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**Problems of Comparative Social Policy Analysis: The
Case of Pension Systems and Income Security Systems
for the Elderly**

Richard Hauser

May 1988

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**Problems of Comparative Social Policy Analysis:
the Case of Pension Systems and Income
Security for the Elderly**

LIS-CEPS Working Paper #20

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May 1988

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I. SOME BASIC PROBLEMS OF COMPARATIVE ANALYSIS

I should like to start by quoting Catherine Jones (1985, p. 4), a British scholar in comparative social policy analysis.

"The necessity for it [comparative analysis] rests on three grounds: Comparative study promotes a better understanding of the home social policy environment; it helps broaden ideas as to what may be done in response to particular issues or problems and may even suggest lessons from abroad; it opens the doors to a greater breadth and variety of case material, and as may further the development of theoretical constructs about social policy formation and development to an extent that could not be possible on the basis of home country experience and material alone."¹

Although I hope we all agree with these grounds for the necessity of comparative analysis--not only comparative social policy analysis--we must not overlook some basic problems of this type of research.

Comparative analysis rests on the basic assumption that countries and societies are not unique in all of their aspects, but that central forces exist that are common to all countries. Therefore, countries can be compared and used as an empirical basis for generalizations and, eventually, new theories about social policy. Two fundamental implicit assumptions are (1) that all societies consist of human beings who ought to be treated as equal irrespective of race, color, sex, religion and political beliefs; and (2) that these human beings behave in similar ways given the same basic institutions, circumstances and influences. These common cores of basic institutions, circumstances and influences may be smaller or larger thus permitting only very partial or more comprehensive comparisons depending on the problems and countries to be studied. But there always will remain a

domain of unique features, specific for each country, thus preventing "true" or "complete" comparisons comprising all possible dimensions or aspects of a problem.

A priori reasoning tells us that this common core will be greater, if countries to be compared are similar with respect to:

1. dominant social values, as well as cultural and religious traditions;
2. democratic institutions and political processes;
3. main institutions of the market economy which is participating in the same international economic marketplace;
4. main features of a welfare state that is characterized by active interventions of the state to promote economic growth, internal and external economic stability, equality of opportunity and social mobility, to limit the domain of inequalities and to promote the well-being of its citizens more generally;
5. absolute degree of economic development and industrialization.

A comparative analysis of countries which fulfill these preconditions, such as most of those chosen for the LIS databank, can be concentrated on other differences (in determining factors) that cause different results, e.g. differences of the social security systems, tax systems, or of labor market regulations. In the literature, this is called the most-similar-cases approach to cross national policy analysis. It can be expected that comparisons among countries which are similar according to these general characteristics are more fruitful with respect to the "transferability" of new insights gained--i.e. the efficiency of certain social security institutions or the mutual interdependence of the social security system and the economic system--than comparative results that refer to very diverse

countries, e.g. socialist countries versus Western industrial countries or versus developing countries.² This is not to deny that comparative analyses between all OECD or United Nations member countries could also be of interest and value. But the level of analysis and the spectrum of determining factors to be taken into account has to be much broader or the results of such an inquiry will be much less comparable and transferable. These arguments hold true not only for cross-national comparisons at one point of time, but also for comparative historical studies of the development of welfare states or certain elements thereof.

During the past few decades, similarities and the common cores among a number of Western countries have increased through:

- worldwide mass communication,
- economic and cultural exchange,
- tourism and migrant workers,
- international treaties and conventions, i.e. ILO and Council of European conventions, and
- formation of international organizations and supra-national entities like the European Community, resulting in increasing exchange and partial harmonization of economic and social policies.

Because of this increase in international interdependencies, e.g. the European community's 1992 status and exchange, comparative analyses of social policies have become more necessary as well as more acceptable and more fruitful.

II. APPROACHES TO A COMPARATIVE ANALYSIS OF SOCIAL PROBLEMS

Three approaches to a cross-national comparative analysis of social problems can be distinguished³:

1. The service-by-service approach (or system-by-system approach function-by-function approach).
2. The group-by-group approach.
3. The problem-by-problem approach.

Service-by-service approach: This approach takes either one branch of the social security system (or the whole system) as a starting point for comparison. The same approach can be taken with the tax system or with other sub-systems of the economic and social institutions of a society.

From a comparative point of view, four basic questions can be posed either for branches of the social security systems or for the systems as a whole:

- (1) What are the main characteristics of the various systems at a certain point in time and how have the systems changed historically?

This question calls for a purely descriptive answer that is mainly focused on institutions. These descriptive answers must be based on a selection of characteristics that are considered to be important with respect to the various social security systems, e.g. coverage of the system, method of financing, level and preconditions of benefits, and so on. But there may not be a universal consensus as to what characteristics are important and which are not. In this case a choice has to be made based on one of the sets of criteria referred to in the third basic question below.

In general the social security systems of various countries are organized differently based on different traditions either of the Bismarck

type or of the Beveridge type or of a socialist type (in which state-run enterprises are responsible for alleviating many of the social risks encountered by the working population). In those cases selecting branches of the social security system with the same name for a comparison could be very misleading. Therefore, the service-by-service approach has to be extended to the function-by-function approach in the sense that at first a definition of the social risk under review has to be chosen, and then all elements of the social security system providing cash and in-kind benefits for the social risk chosen have to be considered simultaneously. As for some social risks, where tax expenditures or mandated employment related benefits are an alternative social policy instrument, the respective regulations must also be taken into account.⁴ A very good example for a social risk--at least in European countries--typically is provided for in many branches of the social security system and the tax system is the alleviation of family burdens.

(2) What are the effects of the social security systems or branches thereof on the economic and social well-being of the population in the short and in the long run, and what are the interactions with the economic systems?

This question takes the social security systems as given and asks for a comparison of their effects. It is especially with this question that the strategy of choosing the most similar cases with respect to the general situation arises. In this case, great differences become important, because only then can differences among countries mainly be attributed to differences in the social security systems and not to their economic system.

A first step usually consists of a comparison of the differences between the post-tax post-transfer distributions of income and the pre-tax pre-

transfer distributions, although this procedure overstates differences because repercussions of the social security systems and the tax systems on the distributions of market incomes are generally not taken into account. Even more interesting insights could be gained by simulating the effects the social security and tax system of one country would have if introduced in other countries taking their distributions of market incomes as given or even taking account of the different repercussions they would have in the other countries (e.g. Wolfson, 1987).

(3) What are the merits and shortcomings of the various social security systems or some branches thereof?

This evaluative question also takes the various systems as given, but asks to what degree certain social goals are reached in each country. It thereby presupposes the criteria for evaluation. There are several options for the selection of criteria which clearly are crucial for the interpretation of the results. They are:

- (a) Country-specific criteria found by analyzing the value traditions and dominating opinions within each country. This will give purely relativistic results because each country is judged according to its own standard. One of the problems is what to do if there are several competing standards in each country. If, for instance, various political parties have different priorities, the sole satisfactory solution would be to evaluate alternatively the performance of the system according to the various party priorities.
- (b) Universal criteria taken from international conventions, like the International Labor Office, Convention No. 102. This may be the least subjective approach but it is hampered by the fact that international conventions in the field of social security usually only prescribe rather low minimum standards to be fulfilled by the signatory states. Protection against social risks which is above the prescribed minima can not be evaluated by these sets of criteria, though most modern welfare states provide such criteria.
- (c) Criteria taken from one country and applied to all countries under review. This is an approach which is especially geared to learning "lessons from abroad" by the country whose criteria are used. But the results may be rather uninteresting for other countries if their

criteria are not also used in turn, or if the chosen criteria from another country is not policy relevant in the reader's country.

- (d) Criteria worked out by the researcher and introduced into the comparative analysis as explicit cross-national value judgements. This very often is the only way out, if universally accepted criteria are not available and country-specific criteria cannot be derived for all countries because of a lack of information or of internal consensus, and criteria derived from one country would do injustice to others.

The evaluation that is called for in this third basic question can be done at one point in time or at successive intervals, either with the relevant criteria held constant or with reasonable changes in the criteria themselves. An obvious sequel to such an evaluation would be suggestions for improving the social security systems, taking into account own national goals and experiences with alternative methods for reaching these goals in other countries.

(4) What are the political forces that led to a certain shape of the respective systems at a point in time and to changes over time in each country?

This question focuses on the political processes resulting in the specific social policy of each country, and relates them to its political institutions, its traditions and dominating values, its political parties and their aims, its pressure groups, its external influences and constraints, and so on. Obviously, this is a most ambitious question which can even be extended to asking for predictions about future developments.⁵

This service-by-service (e.g. pension systems, unemployment compensation systems) approach focuses on some or all of the institutions constituting the social security systems and sometimes even includes the tax system. In general, it is not well suited to dealing with interdependencies among the tax systems, economic systems, and with private actions influencing the welfare of the populations of groups thereof. Only if there exists a very

simple and universal social security system which is completely tax financed (e.g., universal child allowance for all children, a standard pension for all the aged and handicapped, a flat rate unemployment benefit for all the unemployed and a free public health system), could we infer only from the rules how the system works. But typically, social security systems are highly complex creations with a great variety of benefits and eligibility rules which may even be categorical instead of universal.

Additionally, a given program's effects have to be considered in combination with the rules for the social security contributions, the tax system, the functioning of labor markets and so forth. In such cases, levels of benefits, cumulation of benefits, contributions and taxes can be calculated for stylized cases that are considered typical or have assumed a guideline character in public; e.g. the two-parent, one earner family with two minor children earning the median wage. But calculations for these stylized cases do not show how well atypical cases are provided for, and we cannot infer from the rules of the system what the proportions of typical and atypical cases are in the population. Therefore, to satisfactorily compare the real functioning of the various social security systems, we need the actual distributions of all of the characteristics that are relevant to determination of benefit levels, the distributions of the risks, etc. Such an analysis can only be provided by empirical studies based on survey data in addition to supporting institutional analyses.

Group-by-Group Approach: In contrast to the service-by-service approach, the group-by-group approach starts with an empirical description of the economic situation and the living conditions of selected groups and asks for the influence of various determinants, among others social security

benefits, contributions and taxes, to the observed situation. Examples for groups that can be compared by this approach are the elderly, families with children, the one-parent families, single women, families with an unemployed member, the poor, the rich, worker families, and so on.

The main advantage of this approach is that it can better account for the interdependencies between the social security system, the economic system and private transfers, at least on a descriptive basis. If behavioral relations are introduced, even repercussions at the micro-level can be taken into account.

On the other hand, the group-by-group approach does not allow one to make judgements about the functioning of the social security systems of the countries compared in general but only with respect to the selected groups. This restriction can be overcome by using a well designed series of group-by-group comparisons covering all groups considered to be crucially affected by social risks, e.g. very elderly widows. As with the service-by-service approach, the group-by-group approach can be restricted to national cross-sections at one point in time or it can be extended to historical time periods comparing national cross-sections for several points in time, or even to longitudinal panel data analyses.

The same four basic questions can be asked as with the service-by-service approach:

(1) calling for purely descriptive comparisons of the living standards of the groups selected, either of its absolute levels or of its relative levels in relation to a reference group in each country;

(2) asking for a comparative analysis of the determinants of the living conditions of the groups selected, taking the respective social security

systems and other institutional arrangements as given, but focusing on the national differences between these determinants as explanatory variables for the differences between the groups. Additionally, predictions about trends in the positions of the groups selected would be of interest using predicted trends of the determining factors as the starting point;

(3) demanding a comparative evaluation of the living standards of the groups selected by using the various types of evaluation criteria mentioned with respect to the service-by-service approach, and, eventually, resulting in social policy suggestions;

(4) looking for a comparative analysis of the more fundamental political processes that finally resulted in the specific position of the selected groups in each country via changes in the social security system, the tax system, labor market regulations, and so on.

The main problems with the group-by-group approach are six:

- (a) the selection and definition of comparable groups;
- (b) the selection of comparable indicators of living conditions for the groups selected, and the selection of summary measures to characterize average positions and distributions;
- (c) the selection of criteria for ranking countries with respect to the position of the groups selected;
- (d) the decision whether to compare absolute positions of the groups selected between countries or to use as a first step a well-defined reference group within each country with which to compare the selected groups, and then to compare the thus defined relative positions between countries;
- (e) the selection of the reference group; and

(f) 'a decision about the level of analysis at which the determinants of the groups' positions should be located.

This last point merits some additional comment. If we consider the differences in the relative positions of a selected group in comparison to a reference group, what matters are the differences in the determinants of these positions in each country, those which influence the selected group and the reference group and the differences in these differences between countries.

For example, if the selected group is unmarried women and the reference group is married women, and if individual primary gross income is selected as an indicator, labor force participation rates can be considered as one of several determinants. First we have to look at the difference of labor force participation rates between unmarried and married women in each country, and then we have to look at the differences between these differences among countries to check one possible determinant of differences in the relative positions between unmarried and married women with respect to primary income.

Obviously, other determinants must also be checked, such as differences between the differences in average wage rates and in working hours of these groups; and, additionally, differences between the differences in private wealth and in rates of return. If we use individual net income as an indicator, additional factors come into play, such as differences between the differences in taxes and social security contributions and differences between the differences in social benefits of various kinds. And, if we look at the welfare positions--defined as household income divided by the sum of the weights of an appropriate equivalence scale--differences between

the differences in private transfers within and between households enter the picture as well as differences in the household structure of a population.

It is quite obvious that this is only an analysis on an intermediate level taking labor force participation rates, wage rates, social security systems, tax systems, etc. as given. A more penetrating question to ask is what are the differences in the causal factors behind these differences in labor force participation rates, wage rates, social security systems, tax systems, and so on? Lack of data and lack of comprehensive theories forces us to stop at some intermediate level. In comparative analyses, this level is usually less profound than in single country analyses. And it seems to be typical that explanations of differences in relative positions are only partial in the sense that there remains an unexplained part due to unknown differences in factors that are not easily detected. Still, the strategy of selecting "most similar cases" reduces this problem as much as possible.

Problem-by-Problem Approach: The third approach cannot be characterized as precisely as the service-by-service approach or the group-by-group approach, because it is a more abstract approach which includes not only the actual situation of groups, but also potential situations and developments among groups. The analysis has to start by defining a certain problem that is relevant to all countries compared. Examples are: the extent of redistribution via the social security and/or the tax system; the poverty problem; the problem of discrimination; the functioning of the labor market and the extent to which they create social risks and/or contribute to their avoidance; the general development of the welfare state.

In defining the problem under review, value judgements which may not be universally shared, for instance, those concerning how an economic system

ought to work or what the main aims of social policy are, need come into play. To give an example, the inequality of the distributions of gross incomes or net incomes or wealth is usually an interesting problem from a European perspective because economic justice is considered an important aim. In contrast, from a U.S. viewpoint it is mostly the poverty problem that merits intensive comparative research, because fighting poverty has a much higher priority on the political agenda than reducing the domain of inequality in general.

Some problems can be redefined as a group-by-group approach but others cannot. The poverty problem, rephrased as a comparison of the poor in various countries is a good example. A counter-example is the discrimination problem, because the groups that are discriminated against are not known in advance. In one country there may be racial discrimination, in another one sexual discrimination, in a third one religious discrimination, in a fourth one discrimination because of family or regional background, political beliefs, etc. Therefore, one has to start by defining the problem of discrimination in general terms--not an easy task because it implies various value judgements--and then one has to look at each country to find out who the respective groups are and how discrimination works. Because of the more abstract character of the problem-by-problem approach, the four basic questions are less straightforward:

1. The first question asks for a description: what constitutes the problem in each country to be compared, and what are the differences among them?
2. The second question refers to the institutional and behavioral factors which contribute to the problem selected in each country, and to the

differences in these determining factors as well as their changes over time.

3. The third question calls for an evaluation of the seriousness of the problem selected in each of the countries, and for a judgement about the effectiveness of measures taken to solve the problem. In this respect the various sets of criteria mentioned above can be applied and will often result in divergent judgements.
4. The fourth question aims at the underlying political forces creating the problems or hampering their solution, and additionally, at the differences in the value systems of the various countries that possibly lead to differences in the country-specific perception of the problems selected.

Summary. We conclude this section by reminding the reader that the potential value of cross-national research need be tempered by the analytic considerations suggested above. Cross-national comparisons of economic and/or social policy systems must be carefully constructed and executed if we are to learn from them. Choices of units, incomes measures and comparisons must all be made if we are to endeavor to do comparative analysis. But the sensitivity of the results to these choices cannot be avoided.

Having sketched these various approaches to a comparative analysis in the field of social policy, I now illustrate several examples of comparative research referring to one major policy interest group--the elderly. These examples are based on the LIS datafiles, but they might be based on any particular data source.

III. INCOME SECURITY FOR THE ELDERLY: APPROACHES AND FINDINGS OF THREE
LIS-BASED COMPARATIVE STUDIES

The LIS database is not directly suited for the service-by-service approach or the wider function-by-function approach because it needs to be complemented with additional information about the institutional regulations of the social security systems and tax systems of the various countries, a daunting task. Thus, LIS can be used to supplement studies based on this approach which gather the necessary institutional information from other sources, derive some general hypotheses about the functioning of the systems, and then tests these hypotheses with LIS data.

The most natural approach for using LIS data directly is the group-by-group approach, or in some instances, the problem-by-problem approach. I have chosen four studies which deal mainly or exclusively with the economic status of the elderly to illustrate these approaches, to show both the limitations and promise of this approach, and to summarize some main findings that have so far been reached using the LIS database.

Smeeding and Torrey (1989). The first study to be referred to is the one by Smeeding and Torrey (1989) which is also contained as Chapter ___ in this volume. It is written from the United States perspective of "learning issues from abroad," and its main aim is to compare the income of the aged in the 1979-81 period, its distribution among the elderly, and the resulting poverty rates in eight highly industrialized countries (U.S., Australia, Canada, U.K., Germany (FRG), Norway, Switzerland, Sweden). For these countries the "most similar cases" condition can be considered to be fulfilled without further proof. As the study is mainly descriptive, it

deals above all with the first basic question of the group-by-group approach. The following methodological decisions were made:

1. The elderly are defined as adult persons living in households whose head is 65 and over. For further analysis the elderly are divided into the subgroups of those 65-74 and 75 and over. Sometimes the near elderly, 55 to 64, are also considered. Compared to an analysis in which the individual age instead of the age of the head of household is used (which is also possible with the LIS data), the findings may differ. Not all elderly households contain only elderly persons.
2. The study focuses on the position of the elderly in relation to the national average, and only these relative positions are compared between countries, with the exception of absolute poverty rates.
3. As an indicator of the economic position of a person, market income plus public and private transfers net of taxes and social security contributions of the household, divided by the sum of the weights of an equivalence scale appropriate for the respective household, is used. Group averages and national averages of this indicator are calculated for comparison.

In judging this approach, one has to bear in mind that the use of net monetary income as an indicator of economic welfare may lead to biased comparisons, if in some of the countries, certain goods (e.g., health services) are paid for by social security contributions or taxes and provided free of charge to the individuals, while in others they have to be paid for out of net income. This is particularly true if the institutional regulations are such that there is a difference between the average household and an elderly household in terms of either taxes

or benefits. This is only one aspect of the wider problem that there are non-cash elements of income (owner occupied houses, self produced and consumed goods, in-kind transfers) which may accrue differently to the average household and the elderly household. The study hints at these problems but does not examine the situation in all the countries compared. Therefore, a more comprehensive comparison could lead to a modification of some of the findings (see Buhmann, et. al., 1987).

Moreover, the results with respect to relative positions of old and young are at least somewhat dependent on the equivalence scale used. The choice of equivalence scale can be based on the researcher's value judgement or on accepted practice in the major comparison nation (U.S. in this case), or on other grounds. As there are many different equivalence scales, and as one cannot rule out that in each country a different equivalence scale is preferred, a proviso has to be made with respect to the findings (compare Buhmann, Rainwater, Schmaus, Smeeding, 1988).

4. Overall and within-group inequality is measured by the Gini-coefficients whose shortcomings are well known. As a low-income line, both half of adjusted median net income of persons and the U.S. poverty line are used. The first choice is a researcher's hypothetical value judgement since it is not based on studies about the conventions in each country, only the notion that half of the median is an adequate poverty standard. The second measure is one of absolute, not relative, poverty. It consists of the official U.S. poverty line converted to other currencies by using OECD purchasing power parities in the respective years. This is an example of using the standard of ones own country to judge others

and can best be justified with the perspective of "learning lessons from abroad." But in general it has to be observed that even a standard of absolute poverty cannot be independent of a country's level of development and natural conditions, even if countries are similar as is the case in this study. As there are significant discrepancies between the countries under review in GNP per capita, differences in poverty as measured by the same absolute poverty line must partly be due to this fact, and results have to be interpreted with care.

Now turning to the findings of the study the descriptive results can be summarized as follows:

1. Adjusted average household income of age cohorts in relation to the national mean is highest in the age group 55-64, except Germany, where it is the group of 45-55.⁷ In all the countries there is a significant decline in this ratio when we move from the group of 55-64 to the group 65-74 and another one when we move to the age group 75 and over.
2. Compared to all other countries, the U.S. ratio of adjusted average household income to the national mean is second highest for the age groups 65-74, & 75 and over, only exceeded by that found in Switzerland.
3. As measured by the Gini-coefficient, inequality of adjusted income is highest among the U.S. elderly, compared to the other countries. These results can also be found in a companion paper by Hedstrom and Ringen (1989).
4. The proportion of persons in low-income households (below half of adjusted median net income) among the elderly in the U.S. is the second highest, only surpassed by the proportions in the U.K.
5. It is shown that the U.S. absolute poverty line converted to other countries lies well below half of adjusted median income in three countries (Switzerland, Canada, U.S.), around half in three others (Australia, Sweden, U.K.), and well above in the remaining two countries (Norway, Germany). Therefore, the proportions of elderly persons in absolute poverty diverge considerably from the proportions of elderly persons in the low-income groups. By this measure the U.S. takes a middle rank.
6. Whether measured at the low-income line or at the absolute poverty line, in all the countries the respective proportions of elderly persons are higher in the age groups 75 and over than in the groups 65-74.

The authors go only some steps in explaining these results, i.e. answering the second basic question of this approach.

In summary, this paper is the most complete of the LIS studies of the aged. It combines institutional and macro time series data from the U.S. Census Bureau's Aging database with the LIS cross-section data. Despite the problems which might be introduced by the authors' choice of perspectives, several interesting results are obtained. In particular, the fragile economic status of very elderly women living alone is an important finding.

Achdut and Tamir (1989). Based on work by Achdut and Tamir (1989) the composition of the pre-tax income of the elderly is analyzed in six countries. Considerable differences with respect to the proportions of income resulting from earnings and property are found, but, in general, the proportion of social security transfers was much higher in European countries. These differences are partly explained by the differences in labor force participation rates of the aged.

The authors also hint at some differences in the national social security systems but refrain from a more comprehensive analysis. In the course of giving some information about the various pension systems they also refer to earnings replacement rates of old-age benefits as can be found in the literature. Using this information, the decline of income after retirement for a single worker in the countries compared is found to be between 32 and 69 percent, and for a couple between 17 and 53 percent. But the group-by-group approach of the authors, taking account of all types of income of the elderly, demonstrates very clearly that judgements about the situation of the elderly based on earnings replacement rates can be grossly

misleading. This is a major and important point which is clearly established by this LIS paper.

Kohl. The third study by Kohl (1987) is written from a purely comparative viewpoint explicitly selecting countries which are similar in general but have clearly different old age security systems. Kohl compares the United Kingdom, Sweden, Switzerland, and Germany (FRG), whose old age security systems differ with respect to coverage, minimum regulations, methods of financing, and the public/private mix of old age provisions.

The group-by-group approach used is specified by the following methodological decisions:

1. As the legal and factual retirement ages differ between countries, the group of elderly is broadly defined as those persons living in households whose head is 55 or older. Additionally, subgroups comprising five year cohorts each are distinguished (i.e. 55-59, 60-64, etc.).

This broad definition implies, even more so than in the Smeeding/Torrey paper, that individuals with an age below 55 may be included in the groups of the elderly so that the results will not unambiguously be focused on the aged. To cope with this ambiguity, additionally "true" pensioner households are defined as those who receive old age income from public or private sources and whose income from earnings is less than 25% of net disposable income.

2. The study focuses on the relative positions of each five year cohort of elderly to the average position of all elderly over 55, giving no information about the relative position of the elderly with respect to

the national average. In addition, the relative positions of persons in "true" pensioner households are described.

3. As an indicator of the economic position, adjusted net monetary income of persons is selected using the same equivalence scale as in the Smeeding/Torrey study and, therefore, implying the same methodological dilemmas.
4. Inequality among the elderly is measured by the Gini-coefficient and by showing upper and lower quintile shares of adjusted net income per person, and poverty rates are given based on a researcher defined poverty line of half of median adjusted net income.
5. No overall ranking of countries is suggested, but comparisons are made with respect to selected dimensions of old age security.

The main descriptive results of the Kohl study referring to basic question 1 are as follows:

1. Adjusted average household income per person declines in most of the countries with age when we move from the 55-59 cohort to older cohorts, the only exception is Germany where the cohort 70-74 is slightly worse off than the cohort 75 and over. This effect is hidden in the Smeeding/Torrey study because they use 10-year cohorts. This decline is largest in the U.K. and smallest in Switzerland. The analytical fruitfulness of the distinction between pensioner and non-pensioner households shows itself in the result that persons in pensioner households are on average on a level of 2/3 of the income level of non-pensioner households, the only exception being the U.K. where the discrepancy is almost 1/2. This difference also does not show up in the Smeeding/Torrey paper. Considering household types, single living females are on average in the worst position in all countries, a finding which is consistent with Smeeding and Torrey.
2. As measured by the Gini-coefficient, inequality is greater among the total population than among the elderly (55+) in two countries (Germany, Sweden), and smaller in the remaining countries (U.K., Switzerland).
3. As measured by the half of median adjusted income line, poverty ratios increase with age, except in Sweden, thus confirming a result by Smeeding/Torrey, although the figures are generally somewhat lower. By far the highest poverty rates are shown for pensioners in the U.K. (23.6 percent) while Sweden (0.3 percent) has almost completely avoided

poverty among its aged pensioners. Poverty ratios for non-pensioners among the elderly are similar in all the countries (3.4 to 5.3 percent).

4. In general, it can be said that Sweden is the only country which manages to have the least unequal distribution and the lowest poverty ratios among its pensioners while Germany and Switzerland show rather high overall inequality but only medium level poverty ratios among its pensioners. The U.K. is characterized by medium level overall inequality but very high poverty ratios among the pensioners.

These descriptive results are complemented by some steps to explain these differences, corresponding to our second basic question. As a first step, net income of the elderly is split up into earnings, property income, occupational pensions, social pensions, means-tested benefits, other income, and taxes and social security contributions. It is interesting to note that the shares of each income type in overall gross income--as also given in the Smeeding/Torrey paper--differ greatly from the average shares in gross income of each household. This is due to the fact that earnings and property income are very unequally distributed. For the average elderly household, social pensions form the highest income share in all countries (43 to 67 percent) followed by earnings (22 to 32 percent). Occupational pensions play only a minor role (7 to 8 percent) as does property income (2 to 15 percent).

By comparing the differences in the shares of taxes and social security contributions of the average elderly household (from 6 percent in Germany to 30 percent in Sweden) it becomes apparent that differences in tax systems with respect to the elderly play an important but neglected role in explaining the differences in their relative positions and the differences in inequality among them.

Unfortunately the differences in income shares among pensioners and non-pensioners are not shown, thus hampering the analysis of the differential

effects of the various public pension systems. Although the author relates the characteristics of the pension systems to the empirical results for the elderly, the conclusions remain rather general. At this point the institutional and time based limitations of the LIS database become very clear. As pensions in all the countries depend partly or wholly on earnings and contributions-taxes in the former working life of a pensioner, contribution records would be needed for a thorough analysis. Similarly, information about preconditions on which other public and private transfers and taxes are based are not available. Therefore, the researcher is left with the possibility of dividing public transfers into several subcategories, such as means-tested benefits, and to relate the shares of these types of transfers in overall income to some basic characteristics of the social security systems of the countries under review. Although this may result in some interesting insights, it is much less than what we would like to find out with a comparative analysis of this kind.

Kohl also approaches the third basic question by defining three criteria for evaluating the working of social pension systems, namely:

- a. approximately equal levels of living standards for the various age cohorts of the elderly, and for the different household types.
- b. compared to the situation during working life, no increase in inequality in old age, but preferably a decrease, to give the principle of need a stronger influence among the elderly.
- c. avoidance of relative poverty among the elderly.

Without aiming at an unanimous ranking of the countries under review, various elements of the public pension systems are evaluated leading to the conclusion that a high level of average public pensions which are less

unequally distributed than former earnings in combination with universal and generous minimum pensions seem to fulfill these aims best. The Swedish system comes closest to such an ideal.

Hedstrom and Ringen (1989). The fourth and final study, by Hedstrom and Ringen (1989), can be characterized as mainly using a problem-by-problem approach but also dealing with group-by-group comparisons. The countries selected are Canada, Germany, Israel, Norway, Sweden, U.K. and U.S.--the original LIS countries.

The first problem to be considered is whether a Rowntree cycle of poverty can still be found in highly industrialized countries with extended social security systems. Secondly, the relationship between income packaging and income distribution is analyzed, especially with respect to the aged.

In his classical study of poverty in York at the turn of the century, Rowntree showed that the economic well-being of families tended to fluctuate over the life course. Rowntree identified two periods in which families faced the highest risk of poverty--the periods of child rearing and old age. To identify a Rowntree type cycle, Hedstrom and Ringen divide the populations into ten year age cohorts according to the age of the head of household, being well aware of the methodological problems of interpreting cross-section data longitudinally. Only relative positions of cohorts in relation to the national average are compared. As with the other studies referred to, net disposable cash income adjusted by using the same equivalence scale serves as the indicator of economic well-being. Gini-coefficients are used for measuring inequality, and the poverty line is chosen at half of the median adjusted disposable income.

A Rowntree type of cycle can be detected in all of the countries under review if adjusted disposable income is used. The younger cohorts (18-44) and the elderly (over 65) are below the national mean, the middle aged cohorts (45-64) are above with only minor exceptions. There are still some differences among the countries compared. Israel has the least pronounced cycle. In some countries the young have rather low averages (U.S., Norway), in others the aged or at least the very old have rather low levels (U.K., Germany).

Differences between cohorts can also be found with respect to averages in factor incomes of households and unadjusted disposable income of households. They can be used to partially explain the Rowntree cycle and to show the influence of public transfers to alleviate it. But the authors do not go very far in this direction. They even speak of a Rowntree cycle based on income which is not adjusted for household size, clearly a misunderstanding of the Rowntree argument.

By comparing poverty rates over the life cycle, the hypothesis that a Rowntree poverty cycle still exists is only partially supported. In most countries the risk of poverty is highest in the youngest (below 24) and the oldest age groups (65 and over). In Canada and Israel, the risk of poverty is comparatively high in all age groups, but highest only among the young (Canada) or among the aged (Israel). In Sweden, the risk of poverty is generally low and virtually non-existent among the aged. The authors carry the analysis of the risk of poverty among the elderly one step further by showing that in some countries higher rates can be explained by lower average relative positions of the elderly, and in others only by a more unequal distribution among the elderly despite rather high average relative

positions. The authors do not evaluate the various social security systems of tax systems with respect to their effects in mitigating the Rowntree cycle nor do they touch on the political processes and value systems that have shaped the various systems.

In the course of the study many aspects of income packaging, i.e. the composition of gross income by source, are described. Although the authors do not intend to determine precisely the extent to which differences in income packaging affect income distribution, they analyze to what extent poverty ratios and Gini-coefficients correlate with the proportion of public transfers in the average family income package, and they examine the relationship between the economic status of the elderly and the relative importance of public transfers in their income packages.

By correlation analysis, Hedstrom and Ringen show that cross-national variations in income inequality and poverty rates can be partly explained by differences in the proportion of public transfers in the family income package. In general, the more important public transfers are on average, the more equally distributed incomes are, and the lower the poverty rates are. The exceptions to this rule are Germany, where incomes are quite unequally distributed though transfers represent a significant proportion of family income, and Norway, where the poverty rate is lower than one would expect on the basis of the transfer rate.

Restricting the comparative analysis to the elderly, a negative correlation is also found between the proportion of public transfers in gross income and income inequality and poverty. Again, Germany and Norway are exceptions, as is Canada with respect to its very old. On the other hand the levels of public transfers do not explain very much of the cross-

national variation in the elderly's economic situation on average. The relationship between income packaging and the economic situation of elderly families seems to be too complex to be detected by simple correlation analysis. From the viewpoint of an extensive problem-by-problem approach these simple correlation results provide us with useful hypotheses that can form the starting point of an analysis of the differences in the social security systems and the role they play in redistributing market income according to need.

IV. CONCLUDING REMARKS

The purpose of this paper has been to reflect on the various possibilities and problems of comparative social policy analysis and to show the potential and the limitations of the LIS database in supporting this research. The latter was not done abstractly but by reviewing some of the first papers which have used LIS and which mainly dealt with the economic well-being of the elderly. Although other examples could have been chosen from the rather wide range of studies that have been based on LIS so far, the elderly papers provided a convenient set for such an investigation.

Though there are limitations to the LIS database, its potential for comparative analyses in the fields of social policy and income distribution has even increased, since the papers reviewed had been written, as additional countries have been included. But the more exciting perspective is given by cross-section data for the same countries referring to the years around 1986 which are being collected in a second round. This extended database will offer the possibility of making comparisons of the same

country over time as well as between countries, thus increasing the value of LIS for comparative research.

International comparisons which would like to overcome the limitations of purely descriptive or correlational results will additionally have to deal with changes in the social security systems, in the labor markets, in the economic situation, and in the demographic background of the various countries, thus making the analysis rather complex. For these extended comparative analyses the three approaches discussed can as well serve as a guideline as they do for one cross-section.

Notes

¹Similar remarks are made in Lisle (1985).

²For instance, if Peter Flora and Arnold J. Heidenheim's (1987) studies were not restricted to industrialized Western countries in North and middle Europe and in North America, a host of additional problems would have to be tackled, and generalizations would have been much more difficult and presumably more vague in context. The complexity of comparisons between Western industrialized countries and Socialist countries is demonstrated in E.S. Kirschen (1974). See Flora (1987) for an extensive comparison for twelve states (Sweden, Norway, Finland, Denmark, West Germany, United Kingdom, Ireland, Italy, Austria, Belgium, Netherlands, Switzerland).

³These approaches are developed in more detail in Jones (1987) and also Higgins (1987).

⁴Additionally, it may be necessary to take account of the public-private mix of provisions for social risks. Sometimes a social risk is partly or wholly covered by employers (e.g., in Germany salaries and wages are continued to be paid for six weeks by the employer in case of sickness while in other countries sickness pay is often covered by social security institutions). Another important example are occupational pensions or by mandatory private provisions (e.g., persons may be obliged by law to take out life insurance in case they want to opt out of a public pension system).

⁵A review of problems and results in this field can be found in H. Wilensky, G. Luebbert, S. Reed Hahn, A. Jamieson (1987) and in J. Albert, G. Esping-Andersen, L. Rainwater (1987).

⁶See also R. Hauser (1984).

⁷After completion of the study an extreme outlier was detected in this age group in the German dataset because of a coding error. After the correction, the German results are much more similar to those of the other countries. Thus, the overall accuracy of each country dataset is another factor which need be taken into account.

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