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FROM MARGINALISM TO INSTITUTIONALISM: DISTRIBUTIONAL CONSEQUENCES OF THE TRANSFORMATION OF THE FINNISH PENSION REGIME

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This study offers a longitudinal scrutiny of the development of pension policy in Finland and evaluates the impacts that the shift from a "marginal" to an "institutional" welfare state imposed on economic well-being among the elderly. The data that are used stem from household budget surveys from 1966 to 1990. During that period, average income of the elderly doubled in real terms, legislated pensions replaced other sources of income, the traditional cycle of poverty, where the elderly had a higher risk of poverty, disappeared, and income differences between the elderly diminished.

1. INTRODUCTION

In his book *Social Policy*, Richard Titmuss (1974) made a famous distinction among three ideal types of the welfare state: the marginal, industrial achievement, and institutional models. Recent social policy discourse has revitalized this trichotomy. The revitalization can be seen in two partially overlapping areas. First, researchers have tried to unravel the way in which advanced welfare states cluster in terms of their social policy solutions (e.g. Esping-Andersen, 1990; Castles and Mitchell, 1990; Kangas, 1994). Second, the possibilities offered by a number of comparable databases, especially by the Luxembourg Income Study (LIS), have stimulated numerous studies of the distributional consequences of different ideal types of social policy (see e.g. Smeeding, O'Higgins and Rainwater, 1990; Fritzell, 1991; Mitchell, 1991; Ritakallio, 1994a).

Empirical analyses of the consequences of different welfare state models have mainly been based on cross-sectional comparisons of a number of advanced OECD countries. Although cross-sectional comparisons reveal important links between institutional solutions and their distributive effects, they do not necessarily untangle the dynamics or the development of the mechanisms behind these links. Therefore, in addition to careful cross-national analyses, we also need more detailed longitudinal studies of the developmental patterns within single countries.

The purpose of this paper is to offer such a longitudinal scrutiny of the development of social policy in one country, i.e., Finland. Until the early 1960s,

Finland was a welfare state laggard, but by 1990 it provided citizens with social protection that can be considered high by international standards. Thus, the development of the Finnish welfare state offers an interesting test case for evaluating the impacts of a shift from "marginal" social policy to the "institutional" welfare state imposed on economic well-being and income distribution. Due to space limitations, we concentrate our analysis on one area of outcomes. Here, we are especially interested in the development of poverty and income inequality among the elderly. Moreover, we will analyze the interplay of public and private components in old-age security. Has the improvement of legislated pensions crowded out occupational pensions and other "private" sources of income? What about the trends in the distributive effects of different sources of income?

The structure of the paper is as follows: First, we briefly review some classifications or ideal types of pension policy. The third section outlines the general development and institutional changes in Finnish pension policy. In other words, the section is focussed on the shift from marginalism to institutionalism. Thereafter we describe the longitudinal database used. The fifth section analyses the shifts that have occurred since the mid 1960s in the income package provided for the elderly. The two following sections inspect the distributional effects of the transformation of the pension regime: first in terms of poverty among the elderly and then in terms of income inequality. A concluding section summarizes and discusses future prospects in the light of the findings.

2. Models of Pension Regimes

In characterizing the three welfare state models, Titmuss (1974) was not too explicit in his typology, and numerous clarifications of the models have therefore been suggested (Korpi, 1980; Mishra, 1981; Esping-Andersen, 1990; Castles and Mitchell, 1990). Of special interest for the present study is Palme's (1990a, see also Palme 1990b) classification, tailored for analyzing pension policy. In his study of the development of pension security in 18 OECD countries, Palme clusters pension systems on the basis of two dimensions: to what extent different welfare states guarantee (1) basic security and (2) income security, i.e., income-related pensions that in some way are related to the claimant's income from his/her active period. The goal is to classify countries according to the relative importance of these two entitlement principles attached to pension policy. The classification leads into the following four-fold table.

TABLE 1

Models of Pension Security

	Basic Security	
Income Security	No	Yes
No	1. Residual Model	2. Basic Security Model
Yes	3. Income Security Model	4. Institutional Model

Source: Palme, 1990

In the "residual" model (in Titmuss' terminology "marginal"), the state guarantees neither basic security nor income-related benefits. This may be due to an

inadequate level of minimum benefits, and/or to limited coverage of social security. Usually, targeted means-tested benefits that limit the scope of coverage have been regarded as a trademark of the residual model of social policy.

In the "basic security" model, a more or less satisfactory minimum standard is guaranteed to the whole population. Thus, the basis for entitlement is citizenship and/or registered residence in the country concerned. Due to the lack of income-related state benefits, the role of occupational pensions and other "private" income sources in these two models is supposed to be important. Those, whose labor market position is strong enough, obtain income-security through collective bargaining or through individual insurance policies.

Palme labels his third ideal type the "income security" model (Timuss' "industrial achievement" model). The emphasis in this model is on guaranteeing generous income-related social protection to those who are in paid work, whereas those working at home without pay receive very scanty benefits, if any.

The fourth, "institutional" model combines basic security for everybody and income-related benefits to the economically active. Consequently, eligibility for social protection is based both on citizenship and on work-merit. Due to the high degree of need-satisfaction provided by the statutory schemes in this model, the scope of market-based programs is presumed to be limited.

The debate on the distributional impacts of pension policy models seems to be a highly contested terrain, and widely diverging opinions have been presented. According to one strand of debate, the means-tested model is the most egalitarian, since it is biased in favor of the worst-off: it distributes from the rich to the poor. The means-tested model is not only the most egalitarian, but also the most efficient way to channel resources. By targeting benefits to the most needy, the spill-over effect of welfare provisions to wealthier strata is eliminated. However, here lurks the greatest problems of the model, as well. The means-tested model may run into a legitimation crisis, as those who finance the schemes are excluded from the benefits. Moreover, means-tested benefits tend to create disincentives, by punishing those responsible members of the community who have taken care of themselves.

As a solution to the incentive and legitimation problems, some scholars and politicians speak in favor of the basic security model, where universal flat-rate pensions are guaranteed to everybody. The advocates of the basic security model are critical of the income-related pensions, which are blamed for reproducing inequalities and status differences that stem from the labor market.

Finally, the supporters of the instititional model emphasize the merits of combining basic security with income security. The basic pension component guarantees a decent livelihood for those with no or sparse work history, while legislated income-related components provide equal pensions to the entire working population. In the latter aspect, a central question is the equal treatment of different employment categories. Advocates of this model claim that despite income-graduation, statutory pensions increase inequality by providing workers with rights that are similar to those granted by labour market contracts, occupational pension schemes, and individual pension policies to certain categories of salaried staff.

Hypotheses on the distributional consequences of the four pension regimes have been evaluated using cross-national comparisons, usually utilizing the data base compiled by the LIS (see e.g. Whiteford, 1993; Korpi and Palme, 1994).

Cross-national comparisons have often been criticized for merely revealing associations between phenomena, rather than exposing the more interesting causal mechanisms that produce such associations. The purpose of this paper is to complement the picture given by cross-national analyses by providing a longitudinal assessment of the distributional consequences of a transformation of the pension regime.

3. The Transformation of the Finnish Pension Regime

Finland was a late-comer in pension policy (for a general review, see Salminen, 1993). The first pension act came into effect in 1939—of the current OECD member countries only Switzerland and Japan lagged behind. In principle, the Finnish national pension scheme of 1939 was universal in its coverage, but in practice means-testing and other qualifying conditions excluded the majority of the elderly from benefits. By 1950, only one-fifth of the elderly above the normal pension age of 65 years were entitled to national pensions (Kangas and Palme, 1992, 202). In other words, the take-up ratio was extremely low. Also, the benefits provided were meager. With all possible supplements, the full national pension amounted to no more than 15 percent of the average industrial wage, which was one of the lowest replacement rates in the Western countries (SCIP).[1] Thus, early Finnish pension security was clearly residual in character.

Finnish national pension legislation was totally revised in 1956. The new National Pension Act achieved universalism, whereby everybody who was older than 65 years became automatically eligible to a national pension. Citizenship became the basis for entitlement. More specifically, the national pension was divided into two separate parts: (1) a basic amount, paid on the basis of citizenship or residence of at least 5 years, and (2) an income-tested supplement amount.

Figure 1 displays the size of national pensions in relation to the average net industrial wages. Separate lines are drawn for basic amount and "full" national pension that comprises both the basic amount and full supplement amount. In order to put the Finnish case in a larger frame of reference, maximums and means for the other 17 OECD countries involved in the study are presented.[2] "OECD maximum" pertains to the highest basic pension in the whole OECD area. Thus, maximums may refer to different countries in different years depending which of the 18 countries is in the lead.

Compared to other Scandinavian countries guaranteeing basic pensions on the basis of citizenship, the universal and unconditional basic amount has been rather low in Finland, varying between 5 percent and 10 percent of the average industrial wage (Figure 1). Until 1985, any other income proportionally decreased the claimant's supplement amount. In 1985, income-testing was limited, and since

[1]However, there were some privileged groups. All civil servants and some salaried employees in the private sector were guaranteed by occupational pensions.

[2]In addition to Finland, we have data on Australia, Austria, Belgium, Canada, Denmark, France, Germany, Ireland, Italy, Japan, New Zealand, the Netherlands, Norway, Sweden, Switzerland, the United Kingdom, and the United States.

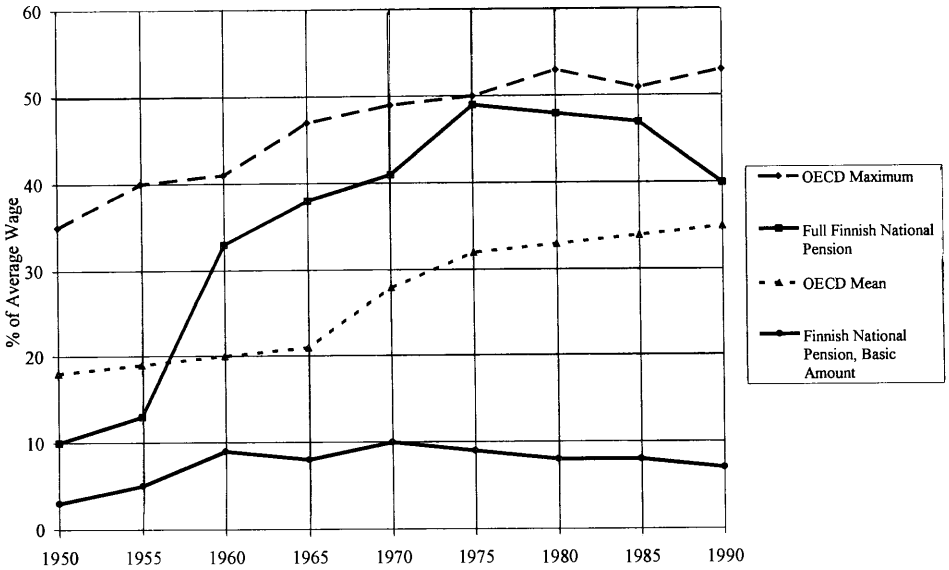

Figure 1. Net Minimum Pension as a Percent of Average Industrial Net Wage: Finnish National Pension and Maximums and Means for 17 Other OECD Countries, 1950–90

then only personal pension income from legislated employment-related schemes and collective occupational pension schemes affect the supplement amount. That is, the previously income-tested national pension became pension-income tested.[3]

In the 1950s, the Finnish pension regime was residual in its character. Due to the improvements carried through in the late 1950s and early 1960s, the regime gradually shifted from residualism toward the basic security model. In the early 1960s, the basic pension (national pension basic amount, plus the full supplement) payable to pensioners without other income was 35 percent of the average industrial net wage. In 1970 it corresponded to 40 percent and in 1975 50 percent of the average wage (Figure 1). During the booming economy of the 1980s, basic pensions could not keep up with the rise in the average income, and consequently, the replacement rate declined ten percentage points, i.e. from 49 percent of the average net wage in 1980 to 38 percent in 1990. Thus, the basic security guaranteed to those outside the labour market and paid work—mostly home-making women—deteriorated in relative terms.

From the mid-1060s, a gradually growing work-merit element was added to the basic security model. The legislation introducing an income-related pension scheme for private-sector employees was passed in 1961 (effective from June 1, 1962). When employment/earnings-related pensions were legislated for the private sector employees, the existing public sector pension systems remained intact, and the private-sector legislated scheme was built up separately. Thus, in addition to the private sector employees' scheme, there are separate income-related pension schemes for

[3]Each Mark from the other pension schemes will decrease the national pension supplement by 0.5 Mark. If the amount of other pension income exceeds a certain maximum limit, the supplement amount will cease.

public-sector employees. In the beginning of the 1970s, separate superannuation programs were also introduced for farmers and other self-employed categories and by this time the total Finnish labor force had become covered by statutory income-graduated pensions whose income replacement ratio has hovered around the OECD mean (Figure 2).

There are some important differences between statutory pension rights in the private and the public sector, and these differences may generate significant differences in the distributional profiles of the various schemes. First, the pension scheme for state employees was codified in 1925. Therefore, the public-sector pension system is now "mature", and full benefits can be paid out, whereas the private sector scheme is still gradually maturing (by 1.5 percent per year) and the first full pensions will be paid out only in the year 2002. The difference between "mature" public sector pensions and "maturing" private sector pensions can be

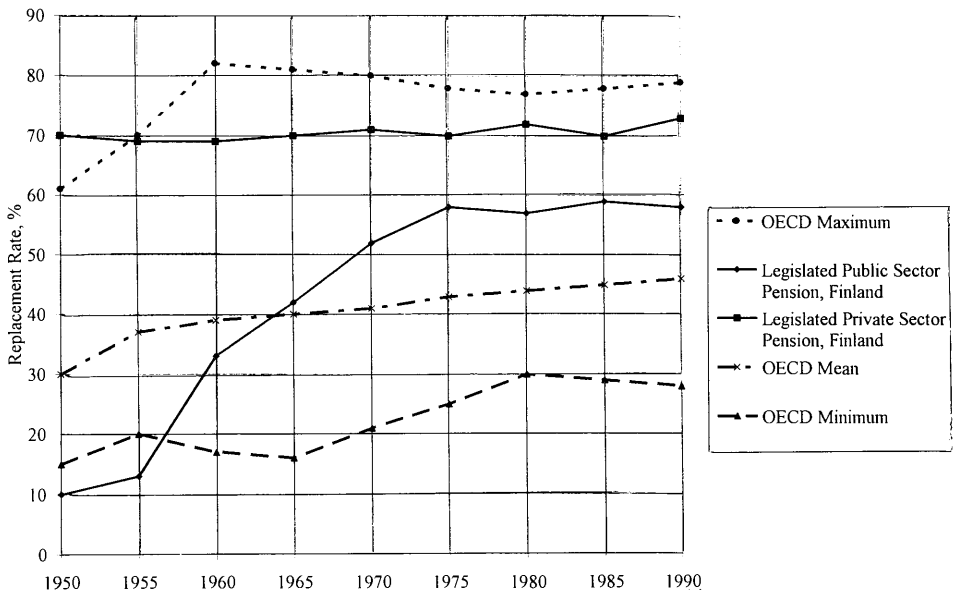

Figure 2. Net Replacement Rates (Pension/Previous Wage, %) in Work Merit Pensions: Finnish Pensions and Minimums, Maximums and Means for 17 Other OECD Countries, 1950–90

seen in Figure 2. The gap between the privileged civil servants and the less fortunate private-sector workers has been made up by the gradual improvements in the private sector benefits. Second, the target level has been lower in the private sector scheme: 60 percent of the final gross wage after 40 years in employment (accumulating pension rights by 1.5 percent per year) compared to 66 percent after 30 years in the public sector (accumulating pension rights by 2.2 percent per year).[4]

In sum, the combination of basic security with elements of the income security model gradually transformed the Finnish pension regime to the institutional model

[4]According to current legislative amendments, public-sector employees' pensions are to be gradually decreased to a level identical with private-sector benefits.

(see also Palme, 1990, 91). The subsequent sections review the distributional consequences of this transformation.

4. Income Data

Our empirical analyses of distributional consequences of the shift in the pension regime are based on the Finnish household budget surveys (HBS) that are representative of the whole population. The Central Statistical Office has conducted these surveys at five year intervals since 1966 (for a closer description, see Uusitalo, 1989). The household budget surveys provide data on incomes and expenditures in Finland in 1966, 1971, 1976, 1981, 1985, and 1990. Data are partially derived from interviews, and, since the 1971 survey, increasingly also from official registers. Income data are collected from tax and other registers and are generally considered to be of high quality.

The basic unit in HBS is the household. The sample size varies from 4,471 households in 1966 to 8,258 households in 1990. In order to weight the samples to the population level, certain adjustments have been made. First, since incomes of households of different sizes are hard to compare, we increase comparability by weighting incomes by equivalence scales (see, e.g. Smeeding *et al.*, 1985, 50; Hedström and Ringen, 1990, 89–91; Fritzell, 1991, 49–51). In this study, we have chosen to divide the aggregate household income by the so-called OECD-equivalence scale, whereafter this "individual" equivalent income is multiplied by the number of members in each household in the sample. For example, in 1990, the application of this procedure produces data for 22,627 cases. Finally, these sample data are then multiplied to the level of the total population by special weights included in the household surveys.

Although there are the usual survey problems with non-response, the under-representation of certain forms of income (income from self-employment, property income, and transfers received), HBS offers the most reliable standardized data set for analyzing the impacts of social changes. The repeated nature of the surveys enables us to simulate a panel design and to better evaluate the consequences of the improvements in pension security. Strictly speaking, the approach is not a panel study, since data are not collected from the same respondents at different points in time. Rather, we have applied the so-called trend approach, where data are derived from the same population but not from the same individuals (Hagenaars, 1990, 17–19). The units are thus cohorts, which are followed over time. Although the trend approach is less powerful than the panel design, it is powerful enough for reliable analyses of distributional effects of the transformation of the Finnish pension regime from the basic security model to the institutional regime (from box 2 to box 4 in Table 1).

5. The Composition of the Income Package

In all societies, people seek shelter from the uncertainties of life. In industrialized societies, social policy is an institutionalized form of collective protection against social risks. In addition to statutory social policy, individuals can also rely on markets and the informal sector. The assemblage of income from the different arenas constitutes the income package of an individual or a group

of individuals (Rainwater, Rein and Schwartz, 1986, 12–24). In their income package, the elderly can mix income from various sources: from paid work, self-employment, savings, investments, social security, and occupational or private insurance policies.

The relative importance of the different components in the income package of the elderly vary considerably between countries and may change over time. In order to get a fuller picture of the developmental patterns of the economic well-being of the Finnish elderly, we therefore analyze the development of the entire income package, not only the public pensions.

The discussion above indicates that social policy is not developed in an institutional vacuum, but rather that existing institutional arrangements pre-condition the subsequent policy options available. This institutional environment affects the choices of individuals and corporate social actors, and there are several theories and research findings exploring the institutional interplay between the components of the income package. For example, it is assumed that if the statutory pension schemes are of poor quality, people will acquire individual insurance policies and/or collectively negotiate occupational benefits with their employers. The converse of this hypothesis predicts that improving statutory social security will gradually crowd-out private schemes. Indeed, some earlier cross-sectional studies on pension policy display a certain crowding-out effect between statutory benefits and private arrangements: the better the public scheme, the less important are private arrangements (Esping-Andersen, 1990; Kangas and Palme, 1992). However, some other studies, based on longitudinal data, report a simultaneous growth and co-existence between different parts of the income package (Griffin, 1992, 92). Instead of the crowding-out effect, parallel growth is posited (Kuhnle and Selle, 1990).

Figure 3 displays the development of the income package of the Finnish elderly. The income package of the elderly is decomposed into eight different sources of income: national pensions, private and public sector employment pensions, other transfers from the public sector, private occupational pensions, work income, income from self-employment and capital income.

Figure 3 shows that between 1966 and 1990, average income doubled in real terms (current prices are adjusted to 1990 prices by the consumer price index). Income from the national pension scheme has been rather stable throughout the period, whereas from 1971 onwards a rapid growth took place in the private and public-sector employment-related pensions. Also other transfers from the public sector—mainly housing allowances—show a slight increase, whereas in real terms income from work and occupational pensions have decreased.[5] Thus, the average pensioners owe the improvements in their real income to income-related pensions.

The development of the income package can also be studied from a different point of view: instead of the absolute changes, we can focus on the relative importance of the different components. This kind of proportional analysis reveals

[5]The decline of work as a source of income among the elderly age bracket has happened across the OECD. In Finland this decline has been more sharp than in many other OECD countries. In 1966, 78 percent of the elderly (60–64 years of age) males and 42 percent of females were in the labor force. The figures were among the highest in the OECD (OECD, 1984). In 1990 the corresponding numbers were 28 and 20 percent, which were among the lowest participation rates in the Western hemisphere (OECD, 1995).

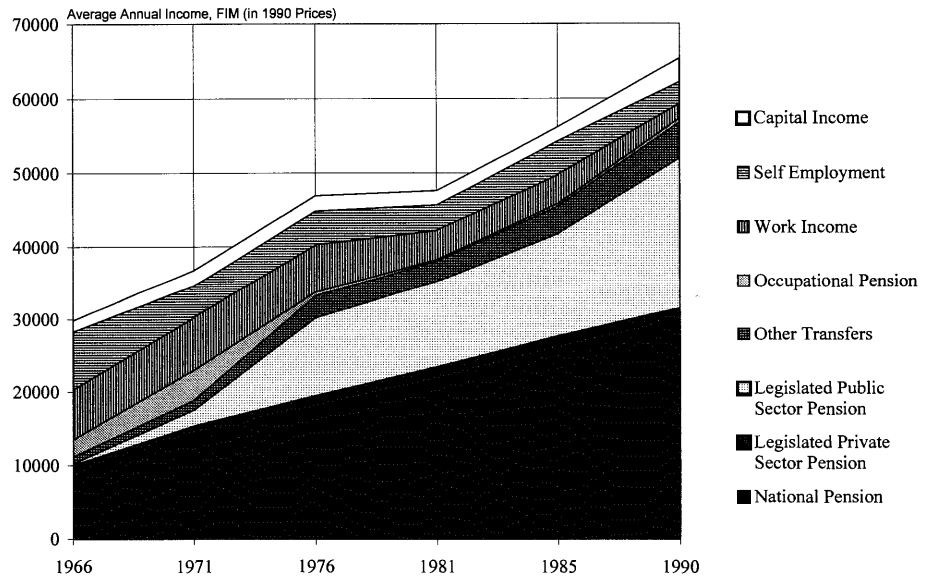

Figure 3. The Development of the Average Income Package of the Finnish Elderly, 1966–90

some interesting shifts in the relative importance of the components. In 1966, statutory pensions constituted only one-third of the income package, while work and self-employment were the most important sources of old-age security. By 1990, the role of earnings and self-employment is marginal: they comprise only 8 percent of the income package. The drop in the relative importance of earnings can mainly be explained by improvements in the statutory employment-related pensions, which contribute 65 percent to the total income package. The rapid transformation of the economic base of Finnish society from agriculture to industry and services lies behind the steady decline in income from self-employment.

The results presented above are clearly consistent with the crowding-out hypothesis. The improvements in legislated pensions have gradually eroded the importance of additional occupational arrangements. In 1966, the contribution of occupational pensions to the income package was almost ten percent, whereas in 1990 it was less than one percent. This crowding-out trend in Finland contradicts the developments in many other countries over the same period, where a growth in occupational benefits is visible (see e.g. Kangas and Palme, 1992). For example, in the United Kingdom occupational pensions increased in importance from 14 percent in 1971 to 23 percent in 1988 (Griffin, 1992, 93).

These diverging trends in private occupational pensions in different countries reflect differences in the institutional set-ups for statutory pensions. In these set-ups, there is one Finnish peculiarity which distinguishes Finland from the other OECD countries. In contrast to the other countries, there are no pension ceilings (maximums) in the Finnish statutory income-related schemes. The target level is 60 percent or 66 percent of the final wage or salary, irrespective of its size. This implies that high-income earners have had little incentive to establish separate supplementary programs, and the occupational pension schemes that were

established before the implementation of statutory earnings-related pensions have thus been gradually replaced by the statutory schemes (see Kangas and Palme, 1992).

6. Pension Policy and Poverty

Although everybody has some idea what poverty means, the concept of poverty and the measurement of poverty is a highly contested terrain among social scientists (see e.g. Alcock, 1993; Jäntti, 1993, 15–40). Researchers have proposed a wide variety of different measures, ranging from the absolute minimum food-intake line to more or less relative definitions (Ringen, 1987, 141–65). Often, different definitions produce different pictures of the scope and extent of poverty. For example, in his study of poverty in Finland, Ritakallio (1994b, 42–45) found out that a relative measure based on low income tends to identify quite a different group of persons as poor than a measure based on expenditure on goods and services, or than a measure based on recipiency of social assistance. The overlap between these three measures is strikingly poor (see also Kangas and Ritakallio, 1995).

In principle, our data would allow us to apply all three measures, but since we are primarily interested in the income package, we have defined poverty in terms of low income. We apply the commonly used head-count ratio, which expresses the proportion of the poor in the total population. According to this measure, the poor are persons belonging to a family with equivalent net income below a certain percentage, in our case 50 percent, of the median income for the whole population.

In order to get an overview of the dynamics producing old-age poverty, we have first studied poverty in different age groups within the elderly population (Table 2) at different points in time. As the table displays, up to the seventies, the risk of poverty increased with age. For example, in 1966 the poverty rate in the age bracket 50–54 years was 8 percent, compared to 18 percent among those above 75 years of age. Gradually, improvements in pension security mitigated the poverty risk among those above the normal pension age of 65 years. By 1990,

TABLE 2

Poverty Rates (%) Among Different Age Groups and Cohorts in Finland, 1966–90

Age group	1966	1971	1976	1981	1985	1990
50–54	8.2	9.7	6.0	3.5	2.2	2.0
55–59	9.9	12.5	5.3	2.6	3.0	2.1
60–64	14.1	14.1	8.5	4.4	3.1	2.5
65–69	11.8	9.6	5.2	3.1	2.8	2.1
70–74	11.2	17.1	3.4	3.7	3.6	1.9
75+	17.5	15.0	7.0	4.7	3.2	2.7

Source: Authors' calculations from HBS data.

Note: Poverty is calculated as a proportion of persons living in households whose head is within the specified age bracket and whose equivalent disposable income is less than 50 percent of the median disposable income in the whole population.

differences in the poverty risks between the age groups had become minimal. In sum, the shift of pension regime described in Figures 1 and 2 seems to have considerably changed the traditional cycle of poverty, where the elderly have a significantly higher risk of being (permanently) poor.[6]

Table 2 gives us six cross-sectional snapshots of the material well-being of six age groups in Finland. The problem with cross-sectional studies is that we cannot fully capture the dynamics operating between old-age poverty, the improvements in pension security and getting older in different generations. The cross-sectional age group differences displayed in Table 2 can be interpreted as differences between cohorts or generations only if the generational characteristics are stable over time (Hagenaars, 1990, 17). This is hardly the case. As described above, the Finnish employment-related pensions for private sector employees were implemented in 1962. Since then, pensions have been maturing by 1.5 percent a year. This means that different cohorts have not had equal possibilities to accumulate their pension rights. Older cohorts retiring in 1966 usually had private sector pension rights accumulated from only five years, and thus their income-related pensions amounted to 7.5 percent of their wage, whereas cohorts that retired in 1990 had accumulated their pension rights over 29 years, and their income-related pension could correspond to 43.5 percent of their final wage or salary. This clearly indicates that there are indeed very strong generational effects. Our database allows us to combine a series of trend studies to form a simple cohort design to unravel how different cohorts with diverging pension rights are exposed to poverty.

In Table 2 we read the cohort effects from the diagonal lines. The main diagonal comprises a cohort that was born between 1912 and 1916. In 1966 they belonged to the age group of 50 to 54 years, and in 1990 they were 75 or over. For this cohort, we have six obervations, which means that the cohort has passed through all our six age groups. For the older cohorts (born before 1912) and younger cohorts, born after 1916 we have fewer observations. For example, those born before 1891 and those born between 1937 and 1941, data are displayed in only one age bracket (over 75 and 50–54 years of age, respectively).

The general pattern (with minor exceptions) shown from Table 2 is that each cohort ends up with a lower poverty rate than the previous one. In other words, each subsequent cohort has enjoyed higher material well-being than its forerunners.

The comparison of Figure 1 and Table 2 shows partially contradictory trends in Finland. According to Figure 1, since the mid-seventies the national pension level in relation to average earnings has steadily deteriorated. Despite this, the poverty rate among the elderly has declined. The explanation for these apparently diverging patterns can be found in the maturation of the legislated income-related pension schemes. More and more pensioners receive additional pension income

[6]In order to check the sensitivity of our measure of 50 percent, we also used two alternative poverty lines, namely 40 percent and 60 percent of median income. The story told by the different measurement levels is quite similar: poverty among the Finnish elderly has dramatically diminished from 1966 to 1990. According to the 40 percent level, the proportion of poor pensioners fell from 14.2 percent in 1966 to 0.5 percent in 1990. The highest poverty line classifies 36.6 percent of the elderly in 1966 as being in poverty, and 15.2 percent in 1990.

through these schemes. In 1966, as much as 71.2 percent of the elderly households received pensions only from the national pension scheme, whereas in 1990 the figure was not more than 4.6 percent (figures derived from the household budget surveys). In addition, each new cohort accumulates better income-related pensions, compensating for the drop in basic pensions. Thus, the income level of the elderly population as a whole may increase, even though the relative income level of those living on national pensions only may decrease. To put it in another way, those living solely on national pensions have been in relative terms the losers in the transformation of the pension regime but the number of these losers has rapidly diminished.

Since the labour force participation of women has been lower, and those without work records and thus without employment-related pensions are more often women than men, it is interesting in this respect to compare poverty rates among elderly women and men. We might predict that a deterioration of the national pension would hit women first. For men the drop in national pensions is compensated through earnings-related benefits.

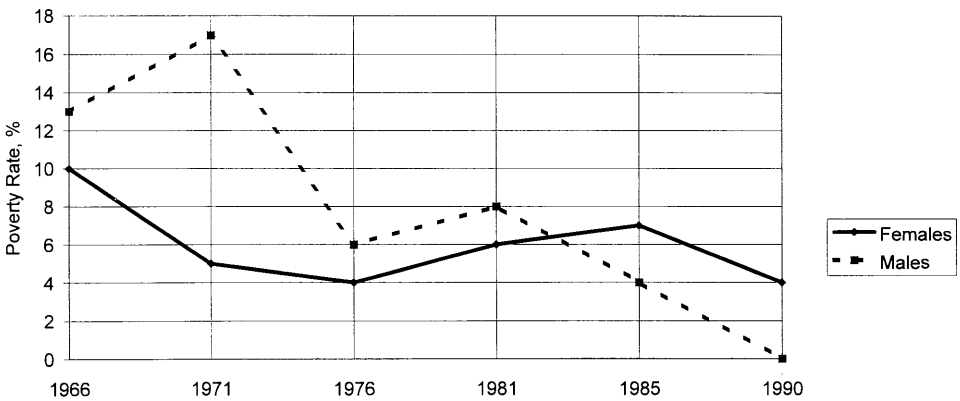

Figure 4. Poverty Rate (%) Among the Elderly Females and Males in Finland, 1966–90

Since our data are based on household income, we cannot adequately evaluate individual pension income. The only way to estimate differences in poverty rate by gender from these data is to look at elderly persons living alone, as has been done in Figure 4. According to this figure, the poverty rate among elderly men seems to have been somewhat higher up to the mid-1980s, whereafter the picture is reversed. Thus, in concordance with our hypothesis, the cuts in national pensions have had stronger impacts on the elderly women than men. Unfortunately, the sample of one-person elderly households is very small ($n < 100$), which means that the differences are not statistically significant and are only indicative.

The main lesson to learn from the inspection above is as follows: the transformation of the Finnish pension regime from a marginal to an institutional model has considerably reduced the poverty rate among the elderly—whether male or female. By 1990, the Finnish poor were not elderly and the Finnish elderly were not poor (see also Kangas and Ritakallio, 1995).

In addition to combating poverty, an important task for pension policy is the reduction of inequality in the economic well-being of the elderly. In a similar way as in measuring poverty, there is no one best way to assess inequality, but various inequality indices may be used (for a discussion, see Nygård and Sandström, 1981; Jäntti, 1993). A commonly-used measure is the squared coefficient of variation, CV^2 (see e.g. Nygård and Sandström, 1981, 406–407). Since it also has some useful decomposition properties, we have chosen to work with the CV^2. This index can conveniently be decomposed into separate components to assess the quantitative importance of each income source in the income package (see Methodological Appendix).

Developmental patterns from 1966 to 1990 in inequality among the elderly are displayed in Table 3. As a rule, inequality in all age groups is greater in 1966

TABLE 3

Inequality (CV Squared) Among Different Age Groups and Cohorts in Finland, 1966–90

Age Group	1966	1971	1976	1981	1985	1990
50–54	0.42	0.30	0.16	0.15	0.14	0.17
55–59	0.49	0.37	0.29	0.16	0.15	0.18
60–64	0.44	0.40	0.20	0.20	0.18	0.15
65–69	0.56	0.33	0.26	0.19	0.20	0.16
70–74	0.48	0.29	0.24	0.18	0.20	0.17
75+	0.36	0.48	0.25	0.18	0.18	0.17

Source: Authors' calculations from HBS data.

Note: Inequality is the squared coefficient of variation of disposable equivalent income for persons living in households whose head is within the specified age bracket.

and 1971 than at the later points in time. With the exception of the age bracket of 50–54 years, inequality in 1976 is greater than in the eighties, and inequality further decreased during the 1980s. This is true especially with reference to the age groups over the normal pension age of 65 years. Data for the three latest observation years do not indicate major changes in inequality between the age brackets.

In the same vein as in old-age poverty, we are also interested in cohort effects. As can be seen in Table 3, the degree of inequality among the oldest cohorts is higher than among the subsequent cohorts. Inequality patterns among the cohorts born after 1922 are almost identical, indicating that the maturation of the pension system has led to a stable distribution of income, which is more equal than what preceded it, and presumably, than what would have occurred without it.

In addition to the overall trends in inequality, we have calculated separate CV^2 values for each component in the income package, in order to differentiate the distributional profiles of the various income components. The results are shown in Table 4. Inequality both of disposable income and of gross income has steadily decreased—the only exception is a slight increase from 1981 to 1985. As regards the statutory pension programs, the distribution of national pensions is

by now the most even, followed by the private-sector employment-related pensions and the public-sector pensions. The distributional profiles of the non-statutory components of the income package (work income, income from self employment, capital income and occupational pensions) are the most unequal.

TABLE 4

INCOME INEQUALITY AMONG THE ELDERLY (65+ YRS) AND THE DISTRIBUTION OF INCOME FROM DIFFERENT SOURCES (SQUARED CORRELATION OF VARIATION) IN FINLAND 1966–90

Source of Income	1966	1971	1976	1981	1985	1990	Change
Disposable income	0.57	0.37	0.24	0.20	0.21	0.16	−4.7
Gross income	0.96	0.58	0.52	0.39	0.42	0.27	−4.7
Legislated income transfers							
1. National pension	0.48	0.37	0.37	0.36	0.29	0.32	−1.7
2. Private sector pensions	30.09	11.93	4.78	2.88	2.84	1.19	−7.7
3. Public sector pensions	9.87	10.05	8.61	5.30	5.19	3.49	−4.0
Legislated pensions (1–3)	1.00	0.94	0.89	0.46	0.46	0.27	−4.8
4. Other transfers	6.14	3.00	2.84	2.67	2.91	2.82	−3.1
Other than legislated							
Occupational pensions	17.25	13.47	45.81	124.43	67.86	84.27	5.5
Work income	6.40	4.42	5.62	9.62	14.15	17.44	3.9
Self employment	7.62	4.88	7.76	9.51	14.17	18.01	3.4
Capital income	15.48	9.13	17.04	11.19	11.73	6.25	−3.5

Source: Authors' calculations from HBS data.

Note: The inequality indices are calculated for equivalent income. Change is annualized percentage change.

The last column in Table 4 displays the annualized percentage changes from 1966 to 1990 in each component. It can be seen that the most dramatic change has taken place in the legislated private sector pension program. In 1966, income from this source was clearly biased in favor of high-income earners, whereas by 1990 it was one of the most egalitarian schemes—second only to national pensions. A reverse trend is visible in voluntary occupational pensions, which display the most uneven distributional profile, manifesting the highly exclusive character of these benefits. These results are consequences of two interwoven processes. First, in the 1960s private sector pension benefits for the majority of blue-collar workers were meager, whereas many white-collar workers with long employment in the same enterprise were entitled to better pensions.[7] Thus, the early benefits shared similar traits with the present private occupational pensions. Second, the gradual improvement of the private sector pension system has crowded-out the majority of older occupational arrangements (as indicated by Figure 3), and by now, the few existing occupational schemes are both very limited in their converage and generous in design, which inevitably leads to an unequal distribution of benefits (for a closer analysis, see Kangas and Palme 1992).

[7]This was mainly due to the special rules regulating the computation of the pension amount: 1) every year in employment from 1962 onwards accumulated pension rights by 1 percent (since 1975 by 1.5 percent); 2) employment history prior to 1962 was taken into consideration only if the claimant had worked continuously in the same enterprise. Since white-collar workers tend to have permanent and long-term employment contracts, in contrast to the situation of blue-collar workers, the middle class benefited from the calculation rules, which were not that favorable to the traditional working class.

In order to obtain a fuller picture of the distributional effects of the components in the income package, we have calculated the relative contribution of each component to overall income inequality, by weighting each component's redistributive effect by the component's relative share in the income package (see the methodological Appendix). The results are presented in Figure 5. Positive values indicate that the component in question positively contributes to inequality (increases inequality) and negative values pertain to negative contributions (diminishing inequality).

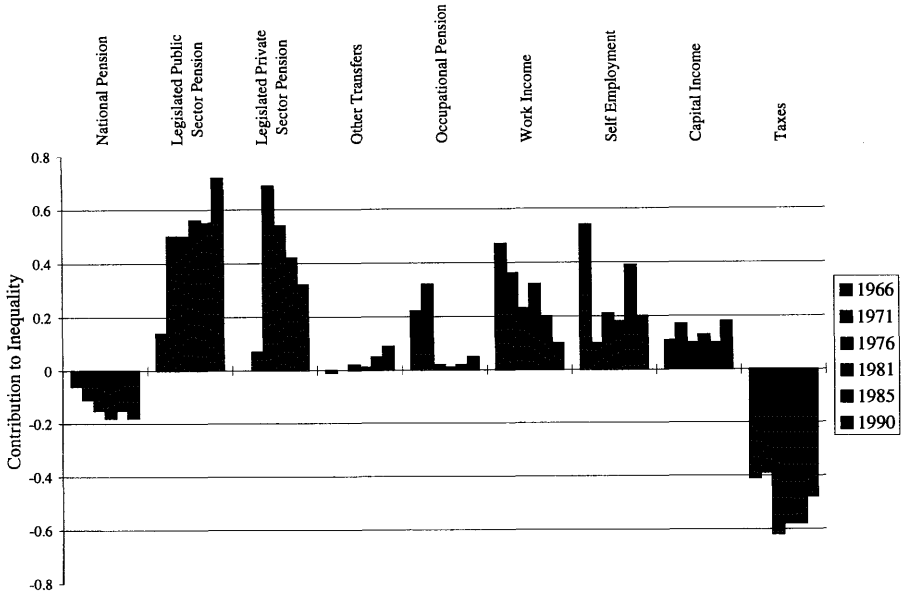

Figure 5. Contribution to Inequality of Disposable Income, Finland 1966–90

Two of the components of the income package are redistributive: national pensions and taxes. The redistributive effect of national pensions continuously increased from 1966 to 1981, but since then the redistribution through basic pension has stagnated to the 1981 level. Taxes have strong redistributive effects, but since the mid-1970s these effects have diminished. In tandem with the shrinking role of private occupational pensions and earnings as a source of income for the elderly, the contributions from these components to total inequality have declined. The patterns for the two statutory earnings-related pension schemes are interesting. The contribution to inequality from the public-sector employees' scheme has constantly increased over time, while the private-sector scheme shows a quite different pattern. At first the contribution dramatically rose, but after 1976 there is a continual decline, which indicates that the employment-related pension benefits are more equally distributed over employment categories than they used to be.

8. DISCUSSION

In the beginning of the 1960s, the level of Finnish social protection was comparatively speaking very low. The benefit level was inadequate and the number of

persons covered by social insurance was limited. Means-testing conditioned eligibility for statutory old-age pensions. With the exception of some categories of white-collar workers, employees were without income-graduated pensions. In social policy terms, Finland belonged to the group of countries with marginal social policy.

From the early 1960s, the character of the Finnish welfare state rapidly changed. The basic pensions were improved and the implementation of the universal income-related superannuation scheme considerably improved the economic well-being of the elderly. The Finnish pension regime shifted from marginalism to institutionalism.

Our analysis of poverty and income distribution shows that the shift of the pension regime had a profound impact on the economic well-being of the Finnish elderly. Up to the mid-1960s, poverty was a persistent problem among the elderly, but by 1990 the old-age poverty rate in Finland was one of the lowest among the OECD countries. Thus, the shift towards the institutional social policy model has substantially reduced old-age poverty. In a similar way, overall inequality among the elderly rapidly decreased from 1966 to 1976, although since then no major changes have taken place.

The results above clearly indicate that statutory universal programs in Finland have equalizing effects, despite the fact that there is a certain degree of built-in inequality in the schemes in the form of earnings-relatedness. In Finland, the statutory, completely earnings-related pension schemes have gradually crowded-out the more regressive components of the income package. Our results show that the non-statutory components are strongly biased in favour of high-income earners, and the expansion in those components would increase inequality among the elderly (cf., Korpi, 1992). It should be remembered that in principle, the extension of coverage would step by step diminish the inequalizing effect of the private occupational schemes, precisely in the same way as happened in the context of the private sector legislated pensions. However, this option would materialize only on the condition that the coverage of occupational pension is virtually universal, or at least very wide, and that the schemes treat all employment categories similarly. This is hardly the case. Empirical evidence from other countries shows that occupational benefits are directed to the middle rather than to the working class and to men rather than women, and to those in strong labour market positions rather than to those whose status is more marginal (e.g. Taylor-Gooby, 1991, 26–51).

There are presently severe pressures on the Finnish pension model: the greying of the population, improving pension levels, and the increasing numbers of pensioners are creating pressures to increase employers' and employees' contributions, while the deep economic recession has led to an intolerable level of unemployment and has deteriorated the balance of the government budget, so that the government sets more stringent economic limits to the financing of pensions and other public expenditure. In the early 1990s, the Center-Conservative government introduced a number of austerity measures which included freezing the indexation of pensions, increasing the pension age in early retirement plans, and introducing special taxes and social security contributions for pension recipients. Also direct cuts have been proposed in statutory pension benefits: the universal

national pension should not be paid to those receiving employment-related pensions; the target level in statutory income-related pensions should be lowered from 60 percent to 55 or even to 50 percent of income; income for pension purposes should be calculated from income for the last ten years or lifetime income instead of the present base of the four last years in employment; indexation of pensions should be changed so that benefits would no longer rise to match subsequent increases in wages. Some politicians have proposed a shift away from income-graduated statutary pensions back to flat-rate pensions. The most radical suggestions argue that statutory pensions should be targeted at the most needy, while the rest of the population should contract individual pension policies or negotiate with their employer on occupational labor market benefits. In sum, a shift from institutionalism back to marginalism is proposed. Thus, there is a fear that this shift would gradually result in the reverse of the greater social equality produced by the transformation from marginalism to institutionalism.

Methodological Appendix

There is no best way of decomposing income inequality indices by income source, just as there is no one best income inequality index. A commonly used measure is the squared coefficient of variation, CV^2 (see e.g., Nygård and Sandström 1981, 406–407). Since it also has some convenient decomposition properties, we choose to work with the CV^2. This index can conveniently be decomposed into separate components to assess the quantitative importance of each income source the CV^2 can be written

$$CV^2 = \sum_k \frac{\mu_k^2}{\mu^2} CV_k^2 + \sum_{j \neq k} \sum_k \frac{\mu_j}{\mu} \frac{\mu_k}{\mu} \rho_{jk} CV_j CV_k,$$

where μ_k and μ are the means of the k-th income component and disposable income, respectively, CV_k and CV are the coefficients of variation and ρ_k is the correlation between the j-th and the k-th component. The square of the ratio of the mean of the k-th component to the overall mean can be interpreted as the weight on the income inequality of the k-th component. One possibility to assess the contribution of the income components to changing inequality is to change the weights, the coefficients of variation and the correlations sequentially, and to register the percentage change in overall inequality at each stage. An alternative is to change the three sets of parameters—the means, the variances and the correlations between different income components—sequentially.

The problem with these approaches is that the magnitude of each effect depends on the order in which the parameters are changed. This follows from the fact that changing the parameters sequentially creates different income distributions. Other approaches are available. In this chapter we decompose the CV^2 into a sum of k terms:

$$CV^2 = \sum_k \frac{\mathrm{Cov}(y_k, y)}{\mu^2} = \sum_k \rho_k CV_k CV \frac{\mu_k}{\mu} = \sum_k S_k,$$

where ρk is the correlation coefficient between y_k, the k-th component and y, disposable income. Dividing through by CV^2, we get the relative contribution of each k components, s_k, to overall income inequality:

$$\sum_k \frac{S_k}{CV^2} = \sum_k s_k \equiv 1.$$

These relative contributions can then be compared across years to assess the importance of each income component. S_k and s_k are measures of the importance of a component for total CV^2. Looking at how these terms change reveals how the contribution of each separate source of income changes in total inequality. (See Jenkins, 1992 and Shorrocks, 1982).

We are also interested in another type of question, namely: What was the share of each component in the change in CV^2 from the first year we have data, t_1, to the second year, t_2? This can be studied by decomposing the change in CV^2 into separate parts. Define the annualized change as

$$\%\Delta = 100 \times \frac{CV_{t_2}^2 - CV_{t_1}^2}{CV_{t_1}^2} \cdot \frac{1}{\tau},$$

where $\tau = t_2 - t_1$. This can be decomposed into a sum of the k parts; in order to study $\%\Delta$ in terms of the percentage change in each components contribution, $\%\Delta\ Sk$, write

$$\begin{aligned}\%\Delta &= \sum_k 100 \times \frac{S_{k,t_2} - S_{k,t_1}}{S_{k,t_1}} \cdot \frac{S_{k,t_1}}{CV_{t_1}^2} \cdot \frac{1}{\tau} \\ &= \sum_k \%\Delta S_k \cdot s_{k,t_1},\end{aligned}$$

giving the contribution of each component to total change. The first part in the product is the annualized percentage change in the contribution and the second part is the average relative contribution of the k-th income component. Thus, the change in CV^2 is expressed as the percentage change of each components contribution weighted by the average relative contribution of that component.[8]

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[8]Note that the procedure assumes constant growth over time instead of, e.g., compound growth.

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