups food and vegetables which have constant weighting.

TABLE A.23 (Continued)

Country	Seasonal Products
IRL	seasonal products: eggs, potatoes, tomatoes method: "X-II Seasonal Adjustment Program" for eggs, potatoes and tomatoes; other seasonal not handled in a special way.
DK	seasonal products: Fish: plaice, cod; vegetables: carrots, leeks, onions, tomatoes, cucumbers, white cabbage, cauliflower, lettuce, potatoes; fruits: apples, grapes, oranges. method: seasonal factors determined for the last 5 years; prices adjusted.
G	seasonal products: Fresh fruits and citrus fruits, fresh vegetables, summer/winter clothing and footwear; method: variable monthly items and weights for the two food groups with constant weighting; else: for off season, closing prices of preceding season are maintained.
E	seasonal products: fresh fruits and vegetables; method: variable monthly items and weights for the 2 groups with constant weighting.
P	seasonal products: horticultural products and fruits; method: variable monthly items and weights for groups with constant weighting; 12-months moving average.

TABLE A.24

Country	Weighting Proportion of Seasonal Products in Total Index	
D	2.448%	
F	4%	
I	4.8%	
NL	fresh vegetables:	7.8 o/oo
	fresh fruit:	9.1 o/oo
	potatoes:	1.7 o/oo
	flowers, indoor plants:	6.1 o/oo
	seasonal clothing:	16.0 o/oo
	seasonal footwear:	1.6 o/oo
	holidays:	14.8 o/oo
	miscellaneous:	4.7 o/oo
B	fresh fruits:	8.90 o/oo
	fresh vegetables :	10.65 o/oo
	potatoes:	3.00 o/oo
	flowers:	4.70 o/oo
	travel ('formule club'):	3.35 o/oo
L	fresh fruits:	19.7 o/oo
	vegetables:	9.0 o/oo
UK	seasonal food:	30 o/oo
IRL	1.6%	
DK	1.75%	
G	fresh fruits and citrus:	27.0 o/oo
	fresh vegetables:	21.4 o/oo
E	38.23 %	
P	fresh fruits:	21.2 o/oo
	horticultural products:	17.9 o/oo

TABLE A.25

Country	Revisions
D	Next base year: 1985 target: every 5 years;
F	Next base year: annually (chain index)
I	Next base year: 1985 target: every 5 years
NL	Next base year: 1990 target: every 5 years
B	Next base year: 1988 target: no fixed intervals
L	Next base year: 1984, 1989 target: every 5 years
UK	Next base year: annually (chain index) Once published, the index is not revised retrospectively but any necessary adjustments are made to subsequent indices as soon as possible.
IRL	Next base year: target: regular intervals of 7 years.
DK	Next base year: target: 5 - 6 years
G	first index: 1959 revisions: 1969, 1974, 1982
E	Irregular intervals: 5-8 years
P	Next base year: 1989

TABLE A.26

Country	Calculation of National Index
D	The national index is the weighted arithmetic mean of the price indexes in the 'Länder' and West Berlin; weight: resident population in 1980.
F	No regional indices.
I	Twenty regional indices are calculated from the price data from 93 provincial capitals, weighted by population figures from 1984; these are aggregated to give the national index by further weighting with consumer information from the regional accounts.
NL	Since price data is based on self-weighting sample, average prices per article can be calculated directly from collected prices.
B	The national index is the weighted average of each index series of 62 communities surveyed; weight: population census 1981.
L	The price index of the capital city Luxembourg is considered as representative of the whole country; no regional indices.
UK	No regional indices are calculated.
IRL	National index is computed directly as a weighted average of the price changes of constituent items.
DK	No regional indices.
G	No regional indices.
E	Weighted averages of prices measured in 417 commercial areas, giving 17 regional indices; weighting based on consumption expenditure from the family budget survey.
P	Weight: resident population 1980.

TABLE A.27: Number of Items in Consumer Price Index

STATE	MAIN GROUPS (ESA)								TOTAL
	Food, beverages and tobacco (1)	Clothing and footwear (2)	Rent, fuel and light (3)	Furniture, Household Appliances, other goods (4)	medical care and health expenses (5)	Transport and communication (6)	Education, entertainment, and recreation (7)	Other goods and services (8)	
D	192	79	22	136	33	99	133	61	755
F	93	49	10	64	8	21	28	23	296
I	247	60	12	73	144	157	91	94	878
NL	233	120	41	60	5	49	103	79	690
B	148	42	28	53	17	34	34	45	401
L	101	29	20	28	8	20	23	26	255
UK	140	66	31	57		17		83	394
IRL	138	70	34	96	100	101	111	72	722
DK	173	60	23	91	12	61	59	44	523
G	142	58	11	65	11	26	37	36	386
E	171	56	24	56	18	26	40	37	428
P									500

TABLE A.28: Weights of Main Groups in Consumer Price Index (o/oo)

STATE	MAIN GROUPS (ESA)								TOTAL
	Food, beverages and tobacco (1)	Clothing and footwear (2)	Rent, fuel and light (3)	Furniture, Household Appliances, other goods (4)	Medical care and health expenses (5)	Transport and communication (6)	Education, entertainment, and recreation (7)	(Other goods and services (8)	
D	249.3	81.9	213.3	93.6	23.7	142.6	84.7	110.9	1,000.0
F	268.0	75.7	139.2	116.3	72.4	144.2	66.8	117.4	1,000.0
I	304.4	88.2	96.8	75.3	50.6	144.9	80.7	159.1	1,000.0
NL	178.0	67.0	256.0	71.0	138.0	124.0	82.0	84.0	1,000.0
B	233.1	82.3	195.8	94.5	40.0	154.5	81.7	118.3	1,000.0
L	363.0	93.3	138.7	93.5	37.1	130.7	60.2	83.5	1,000.0
UK	281.0	74.0	218.0	80.0	0.0	167.0	77.0	103.0	1,000.0
IRL	403.8	82.2	118.2	65.6	21.8	177.3	59.2	71.9	1,000.0
DK	266.0	55.0	272.0	72.0	18.0	149.0	92.0	76.0	1,000.0
G	360.9	128.3	130.6	85.5	45.2	130.0	87.4	32.1	1,000.0
E	330.3	87.4	185.7	74.1	23.9	143.8	69.6	85.2	1,000.0
P	416.0	101.4	98.9	78.7	26.3	138.2	41.2	99.3	1,000.0

FIGURE A.1: Food, Beverages and Tobacco

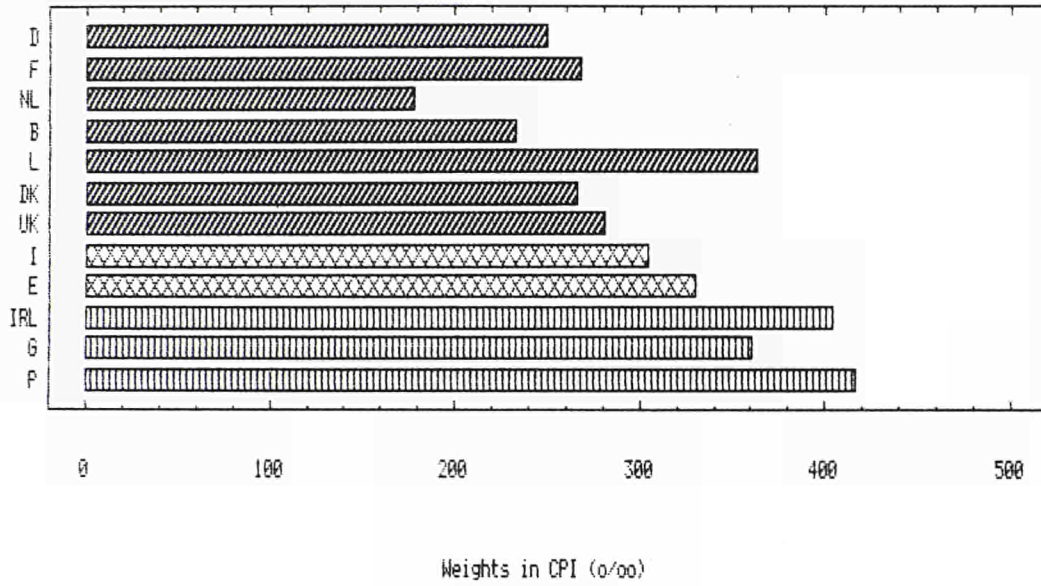


FIGURE A.2: Clothing and Footwear

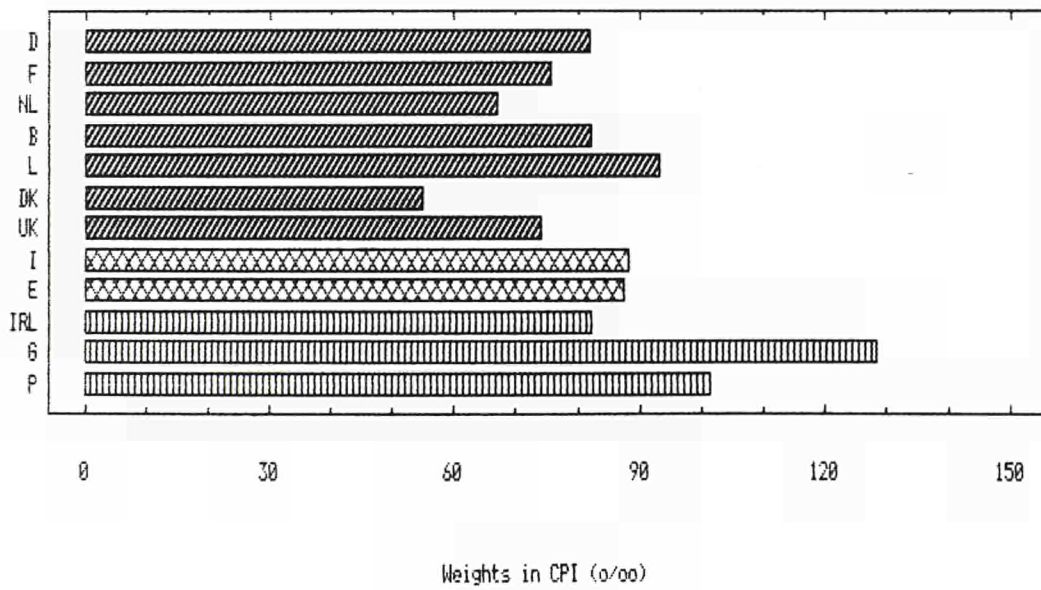


FIGURE A.3: Rent, Fuel and Light

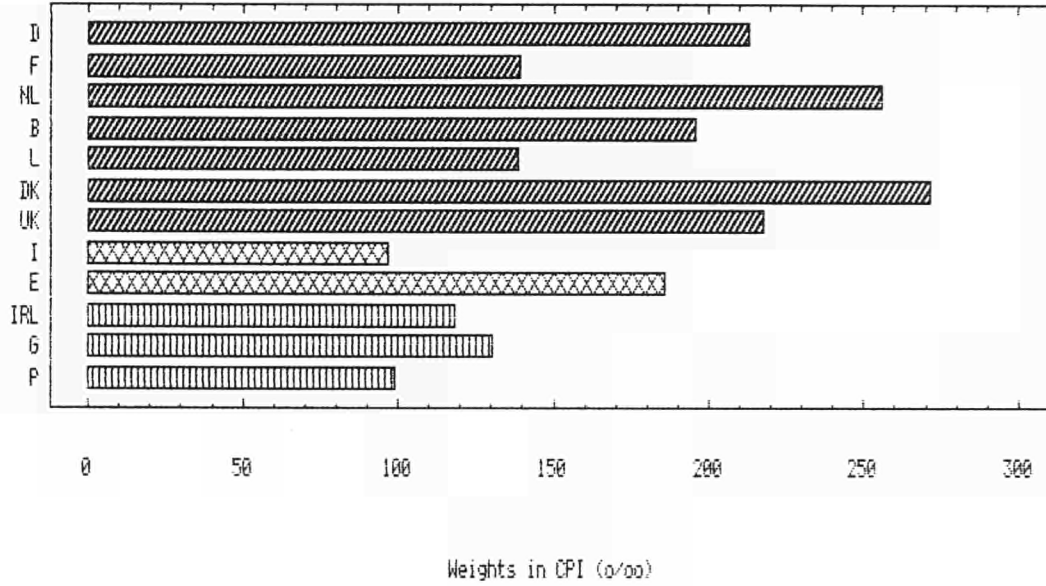


FIGURE A.4: Furniture, Household

Appliances and Other Goods

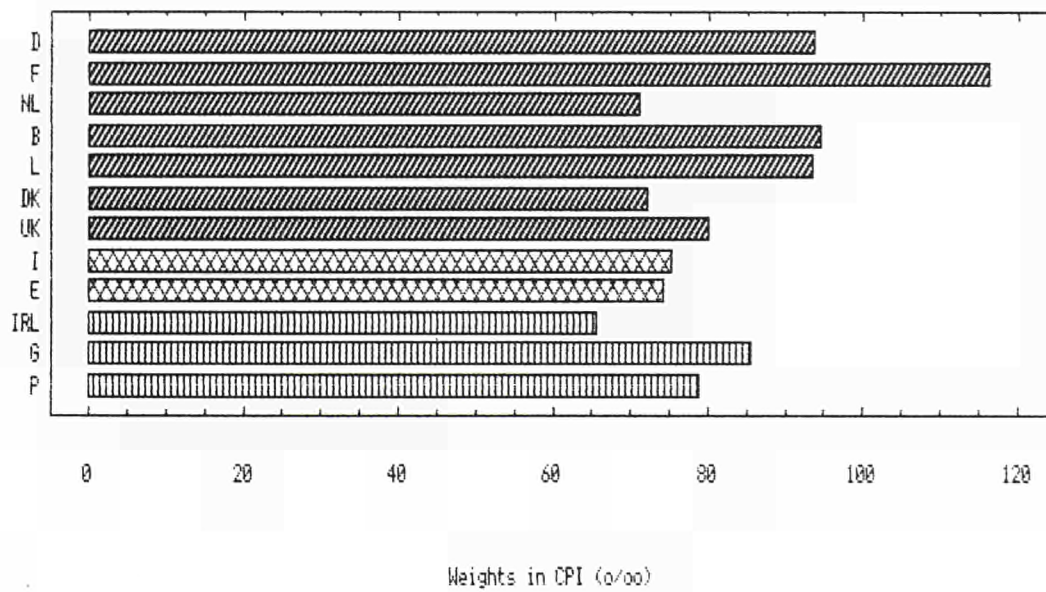


FIGURE A.5: Medical Care and Health

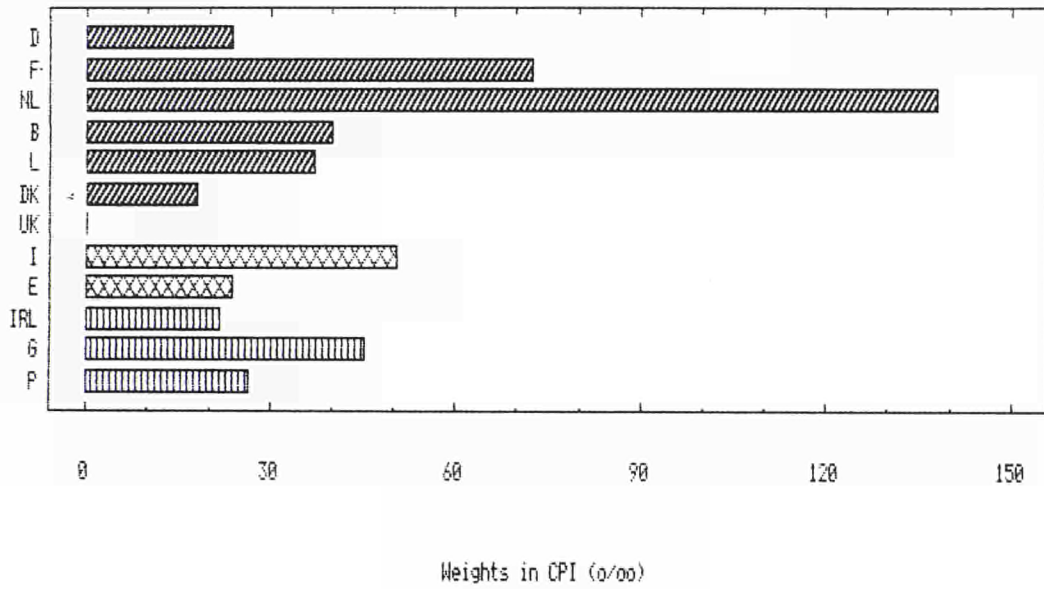


FIGURE A.6: Transport and Communication

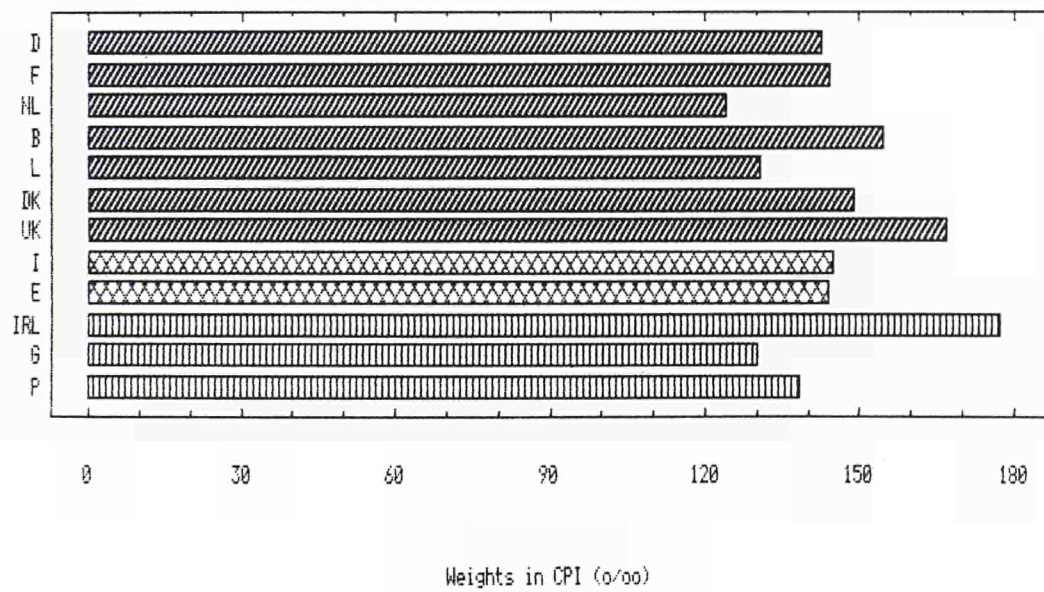


FIGURE A.7: Education, Entertainment
and Cultural Services

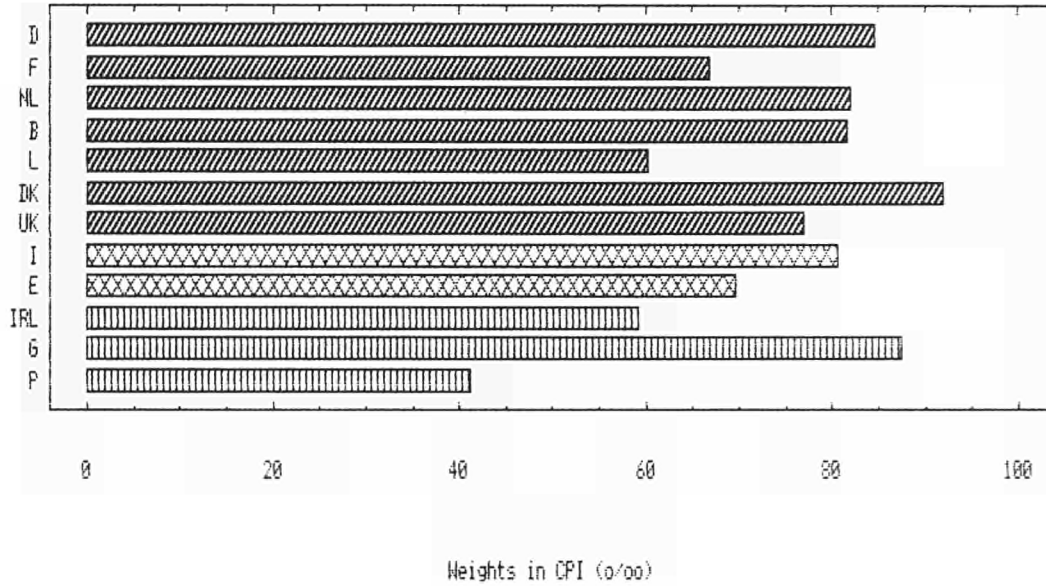
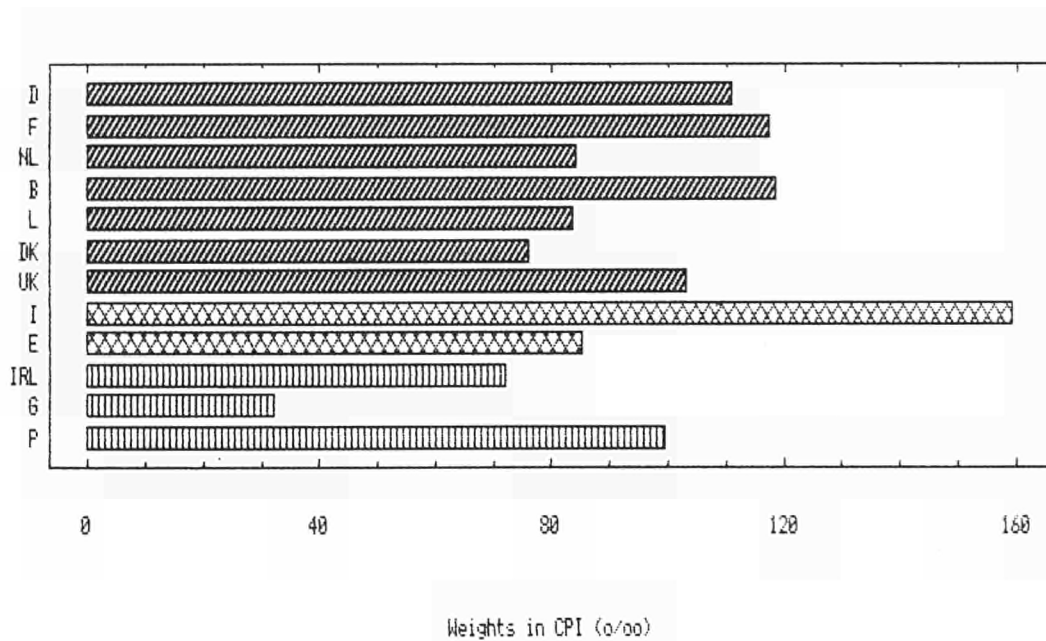


FIGURE A.8: Other Goods and Services



ANNEX B

TECHNICAL DETAILS ON REGROUPING

The information on the weights of main consumption groups as provided by the member states does not always conform to the eight main groups of the ESA classification. This would make any comparison between countries difficult. Therefore an attempt has been made to recalculate the weights on the ESA basis for those countries where the classification of the main groups deviated strongly from the ESA classification. The definition for the content of the eight main groups in this classification can be found in EUROSTAT (1986).

The main groups are:

- Group 1 : Food, Beverages and Tobacco
- Group 2 : Clothing and Footwear
- Group 3 : Gross Rent, Fuel and Power
- Group 4 : Furniture, Furnishings and Household Equipment and Operation
- Group 5 : Medical Care and Health Expenses
- Group 6 : Transport and Communication
- Group 7 : Recreation, Entertainment, Education and Cultural Services
- Group 8 : Miscellaneous Goods and Services

F.R. Germany:

The group "Personal and Medical Care" has been redefined so as to coincide with Group 5. Only "Waren und Dienstleistungen fuer die Gesundheitspflege" (23.72 o/oo) were retained and the remainder was allocated to Group 8.

France:

Since the grouping provided by France showed strong deviations from the ESA grouping, a new grouping was designed on the basis of the details on weighting given in INSEE (1987). Below the eight main groups are defined in terms of the "postes de depense".

<u>Groups</u>	<u>"No. du Poste de Depense"</u>
1	1+66
2	IIA-40-41
3	71+721+722+651+652+653+655+656+657
4	723+(IIB-65-66-587-588-589-59-61-62-63-64-67)+851+852
5	587+588+589+76
6	654+59+77+78+79
7	61+62+63+64+80+81+853+854
8	67+75+82+83+84

Italy:

The eight main groups could be obtained by direct aggregation of the information provided.

Netherlands:

The provided information concorded with the eight main groups.

Belgium:

The provided information concorded with the eight main groups except for group 5, which also contains cosmetics; the detailed information given in *Ministere des Affaires Economiques (1984)* did not allow for a regrouping.

Luxemburg:

The provided information concorded with the eight main groups.

United Kingdom:

The information provided in the questionnaire did not concord with the weights given in *Dept. of Employment (1987)*. Moreover some regrouping was necessary:

<u>Groups</u>	<u>Categories of Dept. of Employment</u>
1	(Food- Catering)+ Alcoholic drinks+ Tobacco
2	Clothing and Foodwear
3	Housing+ Fuel and Light
4	Household Goods+ Domestic Services
5	none
6	Postal Charges+ Telephone charges+ Motoring Expenditure+ Fares and Other Travel costs
7	Leisure Goods+ Leisure Services
8	remainder

Ireland:

The eight main groups have been defined in terms of the categories used by CSO (1983) as follows:

<u>Groups</u>	<u>Categories CSO</u>
1	Total Food+ Total Alcoholic Drink+ Total Tobacco
2	Total Clothing and Footwear+ Shoe Repairs
3	Total Fuel and Light+ Total Housing
4	Total Household Durables+ Laundry and Dry Cleaning
5	Doctors', Dentists', Opticians' Fees+ Medicins & Drugs+ Hospital Charges+ Other Medical Expenditures

- 6 Total Transport+ Postage+ Telephone and Telegrams
- 7 Sporting Goods+ Toys+ Magazines and Journals+
Newspapers+ Books+ Records, Tapes and Cassettes+
Photographic Goods and Services+ Cinema+ Dancing+
Other Entertainment+ Education and Training+
TV and aerial Rental
- 8 Remainder

Denmark:

The information provided allowed direct aggregation to the eight main groups.

Greece:

The information allowed direct aggregation except for group "Health and Personal Care", where "personal care" and "articles of personal care" were taken out and moved to group 8.

Spain:

The provided information allowed direct aggregation.

Portugal:

No information was provided and the grouping into the eight main groups has been made on the basis of INE (Portugal, 1987). Below follows the definition of the eight groups in terms of the categories employed by the INE:

<u>Groups</u>	<u>INE Categories</u>
1	(Alimentacao e Bebidas- Alimentacao Consumida fora de Casa)+ Tabaco e Despesas do Fumador
2	Vestuario e Calcado
3	Rendas da Habitacao+ Agua+ Combustiveis e Electricidade
4	Acquisicao de Bens Domest. Duraveis+ Produtos de Utilizacao Corrente+ Servicos de Reparacao, Conservacao e Manutencao de Bens Duraveis
5	Saude
6	Transportes e Comunicacoes
7	Ensino, Cultura e Distracao
8	Outros Bens e Servicos+ Alimentacao Consumida fora de Casa

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