

# THE INTERNATIONAL COMPARISONS OF CONSUMPTION LEVEL CARRIED OUT BY THE POLISH CENTRAL STATISTICAL OFFICE

BY EUGENIA KRZECZKOWSKA  
Central Statistical Office, Warsaw

1. The problems presented have arisen in practice when carrying out international comparisons of national income and its elements between the CMEA countries. Some rough conclusions are drawn from the nearly completed comparison of consumption level between Poland and Austria.

2. The basic methodological principles of the comparison were similar to the methods used by the group of economists directed by Milton Gilbert and Irving Kravis in their comparison relating to Western European countries. However, a number of new problems have emerged in the course of our work which required practical and theoretical solutions.

Some differences in theoretical approach between the Gilbert-Kravis study and ours are discussed. Gilbert and Kravis based their comparison as far as possible on average prices of commodity groups or quantity data, and price indexes for representative goods were applied only as a practical necessity. On the contrary in our study we based our calculation mainly on representative goods and their price relation as this method, in our opinion, takes into account quality differences, which escape from the picture in the Gilbert-Kravis method.

3. Some special theoretical and practical problems of comparisons between countries having market economies and those with planned economies are presented in terms of the example of the comparison of consumption levels between Austria and Poland.

Three groups of questions are pointed out: (1) the problem of the definition and boundaries of the aggregates compared; (2) the problem of differences in pricing in the groups of products and services compared, resulting from the social policy of the government concerned; and (3) the problem of differences arising from general price policies in the countries compared.

4. At the end of the paper it is suggested that it would be useful to work out a "statistical information system", which would make possible detailed comparisons of the volume of consumption among several countries and groups of countries without the need of conducting direct comparisons between each pair of countries.

1. International comparisons of economic level and economic structure between different countries and groups of countries are one of the most fascinating fields of statistics. They are useful in the assessment of socio-economic trends, the analysis of differences and similarities in economic structure, and the study of economic level and its growth in the countries being compared.

International comparisons have become particularly important in recent years, due to the intensive development of international economic links, as well as to the establishment of international regional economic communities such as CMEA, EEC, OECD, etc., and to the needs of various international organizations.

Some questions concerning methodology and practical solutions used in international comparisons will be discussed in the present paper. The problems presented below have arisen in practice in carrying out international comparisons of national income and its elements among the CMEA countries. Some rough conclusions drawn from the nearly completed comparison of consumption levels between Poland and Austria are presented in the last part of this paper.

2. Poland, from among the countries with planned economies, began work in the sphere of international comparisons relatively early by carrying out a

comparison of the physical volume of consumption in Poland in 1959 with that of Czechoslovakia in 1960–1961. These comparisons covered consumption of products and material services by the population (households).

The basic methodological principles employed in the comparison were similar to those used by the group of economists directed by Milton Gilbert and Irving B. Kravis who performed the comparison of the physical volume of products and level of prices in Western European countries.<sup>1</sup> However, a number of new problems which required practical and theoretical solutions have emerged in the course of our work.

To a great extent, comparisons were carried out by the use of the so-called indirect method, i.e., a method depending on recalculating the values expressed in one national currency into the currency of the other country with the help of price indices. This procedure required a break-down of consumption into relatively small groups of products or material services, expressed in the national currency, for which recalculations were made into the currency of the other country. We call those groups “recalculation groups”.

The recalculation of these groups into another country’s currency was carried out on the basis of unweighted price indices of representative products (or services), characterizing the price relationship of a given recalculation group. Having considered a number of different possibilities we decided to accept, as the most suitable, an unweighted geometric average price index of individual prices of representative goods as the average price index for a given recalculation group, because this index meets the reversibility test, which for international comparisons has considerable practical significance.

The comparison was made in retail prices. Retail prices were applied not only to purchases by the population in retail trade, but also to other elements of consumption such as natural consumption, etc., in order to eliminate the influence on the results of differences in the share and relative price levels of those elements of consumption which are in national accounting practice calculated at prices other than retail prices.

The principle of selecting representative products does not require a lengthy discussion, but I should like to draw attention to a few matters. The fundamental condition for a product to fulfil its task as a representative good is that it must be precisely defined, and it must have an identical specification for both countries, at least for those parameters which determine utility. The ability of a given product to represent a given recalculation group implies representativeness from the point of view of the price relation between the two countries, not its share in the value of the given group. The value share of the representative product in the value of a given recalculation group is recognized as a factor which plays a role only when the share of the representative product reaches a range of several tens of percentages of the value of a given group, but in practice this happens very rarely.

1. Milton Gilbert and Irving B. Kravis, *An International Comparison of National Products and the Purchasing Power of Currencies*, Organisation for European Economic Cooperation, Paris, 1953, and Milton Gilbert and Associates, *Comparative National Products and Price Levels*, Organisation for European Economic Cooperation, Paris, 1956.

The selection and quantity of recalculation groups depended on the possibility of grouping the data so that a similarity in intercountry price relationships within groups could be expected. In cases in which further research revealed a significant diversity in the price relations of the products initially included in one recalculation group, a further break-down of this group was considered, so as to achieve more similar inter-country price relations for each recalculation group. Of course, practice has not always conformed to this theory, and these postulates have been strictly observed only with regard to groups with high shares in the value of consumption.

For analytical purposes, apart from recalculation groups, a so-called analytical grouping system was introduced. It was based on the appropriate summing up of the recalculation groups. The classification used is very similar to the classification later recommended by the Conference of European Statisticians.

The calculations for analytical groups (this means aggregates of recalculation groups, right up to total consumption as a single group) were accomplished by summing up data expressed in two different currencies, and thus taking into account various consumption and price structures in the countries compared.

As a result of these calculations we, of course, obtained two physical volume indices of the relative levels of consumption in the countries in question, one calculated on the basis of consumption valued in zloty, and the other in crowns. The diversities in results obtained on the basis of various price weights were also analysed in certain groups. For presenting final results, for practical reasons, the geometric average of these two indices was used (the so-called "Fisher's Ideal Index"). In those groups where the differences in results obtained on the basis of different price weights were relatively high, additional analysis was carried out.

Examining the differences between the methods of comparison used by Gilbert and Kravis and the methods used in practice by Poland, it should be pointed out there is a difference in theoretical approach to the question of calculating the volume indices for groups of products, despite the fact that the practical solutions have frequently been relatively similar.

It seems that in the study directed by Gilbert and Kravis, the theoretically more advisable calculations were acknowledged to be the ones based on quantity data (or average prices) pertaining to a given group, but recalculations on the basis of representative product price indices were applied as a practical necessity.

In our practice, we have recognized the advantage of recalculating with the help of representative product price indices as a method which takes into consideration to a greater extent the differences in quality of products between countries. Other methods were applied in a limited sphere only.

At the same time, it must be admitted there are many pitfalls in the solution adopted by us. It appears that although a comparison based on the average prices of narrow assortment groups does not take into account differences in quality, and for that reason distorts the results, the margin of error in many cases might not be substantial. This particularly concerns product groups in which, because of purely technological reasons, more important differences in the internal structure according to quality are not possible. The "indirect

method”, applied in general by us, in a case of an appropriate choice of representative products leads to more exact results. On the other hand, in a case of a bad selection of representative products, this method could produce a significant distortion, higher than in the “average price method”.

3. On the basis of material concerning the comparison of consumption between Poland and Czechoslovakia, several examples could be given which, I think, would justify the approach used by us.

The volume index of consumption for “meat and poultry”, calculated in accordance with the method adopted in Gilbert’s study, that is, based on the quantity data and average prices, for Czechoslovakia in 1959 is 123 (taking Poland as 100). The analogous index calculated on the basis of representative price indexes (35 representative products) amounts to 118. An additional analysis of the data confirms that the differences are justified by the fact that the meat on sale in Poland is of a higher quality. In this group there is a great diversity between indices based on the two methods in question in the sub-group “cooked meats and cooked meat products” (index 133 and 122). This is explained by the inner structure of this sub-group. In the group I have mentioned, in Czechoslovakia the share of cooked meats and cooked meat products of a relatively lower price level (such as Vienna sausage and other sausage of a lower quality) is greater. But the higher quality products (for example cooked ham) at a higher price have a lower share than in Poland.

Similarly in the group under the heading “milk and milk products”, the index calculated on the basis of quantity data differs from the index calculated on the basis of a representative product price index. The difference in this case results from the higher share of milk products in Czechoslovakia as compared to Poland. In Czechoslovakia, the share of liquid milk products and dried and condensed milk was higher than in Poland, as the following data illustrate:

	Czechoslovakia	Poland
Milk	100.0	100.0
(1) Liquid milk	84.7	93.8
(2) Liquid milk products	9.4	5.8
(3) Dried and condensed milk	5.9	0.4

Gilbert’s method of comparison would seem to be similarly inadequate for the breadstuffs group. That method, in the comparison of the group under consideration, takes only the quantities of flour, eggs, sugar, and fats used in production, without taking into account labour input and differences in quality involved. An example of the share of corn stuff products in various levels of processing in Poland and Czechoslovakia in 1959 appears as follows:

Specification	Czechoslovakia	Poland
Total corn stuff products	100.0	100.0
Articles of a lower processing level	29.4	46.7
Articles of a higher processing level	70.6	53.3

From these examples, and from our own experience up to the present, it appears that differences in qualities should be taken into consideration both in bilateral and multilateral comparisons.

One could, I think, conclude that comparisons based on representative product price indices should be, theoretically speaking, more legitimate, and recalculations based on quantity data (or average prices) may be merely applied for reasons of practical necessity.

A similar comparison was performed by other countries, for instance, bilateral comparisons of Czechoslovakia and Hungary, and of Bulgaria and Hungary. Together with a previously performed comparison between the German Democratic Republic and Czechoslovakia, four bilateral comparisons were available.

4. The experience acquired in bilateral comparisons was the foundation for the comparison of consumption for 1959 and the extrapolation of some selected basic economic indicators for 1964, in which all the countries of CMEA<sup>2</sup> participated. The aggregates compared were extensive, including, in addition to consumption by the population, collective consumption, the accumulation fund, and industrial and agricultural production.

The method used was in principle similar to the method of comparing consumption described above, with the exception that in agriculture the so-called direct method was used; that is, the amount of compared products from the compared country was directly priced in the prices of the other side.

A direct comparison was made between particular countries and the U.S.S.R. The value of all the aggregates of all the compared countries was expressed in rubles, and on the other hand, the values of the U.S.S.R. aggregates were expressed in the currencies of all the countries involved. On this basis, two volume indices were obtained for all aggregates (based on the ruble and the currency of the given country) including one average index comparing the investigated aggregate of each country with the U.S.S.R. Comparisons of other countries among themselves were made only indirectly, by linking the appropriate volume index of each of these two countries with the U.S.S.R. This method was carried out for analytical groups, and the total of consumption obtained as the sum of analytical groups.

It should be pointed out that in this way "the ruble price structure" (prices in the U.S.S.R. which represent "a common intermediate link" in all comparisons) and the structure of consumption in the U.S.S.R. influence results to a significantly greater extent than do the price structures and the structures of consumption of any other compared country. Because the ruble pricing in a bilateral comparison diminishes the weight of those products which appear in a relatively large quantity in the U.S.S.R. (the regularity of this type of negative correlation between quantities and prices is fairly common), multilateral comparisons conducted with the ruble as an intermediate link favour the countries having price structures relatively more different from the ruble price structure.

As an example, when comparing consumption levels between Poland and Czechoslovakia in 1959 on the basis of a direct bilateral comparison, we

2. CMEA stands for Council of Mutual Economic Assistance.

obtained an average volume index of consumption per capita of 128 for Czechoslovakia (Poland = 100), which is the average of the index of 120 obtained using Czech currency, and 136 using Polish currency. However, when comparing these two countries with the U.S.S.R. as an intermediary, we obtained an average index for Czechoslovakia of 135 (Poland = 100). This implies that there is a greater difference between the price structure of U.S.S.R. and Czechoslovakia than between the price structure of Poland and U.S.S.R.

Analyzing the methods adopted in the CMEA countries for multilateral comparisons, one may conclude that there are certain possibilities of elaborating such a system of data in all compared countries which would assure the possibility of making comparisons in a currency chosen at discretion, and would eliminate at the same time the necessity of making a direct comparison among all countries. The calculation would then be based on linking the results of bilateral comparisons. Such a linking could not deal with analytical groups because the results would be affected by the price structure of the country representing the "common intermediate link".

However, it would be possible to elaborate a uniform classification scheme for the lowest groups of products (recalculation groups) for all countries. If in future each country provides information regarding prices (or an appropriate price index) of each recalculation group, then each country could bilaterally reach an agreement on representative products only with one country accepted as the "common intermediate link". On this basis, unweighted price indices could be established for the recalculation groups of the country representing the "intermediate link" and consecutively with their help indices showing the relations to the recalculation groups of each other country. Because in the framework of the lowest group (recalculation groups) individual representative price indices are not weighted, linkings carried out on this level give the same results as would be obtained in direct comparisons with each and every country. Of course, we are here assuming that the selection of representative products will be made in the most accurate way by means of uniform selection criteria for every country comparing domestic prices with the prices of the country accepted as the common intermediate link. The achievement of correct results with the help of this method will also depend on the complete reversibility of each individual and aggregate price index at the lowest level of product groups, but this problem already has an exclusively technical character.

Thus, it would be possible by accepting country "Y" as a country representing the "intermediate link" to make, for instance, a bilateral comparison between country A and any country X on the basis of country A's currency or country X's (or also the average results of these) without the necessity of making a direct comparison between A and X. It would also be possible to make a multilateral calculation using an optionally chosen common price system for every country participating in the comparison. The project of the comparison among the CMEA countries for 1967 will be performed in conformity with the above mentioned principles.

5. Parallel to the work being conducted under the auspices of the CMEA, researches aiming at introduction of a common price system for multilateral

comparisons or of a system of specially constructed volume indices are being conducted in several countries.

The aim of the investigation is to elaborate a system of multilateral indices which would assure a uniformity in results and equal influence on the results of comparisons of the price structures of all countries in question.

The first type of solution which could be considered, taking the above postulates into account, is the adoption as a basis of comparison of a uniform price system, or uniform price weights for all countries, which actually means the same thing as adopting a uniform price system.

The possibilities of reaching a solution are in particular the following:

- a) Calculation of unweighted average prices (or price weights) from the prices of countries participating in the comparison; here several kinds of averages are possible.
- b) Calculation of average weighted price (or price weights) for participating countries; here several methods of weighting are possible.
- c) Calculation of a conventional price system fulfilling defined assumptions.

In turn, other approaches to the same question aim at elimination of price calculations. They aim at using exclusively volume indices among the compared countries, and at calculating an average volume index or using specially constructed price indices of definite characteristics.<sup>3</sup>

The practical advantage of the average volume index is that that the volume index constructed according to this principle and multiplied by an analogously constructed price index makes a value index expressed in currencies of the compared countries. On the other hand, the disadvantage of this solution is the impossibility of obtaining absolute data directly, that is, the impossibility of calculating structures of the compared aggregates and summing up the aggregates for several countries out of the total number of the compared countries.

As far as the method of average prices and conventional prices is concerned, it should be said that the value index does not result from multiplication of the price index by the volume index. However, the possibility of calculating directly structures and defining the share of different countries in different aggregates or assortment groups is secured.

6. Some special theoretical and practical problems, apart from the ones discussed above, appear when undertaking a comparison between countries having a market economy and those with a planned economy, in which the methods of compiling the national balance (national accounts) are based on different methodological principles, the so-called MPS and SNA systems.

The following is confined to some of the aspects connected with the comparison of consumption, taking as an example the Polish–Austrian comparisons.<sup>4</sup>

3. See: 1/ B. Szulc: Indeksy dla porównań wieloregionalnych, *Przegląd Statystyczny* (Indices for Multiregional Comparisons, *Statistical Review*), III, 1964. 2/ L. Drehsler: *Az árváltozások mérése* (Calculations of Price Changes), Akadémiai Kiadó, Budapest, 1962. 3/ V. Strnad, E. Yershow: "Some Mathematical Problems Arising in the International Comparisons of Economic Indicators", *Czechoslovak Economic Papers*, V, Prague, 1965.

4. The comparison of the physical volume of total consumption between Poland and

When making this comparison, all the typical problems occurring in international comparisons have to be taken into account. Since they have been already discussed above, I am not repeating them here. On the other hand, three additional groups of questions should be pointed out:

- 1) the problem of the definition and boundaries of the compared aggregates;
- 2) differences in pricing in the compared groups of products and services, resulting from the social policy of the government concerned;
- 3) differences arising from general price policies in the compared countries.

7. It would seem that the most appropriate comparison of consumption is the one based first on the aggregate defined as consumption out of personal incomes (applied in the MPS system), and second on the aggregate defined as private consumption expenditure (applied in the SNA system). The cognitive value of such comparison would be, however, very doubtful because of the various institutional differences existing in compared countries. For instance, using the SNA definitions, comparisons of consumption levels would lead to a false picture, for in countries having a planned economy, products and non-material services delivered free of charge to the population are relatively more important, and these are not included in the concept of private consumption expenditure in the SNA system. Also doubtful would be the comparison of the sum of the items "private consumption expenditure" and "general government expenditure" and their formal equivalent in countries with planned economy, because of:

- a. diverse functions of activity defined as government activity, and
- b. taking into account in the comparison the elements for which the connection with the standard of living is uncertain (e.g. general administration, armed forces).

The comparison carried out according to the definition adopted in MPS would include the total consumption of material goods (their role in the reproduction process is essentially important), but it would exclude, at the same time, the value of non-material services rendered to the population which are important as far as the comparison of total consumption of population is concerned; this item characterizes levels of living to a great extent.

For the purpose of international comparisons of consumption, regarded as an aggregate characterizing to a certain degree the standard of living of the population (from the point of view of consumption), a special mutually agreed upon concept, which takes the practices of both countries into consideration to the greatest possible extent, should be accepted.

The following table shows the schematic differences in categories of consumption by the population as they appear in the MPS and SNA systems.

Austria is carried out within the work programme of the Conference of European Statisticians. In order to recalculate the consumption of Poland into Austrian schillings and the consumption of Austria into zlotys, consumption as a whole was classified into 220 subject groups (85 groups for foodstuffs and 135 groups for non-foodstuffs). 864 representative goods and services were compared, of which 168 representative goods were within foodstuffs and 696 representative goods and services within non-foodstuffs.



	Households Expenditure		General Government Expenditure	
	MPS	SNA	MPS <sup>5</sup>	SNA
Material goods and material services	a	b	c	d
Non-material services		x		y
Material input in non-material services	m		n	

a and b—Material goods purchased and consumed by households  
c and d—Material goods purchased by the government and consumed as such by households, accruing to households

x—Non-material services purchased and consumed by households

y—Non-material services purchased by the government and consumed by households, accruing to households

m—Material input in non-material services purchased by households

n—Material input in non-material services purchased by the government and consumed by households, accruing to households.

Consumption by the population with calculations adopted in the MPS concept equals:

$$a + c + m + n$$

and using SNA concept equals:

$$b + d + x + y$$

From a theoretical point of view one could make a comparison in accordance with both of these concepts of total consumption by the population. In practice, in view of the difficulties which arise, one could abandon comparisons concerning material input in non-material services ( $m + n$ ), and confine the comparison to material goods consumption ( $a + c$ ), that is to say, material goods and services purchased by the population as well as those purchased by the government and consumed as such by households. (The comparisons between Poland and Austria were made up to this point.)

The definitions of a and b as well as c and d differ in MPS and SNA with regard to accepted definitions of household incomes (wages and other incomes in kind) as well as the treatment of non-profit institutions. However, the sums of ( $a + c$ ) and ( $b + d$ ) represent comparable aggregates.

8. It should be remarked that the impossibility of comparisons of data concerning the consumption out of personal income between market economy and planned economy countries springs from the differences in the social policies of the countries concerned. In countries with planned economies, as a result of social policies of governments, there is a higher share of services and groups

5. Including "private non-profit institutions", according to the SNA terminology, and expenditure made by enterprises on social and cultural goods and services accruing to households.

of goods which are provided free of charge or at reduced prices to the population, for example: holiday (recreational) services, cultural services, and vocational training provided by enterprises, higher education (including the broadly organized system of studies for working persons), medicines, transport to place of work, and various forms of social service, and in some countries free school text-books, copy-books and other educational equipment, as well as free, or at a reduced price, meals in day schools and boarding schools. Generally speaking, it should be said that for a proper characterization of the differences in consumption levels in international comparisons, expenditure on material goods and on non-material services from household incomes and also material goods and non-material services provided free of charge to the population should be taken into account.

It would seem necessary to reach an internationally agreed classification and definition of that part of the expenditure of government which is to be treated as expenditure provided to the population. As has been mentioned above, many borderline items may cause doubts and may be treated in various ways in different countries. It may be difficult for example to state whether a given type of government activity represents a service provided to the population or whether it has merely to do with general activity of government and has no direct influence on the living conditions of the population.

9. In approaching the question of the influence of price policies on results of comparisons, one can observe that in comparisons of the physical volume of consumption in countries with market economies and countries having planned economies, the so-called unique products gain a special significance. Unique products are, in principle, understood as the products appearing in one country, but not appearing in the other country of comparison. Furthermore, for practical reasons they embrace also the products consumed in one country in a very small quantity, and generally consumed in the other country.

In the countries with planned economies, price policy is decided by the government to a significantly higher extent than in countries having a market economy. Some domestic products may therefore have a relatively low price (the production being subsidized by the government) and some are relatively high priced (the import of these products being limited). In principle, relatively low prices are fixed for goods of common consumption, and relatively high prices are fixed for goods of luxurious character. Likewise, since the structure of foreign trade in countries with planned economies results to a great extent from the principles of planning, a whole series of imported products appear on the market in limited quantities, and at relatively high prices. Some of these products cannot be defined as "unique" as they do appear on the market; the consumption level is low, but they are of significance. Nevertheless the approach to these products should be similar or identical to the approach used in the case of unique products.

As a matter of fact, generally speaking, the price relations (weights) accepted for comparisons of consumption should be formed in such a way that the price relationship of a given product to the prices of other products satisfying similar but not identical requirements be similar to the "normal" relationship

in such cases. By "normal", in the framework of a given group, is meant the relations resulting from costs of production.

In the case of "unique" products and products on which, in planned economy countries, a particularly significant influence is exercised by price policy, the above-mentioned exact relationships do not appear and the application of the existing price weights distorts the results. To give one example, in the comparison of consumption between Poland and Austria, the prices existing in Poland for imported foodstuff articles such as citrus fruits and sardines (which in 1964, were particularly high with relatively low consumption) lead, in our opinion, to a distorted picture of the differences in the level of foodstuff consumption.

The volume index of foodstuff consumption in Austria (Poland = 100), calculated using factual Austrian and Polish price weights, amounts to approximately 151 using Polish weights, and approximately 122 using Austrian price weights. The influence on this result of citrus fruits and sardines alone is an enormous one. After eliminating the sardine and citrus fruit price indices, and accepting for these assortments an average price index for given assortment groups (fruits, tinned fish products) the index for Austria using Polish price weights amounts to approximately 128 (Poland = 100).

It is interesting to note that in the case of recalculations of foodstuff in Austria according to the prices expressed in Polish zloty, the share of consumption of citrus fruits and sardines together amounted to approximately 18% of the foodstuff consumption in Austria, which is obviously a distortion of the structure of consumption and gives these groups an inappropriately high weight.<sup>6</sup> The share of these groups in schillings amounts to 5% of foodstuff consumption. As far as non-foodstuff products are concerned, as an example of the influence of price policies on price relations one can give the relatively low price in Poland of books (in particular, school text-books) and municipal transport. On the other hand, it can be stated that in Austria the prices for certain services, for example, tailoring services, as well as industrial products, such as linen and crystal, are exceptionally high. Corrections with regard to the above mentioned examples could be made on principles analogous to those previously indicated concerning foodstuff articles.

It seems a conclusion of a general character could be formulated that in comparisons between planned economy and market economy countries, a special approach and particular analysis is required for goods for which the price level is essentially influenced by planned price policy and social policy of government.

For the various types of analysis of price relations, price policies, etc., in compared countries the actual market price has to be taken into account, but for comparison of the volume, an appropriate correction of a similar character

6. A similar example using articles which are, in Poland, relatively low priced, is that of potatoes, which have at the same time a high level of consumption. In Southern European countries, for instance, their price is relatively high with a low level of consumption; if we had applied the prices of those countries to potato consumption in Poland, it would have led to an enormous volume of foodstuff consumption in Poland expressed in prices of such a country.

to those made in the case of unique products is indispensable. It seems that this approach makes possible more appropriate measures of the relations of the physical volume of consumption in compared countries.

10. To conclude, a few remarks of a prospective nature follow.

First, it should be stated that the difficulties which have to be surmounted when undertaking an international comparison between countries having a planned economy and those having a market economy are not greater than those encountered when comparing countries of the same social and economic system but having different structures of consumption, as for example, Mongolia and Czechoslovakia.

Second, all detailed international comparisons, as practice has shown, are very time-absorbing undertakings. It would be difficult to presuppose that a country interested in making international comparisons would be able to undertake a bilateral comparison with a large number of countries. It would be useful to work out a "statistical information system" which would enable a detailed comparison of the volume of consumption among several countries and groups of countries. In order to construct such a system it would be essential to reach an agreement on the general methodological principles with all the interested countries; in particular on such points as:

- a) the detailed definition of compared categories within "consumption";
- b) classification of consumption by lowest recalculation groups;
- c) principles of selecting representative products.

Apart from this, every country included in this system would have to perform at least one bilateral comparison with another country, on a date agreed upon by all countries (a specified year or a year nearest to it). However, in the whole system certain countries have to fulfill the role of "intermediate links". These countries have to make a comparison, not with one country, but with two or even more countries. On the basis of such a system of "basic international comparison", one could then, on the lowest recalculation groups level, consecutively undertake either multilateral comparisons for the groups of countries, or a bilateral comparison of a given country with another country, optionally chosen (included in the general system). At the same time, this comparison could be based on the optionally chosen price relations of a country, or countries, participating in the comparison. Furthermore, detailed information concerning the structure of consumption and price relations in the compared countries could be utilized.

A direct bilateral comparison between the countries serving to construct a "basic statistical information system" would have to be performed once, and the total system would then be brought up-to-date on the basis of national indices. These would have to be elaborated according to the classification of the lowest recalculation groups, and would make it possible to conduct an up-to-date international comparison.

The remarks presented here are of a general character. The whole conception is of a prospective character. If in the future comparisons based on such a conception are to be undertaken, it would be necessary to begin international discussions in this direction.

1. Les problèmes présentés se sont posés dans les faits quand il s'est agi de faire des comparaisons de revenu national et de ses composantes entre les pays du CEAM.

Des conclusions générales sont tirées de la comparaison presque complète des niveaux de consommation entre la Pologne et l'Autriche.

2. Les principes méthodologiques de base de la comparaison sont ceux qui avaient dirigés les recherches du groupe d'économistes conduits par Milton Gilbert et Irving B. Kravis dans leurs comparaisons touchant aux pays de l'Europe Occidentale. Néanmoins, un certain nombre de nouveaux problèmes ont surgi au cours du travail et ont exigé des solutions tant pratiques que théoriques.

Certaines différences dans l'approche théorique entre l'étude de Gilbert-Kravis et la nôtre sont discutées. Gilbert et Kravis ont basé leurs comparaisons, autant que possible, sur des moyennes de prix de groupes de biens ou des données quantitatives. Ils n'avaient recours aux indices de prix pour les biens représentatifs qu'en cas de nécessité pratique. Par contre, dans notre étude, nous basons nos calculs principalement sur des biens représentatifs; la relation entre leurs prix, de même que cette méthode, à notre avis, tient compte des différences qualitatives, dont ne tient pas compte la méthode Gilbert-Kravis.

3. Quelques problèmes particuliers, touchant à la théorie et à la pratique, de comparaisons entre des pays à économie de marché et d'autres à économie planifiée sont abordés. On a recours à la comparaison entre les niveaux de consommation de l'Autriche et de la Pologne.

Trois groupes de questions sont soulevées:

- a) le problème de la définition et des limites des agrégats comparés;
- b) les problèmes des différences des prix des biens et services comparés, différences provenant de la politique sociale des gouvernements intéressés;
- c) le problème des différences naissant du fait des politiques générales de prix dans les pays comparés.

4. En fin d'article, il est suggéré qu'il serait utile d'élaborer un "système d'information statistique", que rendrait possible des comparaisons détaillées des volumes de consommations de plusieurs pays et groupes de pays; et cela, sans qu'il ne soit nécessaire de faire des comparaisons directes entre chaque paire de pays.