SOCIAL EQUALITY AND STATE-WELFARE-EFFORT
More income-equality, no more equality in quality of life

Ruut Veenhoven

Paper presented at the international sociological conference 'Towards the Good Society. Applying the Social Sciences' June 25 - 26, 1992 Rotterdam, The Netherlands

ABSTRACT
Social-equality is highly valued in present day Western society and a major goal of social policy. It is generally agreed that welfare provision by the state is a suitable mean to that goal and all Western nations are in fact welfare-states. Yet opinions differ on the level of state-welfare-effort required, in particular whether an extended welfare-state breeds a more equal society than a modest one. This difference figures prominently in the current discussion on slimming the welfare-state.

This paper examines whether high state-welfare-effort is indeed accompanied by greater social-equality. It compares 23 first world countries on (change in) social-security-expenditures and (change in) social-inequality. Social-inequality is measured in two ways:

Traditionally social-inequality is measured as difference command over scarce resources, typically socio-economic resources such as income, wealth and social prestige. Comparison of income-inequality between the countries shows less inequality in the most extended welfare-states.

Rather than as differences in such pre-conditions for a good life, social-inequality can be conceived as the difference in actually 'realized' quality-of-life and measured by dispersions in satisfaction with life (as observed in survey-data) and by dispersion in length-of-life (as observed in mortality statistics). These latter two measures are not related to state-welfare-effort: neither in a cross-sectional analysis nor in a longitudinal one appear.

It is concluded that high state-welfare does involve more money-leveling but does not equalize chances for a good life.

1 INTRODUCTION

1.1 The ideal of social-equality
The ideal of social-equality holds that all citizens get equal chances in life. In the minimum variant of this ideal 'equal chances' means 'fair competition' for scarce resources. Inequality is rejected if based on ascription, but accepted if it results from differences in achievement. Maximal variants of the ideal also require a decent life for everybody, irrespective of achievement. This requires a redistribution between the weak and the strong.

As long as human societies exist, there is a tension between the egalitarian and elitist ideals. Since the Enlightenment egalitarianism became dominant in Western society. The inequalities of feudal society were largely leveled by liberal revolutions. Subsequently the inequalities of capitalism were reduced by social-democratic reforms. Elimination of the most
smartening social differences did not lessen the appeal of the ideal. Social-equality is still high on the political agenda.

The goal of social-equality is pursued by several means: redistribution of power (a.o. by the introduction of universal suffrage), redistribution of knowledge (a.o. by compulsory education) and redistribution of income (a.o. by social security). The latter approach is central in the so called 'welfare-states'.

1.2 Equalitarian aims of the welfare-state
Welfare-states are nation-states that guarantee their citizens a minimum level of living, by providing them income supplements and/or services. As such welfare-states typically endorse the maximum definition of equal chances. They aim at a decent life for all citizens: also for the losers in the fair competition for scarce social resources. Typically welfare-states also intervene in that competition in favour of the weak. They do so by regulating the competition (f.e. safety standards, minimum wages), by enhancing competitive chances of the weak (f.e. free education, positive action) and by creaming the profits of the strong (f.e. progressive taxation).

All modern western nations endorse such policies. Hence all present day western nations can in fact be called welfare-states. Yet there are large difference in degree of state-involvement. In that sense one can say that some of the welfare-states are more welfare-state than others. A better use of words is saying that welfare-states differ in 'state-welfare-effort' or that the welfare-state is more 'extended' in some countries than in others.

1.3 Claimed effects of state-welfare-effort on social-equality
It is generally agreed that the emergence of the welfare-state has contributed significantly to the reduction of social-inequality in Western societies. Yet opinions differ on, whether extended welfare-states produce a more equal society than minimal ones. On the left side of the political spectrum the dominant opinion is: 'the more state-effort, the more equality'. On the right side this belief is questioned. Some New-Right radicals even claim that benevolent state-welfare creates social-inequality in the long run rather than reduces it.

This difference figures prominently in the current discussion about slimming of the welfare state. Opponents foresee that cuts on welfare-expenditures will inevitably create new cleavers, even in extended welfare-states. They claim that 'poverty' is coming back in affluent society and warn for a growing split ('two-third society', 'new underclass'). On the other hand advocates of a slimmer welfare-state claim that cut backs are necessary to maintain a basic social safety-net, which they see as more crucial for social-equality in the long run. They further object that 'new' poverty is not as bad as 'real' poverty used to be, and less permanent a matter to create a new underclass.

*The positive view* The hypothesis that broad welfare-states provide a more equal society than thin ones draws on the following arguments:

Firstly, social-equality is seen as a matter of correcting the evils of capitalism. That correction would best be achieved through the redistribution of incomes, largely by means of social-security and other welfare expenditures. The greater the share of the national income used for that purpose, the less inequality remains.

Secondly, the nation-state is seen as the best institution to do that job. Only the state has the necessary power to collect the money from the reluctant rich. When redistributing the money the state is most likely to aim at equality, democratic governments being dependent on mass vote. Lastly, a prominent role of the state in welfare production and distribution is expected to foster feelings of solidarity and security, which benefit a more egalitarian culture.
The negative view  The following arguments are advanced in favor of the rival hypothesis that
high state-welfare-effort does not create a more equal society.

Firstly, it is doubted that more welfare simply makes more equality. Welfare is seen to be
subject to the law of diminishing returns, basic arrangements producing more equality per unit
investment than added 'luxury'. Present 'fat' welfare-states could therefore be slimmed without
any substantial loss in equality.

Secondly, the superiority of the state as a welfare-producer is called into question. The
state would be insensitive to consumer demand and provide the wrong services in too large
quantities. The state would also produce and distribute less efficiently. Its capacity would be
limited by fiscal problem. A mixed system would therefore produce more welfare for the same
price and would thereby work out equally egalitarian.

Thirdly, it is claimed that extended welfare-states tend to create new inequality
unintended, the combination of benevolent arrangements and lenient control leading people into
a 'poverty traps'. Frugal state-care or welfare provision by non-state institutions, would involve
more incentives for achievement and would not invite to resignation to permanent
underclass position

1.4 Research question
Probably all these arguments have some reality value. State-welfare-effort can exert both positive
and negative effects on social-equality. It is not possible to reason out how these effects will
interact and counter-balance. The issue can better be settled empirically, by assessing the net
result. Therefore this paper checks whether or not high state-welfare-efforts results in greater
social-equality. The null-hypothesis is that it does.

2 METHOD
This question is answered by comparing social-inequality in countries that differ in degree of
state-welfare-effort. It is assessed: 1) whether low effort is accompanied by high inequality; 2)
whether increase in welfare effort was followed by a reduction in inequality, and 3) whether this
decrease was more pronounced in the countries where state-welfare expanded most.

2.1 Countries
The analysis is restricted to the so called 'first world' countries. These are relatively rich
industrialized nations that all provide some state-welfare, but vary in degree of state-effort. The
'second world' (former communist) countries are not included in the analysis. Though these
nations are also welfare-states, their situation is too different to allow meaningful conclusions.
Third world countries are left out because most of these states hardly provide any welfare.

At this moment the world counts some 30 first world countries. On 23 of these I found
comparable data about both state-welfare-effort and social-equality. These countries and their
characteristics are enumerated in the data matrix on scheme 1.

2.2 Measures of state-welfare-effort
There are several ways to compare the degree in which states provide social services to their
citizens: there are legal and financial indicators.

Legal indicators
As states tend to operate on the basis of laws, one can make up an inventory of the various legal
services in each country and assign weights to their scope and range. As yet only two indicators
of this kind are available for a sufficient number of countries. The first is Estes' Welfare Index
which is in fact based on the year a country adopted its first laws. (Estes 1984: 24) Early
adaptation may go with more current input, yet this is not necessarily do, the case of England is
an example of the contrary. Hence this indicator clearly has its limits. The second legal indicator
is the 'demodification-score' by Esping-Andersen (1990), it reflects the scope of social security entitlements in terms of accessibility, generality, level of allowances and collective share in financing.

Financial indicators
Another possibility is to compare the amount of money states spend on social services. This is more simple in theory than in practice.

A first problem is to decide which entries in the national account are most indicative. A common choice is to focus on one fairly well defined entry such as 'health' or 'housing', assuming that countries that spend a lot in this area will spend a lot on other social services as well. Yet this is often not the case: e.g. the U.S.A. spends a great deal on education, but little on social security. It is better to add up the expenditures in some main fields: e.g. housing, education, health and social security. The problem with this method is that it requires identical definitions and reliable data in a sufficient number of countries. One can bypass that problem by taking a more global view and sum up all the income transfers. The latter method emphasizes the redistributive aspect of the welfare-state.

Another approach is to depart from total government expenditure and detract expenditures that do not concern social services, such as defense and economic investments. A disadvantage of this method is that one cannot strip away all the non-service expenditures, particularly not because many entries in the national account book are of a mixed character. On the other hand this approach avoids many pitfalls of definition such as in the case of Sweden where the unemployed get temporary jobs instead of social benefits and where social security expenditures are therefore relatively low.

None of these indicators stands out as the best. Hence all will be include in the analysis.

A second problem is distinguishing between social services produced by state and by non-state organisations. In first world countries it is fairly well possible to distinguish between state and market sector, even though the classification of semi/government corporations involves difficult and sometimes even arbitrary decisions. The OECD statistics provide a well considered classification on which we will rely.

In second world countries such a distinction is hardly possible however. This is one of the reasons for not including these countries in the analysis.

A third problem is to compare national accounts. Entries are not always identical. This is another reason for dropping second world countries. We have more or less comparable statistics of first world countries only. Even for these countries the available statistics do not allow the comparison of all major social service expenditures. Detailed data are available for only twelve countries (Flora 1983), which is too small a number. As a result we cannot use a sum score of specific service expenditures. Consequently we must do with more global categories of government expenditure.

Six different indicators were used in the analysis. The data reported in this paper are based on social security expenditures.

2.3 Measures of social (in)equality
Above social-equality was defined as equal life-chances. Equality of life-chances between citizens in a country can be measured in two ways: by equality in resources and by equality in results. 'Resources' and 'results' are obviously related matters: resources mostly help to yield
results. Yet these matters are not the same. Resources may be irrelevant for certain goals or may be used inappropriately. Analogous concepts in economy are 'capital' and 'profit'.

2.3.1 **Inequality in resources**

Measuring social-inequality by inequality in command over resources involves two problems:

The first problem is that one can at best measure some differences in resources, but never all the differences that possibly matter for the quality of life. That problem is analogous to assessing the health of persons: single symptoms such as coughing or fever mostly do not characterize global health sufficiently.

In this line the second problem is that we do not know which resources are most crucial for a good life. Hence it is difficult to select a few differences that validly indicate wider social inequality. The current opinion in this field seems to be that financial resources are most decisive for the quality of life: indicators of financial-inequality being the most commonly used.

The third problem is that the relevance of most resources is obviously variable across persons and social categories. Money income matters less for an idealist than for a materialist and is less relevant for a single student than for a bread-winner.

These problems can be by-passed in the alternative approach of measuring social-inequality by inequality in resulting quality-of-life.

In the context of 'life-chances', the concept of 'resources' refers to preconditions for a good life. An other word for the same is (quality of) living-conditions. In discussions on social-inequality the emphasis is typically on socio-economic resources such as 'income', 'wealth', 'power' and 'social prestige'. A country is considered less equal the greater the gap between rich and poor, the greater the power difference between rulers and ruled and the longer the social prestige-ladder.

It is difficult to compare countries with respect to inequality in political power and social prestige. Financial differences are better comparable. Hence the most current measure of socio-economic inequality is income-inequality.

Income-inequality in nations can be measured at the extremes of the income distribution: for example by the percentage of the total income that is earned by the richest 10% or by the percentage of the population below the poverty line of half the modal income. The are also measures that consider the entire income distribution. One of these is the Gini-coefficient, which will be used here.

2.3.2 **Inequality in quality-of-life.**

Social-in-equality can also be measured by the apparent result of social allocation. If in a society some people pine away while others flourish, there is undeniable inequality: even if we do not know whether and which differences in preconditions (resources) are responsible for this variation in results (quality-of-life).

The degree to which people actually flourish is usually referred to as (global) 'quality-of-life' or 'well-being'.

A problem with these terms is that they are also used for command over resources (beneficial living conditions). To avoid confusion with these presumed pre-conditions for a good life I will speak of realized quality-of-life or well-being.

The degree to which people flourish can be measured in several ways: one way is to focus on their physical prosperity, another to look at their psychological well-being.

2.3.2.1 **Inequality in length-of-life.**

The degree to which people flourish physically can be measured in several ways: by performance abilities, by absence of impairments and by subjective health-feeling. Length-of-life also provides a good indication. Only on that latter indicator are comparable data available. All first
world countries have fairly reliable mortality statistics which record the age at which people die. Obviously not everybody lives equally long. Some die at age 40 and some at age 80. Like in the case of income, this inequality can be expressed in a Gini-coefficient. Comparison of these scores between countries reveals that longevity is less unequally distributed than income. **Scheme 1.** shows that Gini-coefficients vary between .10 and .13, whereas income inequality in the same countries varies between .27 and .41. Japan stands out as the country with the lowest inequality in length-of-life: (Gini .101). The Japanese not only life long, but also most equally long.

Among the first world countries Canada scores worst (Gini .128). Inequality in length of life was considerably greater in second world countries around 1960: f.e. .20 in Yugoslavia and .17 in the former USSR. (Data not shown, see Ultee 1988).

### 2.3.2.2 Inequality in satisfaction-with-life.

Like physical well-being psychological well-being can also be measured by performance, impairment and subjective satisfaction. Measures of performance and impairment are very problematic and are hardly comparable across nations. Measures of subjective satisfaction are better usable, in particular measures of life-satisfaction. Elsewhere I have reviewed the validity of survey questions on this matter and their comparability across nations (Veenhoven 1984, 1989).

**Life satisfaction** Life-satisfaction can be measured simply by asking people how much they appreciate their life all in all. When such a question is posed to a representative sample of the population in a country we can asses the level of satisfaction in that country by computing the average score and the inequality in happiness by considering the dispersion of the scores, as measured by a standard-deviation.

**Suitable questions** The dispersion of life satisfaction in countries is best visible in questions that provide a broad range of answer categories. The best available item in this respect is Cantril's (1965) 11 point 'ladder rating'. This item not only provides the broadest rating scale, but it also bypasses a main semantic problem. The questions does not use terms like 'happiness' or 'life-satisfaction', but invites to a rating of present life on a ladder ranging from the 'best possible' to the 'worst possible life'. This item has been used in two world surveys in 1960 (Cantril 1965) and 1975 (Kettering/Gallup 1976). Unfortunately the distributions of the 1960 survey are not reported in full detail, because Cantril grouped the scores in three categories. The 1975 survey sampled parts of the world rather than nations. A similar question has figured in the World Value Study in the early 1980's: however this study concerned 12 first world nations only, which is too limited a number for a fruitful exploration.

A broader nation set is available if we turn to questions that invite the respondent to rate his happiness on a 3 point scale. such questions are typically formulated as 'Generally speaking; how happy would you say you are: would you say you are very happy, pretty happy or not too happy?' Around 1980 such questions have figured in surveys in 28 countries. This is more than any other item. Yet this item has some disadvantages: Firstly, the range is short. Secondly, the word happiness and its translations may bias the responses. Thirdly, the formulations are not quite identical.

Faced with the choice between perfect data on too few countries and less than perfect data from a sufficient number, I opted for the latter.

**Measure of Dispersion** Inequality in happiness can be measured by several statistical measures of variance. There are measures for the degree to which distributions are bi-modal, for the degree
to which they are symmetric and for their spread (flatness). For the purpose at hand here measures of ‘spread’ are the most appropriate.

The most current measure of spread is the standard-deviation, which is the root of the average squared difference from the mean. Standarddeviations were computed for each of the 28 countries. See once more scheme 1. (simple standarddeviation)

A problem with this measure of spread is that it is not independent of the mean of the variable concerned. The possible variation in the standarddeviation is greater when the average score is in the center of the possible range, than when at the extremes. The possible variation of the standard deviation on the three step happiness scale used here is depicted by the shaded field in the diagram on scheme 2a. In scheme 2b the observed standard deviations are plotted in. One can now see that the possible variation on the y-axis is much smaller in the case of the most happy and unhappy nations (respectively Netherlands and India). The raw standard deviations in Germany and the Netherlands are about the same (respectively .54 and .56). Yet when the relative position on the possible range is considered the Dutch are clearly more close to the maximal equality possible at their level of happiness. This statistical-artifact can be corrected by transforming all standard deviations to a score on the same range, f.e. by 'stretching' the shorter ranges at the extremes to the 0 - 1 range at the median. This mathematical artifice produces the corrected standard-deviations in scheme 1.

Corrected standard deviations were computed by means of the following formula:

\[
\text{corrected SD} = \frac{\text{uncorrected SD} - \text{minimum possible SD}}{\text{maximum possible SD} - \text{minimum possible SD}}
\]

where minimum possible SD = \(0.5^2 - (\text{mean} - 1.5)^2\) (if mean <2)

or \(0.5^2 - (\text{mean} - 2.5)^2\) (if mean >2)

maximum possible SD = \(1^2 - (\text{mean} - 2)^2\)

\[\text{Inter correlations}\]

The two indicators of equality in quality-of-life appear hardly related statistically (\(r = +.11\) ns in a sample of 17 nations). Apparently they represent two independent aspects of equality.

3 ANALYSIS

3.1 Checks for spurious distortion

Social-inequality is nations depends on more than state-welfare-effort alone. Other reputed determinants are economic development and political democracy. Differences in these respects between the nations considered may veil the unique effect of state-welfare on social-equality. Therefore, partial correlations are computed, controlling wealth and democracy. Given the size of the sample, these variables cannot be controlled simultaneously.

Economic wealth of the nations is measured by the 'Real' Gross Domestic Product per capita (RGDP). This is a better measure than the simple GNP. It measures actual buying-power rather than more money. Data were drawn from Summers & Heston (1988).

Political democracy is measured by the degree to which laws and law-enforcement in countries guarantees political rights and civil liberties. Data were drawn from Gastril(1987) and cover the years 1973 - 1986.
3.2 Cross-sectional and longitudinal
A first test of the null-hypothesis is obviously to check whether social-inequality is indeed lower in the nations where state-welfare-effort is most extended. However that cross-sectional analysis cannot settle the issue definitively. It is possible that a high level of state-welfare does reduce inequality, but that this progress is not visible in current equality scores because state-welfare expanded most in the initially most unequal societies.

Therefore the cross-sectional analysis is completed with a longitudinal one. Change in state-welfare-effort during the last decades (growth in all cases) is crossed with change in social-inequality in that period. The period considered is 1950 - 1980. Unfortunately data on change in social-equality are not complete.

4 RESULTS

4.1 State-welfare-effort and income-inequality

Cross-sectional analysis The scattergram on scheme 3 presents the relation between social-security-expenditures and income-inequality around 1980. Incomes tend to be more equally distributed in countries that spend more on social-security. The relationship is modest however: \( r = -0.43 \) (p<05).

The most contrasting cases in the scattergram are The Netherlands (highest welfare, lowest inequality) and Portugal (lowest welfare, highest inequality). Sweden and the USA differ less than most would expect; though very different in state-welfare-effort, these countries differ hardly in income equality. Japan is an exception in this pattern: in spite of state-welfare incomes are quite equally distributed in this country.

Longitudinal analysis I could not trace comparable trend-data in the countries considered here. Hence it is not possible to establish whether the last decades extension of social-security was accompanied by a decline in income-inequality in these countries.

4.2 State-welfare-effort and equality in quality-of-life

4.2.1 Equality in satisfaction-with-life

Cross-sectional analysis In the scattergram on scheme 4 social-security expenditures in 1980 are crossed against the dispersion of life-satisfaction in the same period. Hardly any relation emerges. The trend is contrary to prediction, inequality being slightly greater in the countries that spend most on social security (\( r = +0.18 \) ns). Controls for wealth and democracy do not change that picture. (Data not shown).

Use of the other indicator of state-welfare-effort (government expenditures) produces a non-significant relations as well, but now in the predicted direction (\( r = -0.21 \) ns). However this slight effect disappears entirely after control for wealth and democracy. (Data not shown)

The correlation whirling around zero, it must be concluded that these variables are essentially unrelated.

Longitudinal analysis Data on change in dispersion of happiness during the last decades are available for only eight countries. See scheme 1. In five of these the spread of happiness remained at the same level (Italy, Netherlands, Norway, UK, USA), in two countries the dispersion increased (France, Germany) and in one country it decreased substantially (Australia). A look at scheme 5 learns that these changes do not correspond with change in social security expenditures in these countries.
4.2.2 *Equality in length-of-life*

**Cross-sectional analysis** The scattergram on scheme 6 crosses dispersion of longevity with social security expenditures. Though the trend is in the expected direction, there is no significant correlation: \( r = -0.14 \) (ns.)

Typical contrast are on the left side of the scattergram are Canada and the USA (low state-welfare, high inequality) and at the right side: Sweden and The Netherlands (high on welfare, low on inequality). Japan is again the exception with low state-welfare but all the same the lowest inequality of all.

Use of other indicators of state-welfare-effort do not yield other results. Neither does control for wealth of the nation and political democracy. (Data not shown)

**Longitudinal analysis** As noted above inequality in length-of-life has decreased somewhat in all Western nations during the last decades. Largely but not exclusively as a result of lower infant mortality. Scheme 7 crosses these decreases with increases in social-security-expenditures. This time the data are not presented in a scattergram. Leveling of differences in longevity is more likely the greater the inequality at start: countries that had already achieved low infant mortality can progress less. Therefore the countries are considered with respect to their start position: low inequality, medium inequality or high inequality.

Inspection of the countries that had already achieved low inequality in 1960 shows greater progress in the countries that expanded state-welfare most. Though not very sizable, the differences are consistent.

At the medium level the picture is different however. The progress is somewhat greater in the countries that increased their social security expenditures least (Australia and Switzerland).

Among the countries that had the highest inequality at start the greatest reduction in inequality is also achieved by the country that increased its social security expenditures least (Japan). Unfortunately there are no big spenders in this category.

The conclusion is again that there is no clear statistical relationship.

5 DISCUSSION

The questions and findings are summarized in scheme 8. The data suggest that a prominent role of Father-State in the provision of welfare does result in a more equal distribution of income. Other socio-economic resources not measured here are probably more equally distributed in the most extended welfare-states as well. However, in spite of this success a relatively high level of state-welfare appears not contributive to greater equality in wider quality-of-life. This result will appear counter intuitive to most of us, in particular because the current discussion focuses so much on balancing the economic necessity of welfare-cuts against evils of greater inequality. Hence two questions force themselves to the reader. 'Is that really true?' and 'How can that be?'

5.1 Limitations of the data

There are several reasons to question these results. Doubts can be raised about sample, indicators and analysis.

**Sample size** The sample of nations used here is maximally 22 and in several analyses smaller. As a result a few exceptional cases can distort a general trend. Japan is in fact such a case. The small number also sets limits to the control for other factors that may affect social-inequality. I could filter away the effects of 'wealth' and 'democracy' separately, but not simultaneously.

There are some things to keep in mind before one rejects the results on these grounds. The first is that this sample is greater than any other considered for this issue before. The second
thing is that the sample can not be extended very much. At best we can gather some thirty cases. There are simply no more first world countries. Extension to other types of nation inevitably reduces the significance of the results for the ongoing discussion on the first-world welfare-state.

Indicators There are more indicators of state-welfare-effort than the expenses for social security used here. Others indicators that stress other aspects of state-welfare might yield different results. A preliminary analysis with five different indicators (not reported here) shows indeed that countries do not score identically and produce rather scattered correlations with the different indicators of social-equality. However no other measure of state-welfare-effort appeared to produce consistent relationships. All the correlation whirl around zero.

There are several reasons to questions the validity of the measure of inequality in satisfaction-with-life. There are limitations to the measurement of life-satisfaction as such and the measure of dispersion (corrected standard deviation) is not ideal. For both reasons use of Cantrils' (1965) ladder-rating of present life is preferable. For the time being we have no alternative however. I see no particular limitations to the indicator of inequality in length-of-life used.

One can also question the relevance of the very concept of equality in quality-of-life. An objection can be that equality in this sense can exist in the face of sharp inequalities in command over scarce resources. That can be the case in a totalitarian society where the rulers happen to be equally unhappy and unhealthy as the ruled. That equality in misery would not render the correction of differences in power, income and esteem less desirable. There is certainly some truth in that argument, yet the judgment is less easy if in that totalitarian society everybody is very happy and healthy. The conclusion is even less certain in the situation at hand here: a democratic society with historically unprecedented low inequalities in socio-economic resources combined with high equality-of-life (at an unprecedentedly high level). Why bother about remaining socio-economic inequalities if they do not harm?

Timespan The effect of state-welfare on the distribution of incomes is probably rather direct and is therefore likely to appear in cross-sections and follow-ups over some years. Possibly the effects on dispersion of life-satisfaction and manifest themselves only after decades. If so, these effects could not show-up in the cross-sectional comparisons and possibly only imperfectly in the longitudinal analyses. In fact a sequential analysis is most appropriate in that case: increase of state-welfare in one decade and subsequent decrease of inequality in later decades. The available data do not yet allow such a comparison.

Control variables Social-inequality in nations obviously determined by many other things that may veil the effects of state-welfare-effort in the statistical relation. Control for economic prosperity and political democracy did not reveal a hidden relationship. Possibly others spurious factors disguise a relationship. I see no plausible candidates however.

All these methodological limitations could invite to the disregarding of these disturbing results. Yet that leaves us to the uncertainties of theoretical speculation, which does not provide very solid ground.

5.2 Explanations Greater equality in income The observation that extended welfare-states distribute incomes more equally than limited ones affirms the 'leftish' arguments enumerated above. Apparently the state is more able and more willing to redistribute income than other welfare-institution. This does not mean that the right-wing counterarguments do no apply at all. The small size of the differences
and the modest correlation does suggest that negative effects are involved as well indeed.

No greater equality in quality-of-life. The fact that greater income-equality in extended welfare-states is not accompanied by greater equality in happiness and longevity suggests that income differences do not matter for happiness and health in present day first world nations. This is in fact observed in many studies in this field.

Survey studies on life-satisfaction typically show low correlations with socio-economic status variables such as income and education. In several countries these correlations have dropped to zero in the last decades (Veenhoven 1984: 197-204). Studies on health and mortality do show persistent socio-economic differences, but poorer health at the bottom of the social ladder is not so much a result of buying power, but rather of lifestyle and selective social mobility. The lessened importance of high income and social prestige is also reflected in surveys on life goals and perceived sources of happiness. Matters of money and career no longer figure among the top priorities.

Presently, happiness and physical health depend more on other pre-conditions: in particular on social support in primary networks. If there is any new underclass in Western society this is the singles. This category has less 'chances' for intimate support and is hence more vulnerable for loneliness, depression and bad health. Singles take less pleasure in life on an average and die at an earlier age (Veenhoven 1989). This deprivation is partly the result of social organisation (decline of public life, closure of family) and partly of personal abilities (modern intimacy requiring f.e. both empathy and assertiveness). These matters are largely beyond the control of the welfare-state.

Together with the general rise of affluence, the emergence of state welfare seems to have eliminated real poverty in modern Western society. Income above that level is obviously welcomed, but does not add substantially to the 'flourishing' of people. Extra income provided by benevolent welfare-states are no exception to that.

6 CONCLUSION
All modern Western nations states try to reduce social-inequality and for that purpose all provide various welfare services. The nations where the welfare-effort of the state is greatest realized a greater reduction of income-inequality. However, these nations do not stand out by greater equality in realized quality-of-life as measured by the dispersion of life-satisfaction and longevity. Probably this is because income differences hardly affect life-satisfaction and health any more, since economic affluence and minimal social security guarantee a sufficient material level of living for everybody. This suggests that extended welfare-states can be slimmed slightly without risking painful inequality.
## Scheme 1 Data Matrix

Characteristics of 23 First World Countries, 1950 - 1980

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>Expenditures (in % GNP)</th>
<th>Social Security</th>
<th>Inequality in realized-life quality</th>
<th>Inequality in income (Gini-coefficient)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>dispersion of satisfaction-with-life</td>
<td>dispersion of length of life (Gini-coefficient)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(corrected standard deviations)</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>10.5</td>
<td>+ 4.0</td>
<td>.24</td>
<td>-.46</td>
</tr>
<tr>
<td>Austria</td>
<td>24.2</td>
<td>+ 6.7</td>
<td>.77</td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td>25.5</td>
<td>+ 10.5</td>
<td>.42</td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>14.2</td>
<td>+ 4.2</td>
<td>.18</td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>29.5</td>
<td>+ 15.4</td>
<td>.60</td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>21.8</td>
<td>+ 15.4</td>
<td>.60</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>28.9</td>
<td>+ 13.7</td>
<td>.45</td>
<td>+.40</td>
</tr>
<tr>
<td>Germany (West)</td>
<td>25.2</td>
<td>+ 8.4</td>
<td>.52</td>
<td>+.37</td>
</tr>
<tr>
<td>Greece</td>
<td>16.7</td>
<td>+ 1.6</td>
<td>.40</td>
<td></td>
</tr>
<tr>
<td>Iceland</td>
<td>-</td>
<td>-</td>
<td>&quot;</td>
<td>-</td>
</tr>
<tr>
<td>Ireland</td>
<td>22.3</td>
<td>+ 10.7</td>
<td>.40</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>-</td>
<td>-</td>
<td>.33</td>
<td>+.03</td>
</tr>
<tr>
<td>Japan</td>
<td>11.7</td>
<td>+ 4.8</td>
<td>.51</td>
<td></td>
</tr>
<tr>
<td>Luxembourg</td>
<td>-</td>
<td>-</td>
<td>.37</td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>31.3</td>
<td>+ 16.4</td>
<td>.33</td>
<td>-.15</td>
</tr>
<tr>
<td>New Zealand</td>
<td>16.6</td>
<td>+ 2.1</td>
<td>&quot;</td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td>20.8</td>
<td>+ 11.3</td>
<td>.27</td>
<td>-.08</td>
</tr>
<tr>
<td>Portugal</td>
<td>10.4</td>
<td>-</td>
<td>.27</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>17.4</td>
<td>-</td>
<td>.57</td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td>19.7</td>
<td>+ 6.5</td>
<td>.47</td>
<td>-.08</td>
</tr>
<tr>
<td>USA</td>
<td>13.4</td>
<td>+ 5.2</td>
<td>.33</td>
<td>-.14</td>
</tr>
<tr>
<td>Sweden</td>
<td>32.8</td>
<td>+ 18.6</td>
<td>.18</td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>15.1</td>
<td>+ 5.9</td>
<td>.32</td>
<td></td>
</tr>
</tbody>
</table>

Data: Expenditures Social Security: Gordon 1988
Dispersion of life-satisfaction: Veenhoven 1991
Dispersion of length of life: Ultee 1988
Scheme 2

Spread of happiness and level of happiness in 28 nations around 1980

a Possible variation of the standard deviation

b Actual distribution of the standard deviation
Scheme 3


$r = -.43 \quad p < .05$

social security expenditures (in % GNP)

AUS Australia  GR Greece  NOR Norway
Austria  IC Iceland  POR Portugal
BEL Belgium  IRE Ireland  SP Spain
CAN Canada  IT Italy  USA United States
DAN Danmark  JAP Japan  UK United Kingdom
FIN Finland  LUX Luxemburg  SWE Sweden
FR France  NL Netherlands  SW Switzerland
GER Germany  NZ New Zealand
scheme 4
State-welfare and inequality in satisfaction-with-life
in 23 first world nations +/- 1980

\[ r = +.18 \text{ (ns)} \]

social security expenditures (in \% GNP)

AUS Australia  GR Greece  NOR Norway
A Austria  IC Iceland  POR Portugal
BEL Belgium  IRE Ireland  SP Spain
CAN Canada  IT Italy  USA United States
DAN Danmark  JAP Japan  UK United Kingdom
FIN Finland  LUX Luxemburg  SWE Sweden
FR France  NL Netherlands  SW Switzerland
GER Germany  NZ New Zealand

Pearson's $r = +.041$ (ns)

growth in social security expenditures (in % GNP)
State-welfare-effort and inequality in length-of-life in 19 first world nations 1983

$r = -.14$ (ns)
# Scheme 7
Decline of inequality in length-of-life and growth of social-security expenditures in 18 first world nations 1960 -1980

<table>
<thead>
<tr>
<th>Inequality at start (1960)</th>
<th>Decrease of inequality in life expectancy 1960 -1980 (difference in Gini-coefficients)</th>
<th>Growth social security expenditures (in % GNP)</th>
<th>low = &lt; 5 %</th>
<th>middle = 5 -10 %</th>
<th>high = &gt;10</th>
</tr>
</thead>
<tbody>
<tr>
<td>low (Gini &lt; 0.130)</td>
<td>-0.006 New Zealand</td>
<td>-0.005 UK</td>
<td>-0.015 Denmark</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-0.017 Netherlands</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-0.018 Norway</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-0.018 Sweden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>middle (Gini 0.131-149)</td>
<td>-0.029 Australia</td>
<td>-0.025 Switzerland</td>
<td>-0.017 Belgium</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-0.013 France</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-0.023 Ireland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>high (Gini &gt; 0.150)</td>
<td>-0.022 Canada</td>
<td>-0.035 Germany (West)</td>
<td>-0.037 Finland</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-0.036 Italy</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-0.034 Austria</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-0.027 USA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Summary of results

**QUESTIONS:**  

**ANSWERS by kind of social-inequality:**

<table>
<thead>
<tr>
<th>Inequality in resources</th>
<th>Inequality in realized quality-of-life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differences in income</td>
<td>Differences in satisfaction-with-life</td>
</tr>
<tr>
<td></td>
<td>Differences in length-of-life</td>
</tr>
</tbody>
</table>

**cross-sectional**

- More state-welfare, less inequality?  
  - YES
  - NO
  - NO

**longitudinal**

- Increased state-welfare, decreased inequality?  
  - ?
  - NO
  - NO