WELLBEING IN THE WELFARE STATE
Level not higher, distribution not more equitable

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Summary
'Wellbeing' and 'welfare' are often bracketed together, in particular wellbeing and state-welfare. The level of wellbeing is believed to be higher in welfare states, and its distribution more equitable. This theory is tested in a comparative study of 40 nations 1980-1990. The size of state welfare is measured by social security expenditure. The wellbeing of citizens is measured in terms of the degree to which they lead healthy and happy lives.

Contrary to expectation there appears to be no link between the size of the welfare state and the level of wellbeing within it. In countries with generous social security schemes people are not healthier or happier than in equally affluent countries where the state is less open-handed. Increases or reductions in social security expenditure are not related to a rise or fall in the level of health and happiness either.

There also appears to be no connection between the size of state welfare and equality in wellbeing between its citizens. In countries where social security expenditure is high, the dispersion of health and happiness is not smaller than in equally prosperous countries with less public sector spending. Again increases and reductions in social security expenditure are not linked with a rise or fall in equality in health and happiness among citizens.

This counter intuitive result raises five questions: 1) Is this really true? 2) If so, what could explain this lack of effect? 3) Why is it so difficult to believe this result? 4) How should this information affect social policy? 5) What can we learn from further research?

1 INTRODUCTION

All human societies provide various welfare services to members who cannot earn their keep. In the process of modernization much of these services were monetarized and came under control of the state. We see this most clearly and in welfare arrangements for the unemployed, the sick and the elderly. This societal pattern is called 'welfare state'.

It is often assumed that this development contributes to human wellbeing. The level of wellbeing is alleged to be higher in welfare states and its distribution more equitable. In this view, wellbeing will be higher and more evenly distributed in 'advanced' welfare states, such as Sweden, than in welfare 'laggerds' such as the USA. Likewise, slimming down state welfare will reduce the wellbeing citizens and increase disparities in wellbeing. Again the USA is often used as an example. Cuts in its meager social provisions are alleged to have reduced the wellbeing of

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Americans and to have widened the differences in wellbeing. Negative references are made to 'the American social jungle'.

This notion is quite current in public opinion. A majority of the Dutch believe that the social security system makes that people live happier[1] (VanOorschot et al 1999). The idea is also common in the political discourse, where the word welfare often refers to both service-input and wellbeing-output[2]. In scholarly writings the belief that welfare fosters wellbeing appears typically in explanations of illbeing, suffering and disease being often attributed to welfare deficits. The idea is also implicit in writings that depict the goal of welfare as meeting human needs. Most of the explicit statements on wellbeing outcomes of state welfare concern health and longevity. See f.e. Bartley et al (1997) and Becker & Lauterbach (1997).

This belief is not just a theory. It is one of the ideological foundations of the welfare state, and a mayor legitimation of resistance against reform. As such it worth probing its reality value. Though the theory is not undisputed theoretically (see § 6.2), it has never been checked empirically. This paper reports a first series of tests.

Approaches

There are two ways of discovering whether state welfare is really beneficial to the wellbeing of citizens. There are advantages and disadvantages to both approaches.

The first way is to estimate the various effects of welfare. In that approach the main question is *in what ways* the welfare state influences the wellbeing of its citizens. Who profits from what? Which are the strongest effects? This approach provides insight into the functioning of welfare states, but does not answer the question of its ultimate effectiveness, since the relative weight of the various effects is very difficult to estimate.

The second way is to measure the end result. In that approach the question is what the *total yields* are. On balance, are people better off in a welfare state? How can this be measured? This approach provides an insight into what the system delivers but does not tell us why.

The first approach chiefly provides information which is most useful for maintaining the welfare system. There is a great demand from policy-makers for this type of study. The second approach shows the merits of the system as such. This is more important to those whose primary concern is the legitimation of social policy or the evaluation of system alternatives. This is typically the job of opinion makers.

The research into the relationship between welfare and wellbeing is strongly dominated by policy-makers, who have the largest budget. The first path is thus a fairly well-trodden one. There is a continuous stream of studies on allocation in the welfare state. The second path is less well explored. There are some studies on the effects of state welfare on economic growth, political stability and social cohesion. Effects on overall wellbeing of citizens has not been studied as yet. This paper scouts that novel track.

Strategy

The question is thus whether more or less state welfare makes any difference to the wellbeing of

the citizens, particularly whether more state welfare leads to a higher level of wellbeing and to its more equitable distribution. In order to answer these questions we will first define the term `wellbeing' and explain how that how that concept can be measured (§ 2). The concept of the 'state welfare' is also defined and operationalized (§ 3). The next step is then to collate the available data which we have from 40 countries. In analyzing this data, we first look at whether the level of wellbeing is higher in countries with relatively more state welfare than in comparable countries with a moderate degree of state involvement (§ 4). We then examine whether equality in wellbeing is higher in the most developed welfare states (§ 5). In both cases two comparisons are made: First we consider differences across nations at one point of time, that is 1990 (§ 4.1 and 5.1). Next we compare changes over time, that is between 1980 and 1990 (§ 4.2 and 5.2). Table 1 illustrates this analysis schematically.

This approach has been applied earlier on data from the 1980s. See Veenhoven (1990, 1992) and Veenhoven & Ouweneel (1995). In this contribution the results of this are summarized. New data is also presented. The new data relates to a different period (the early '90s) and a greater number of countries. Furthermore, new indicators for wellbeing are used, in addition to living a long and happy life, there is now also living a 'healthy' life.

The first study in this series was initially set up in order to estimate the wellbeing surplus which the welfare state produces. My ambition was to offer a counterbalance to economists who at that time were able to convince public opinion that state welfare had an adverse effect on economic growth.[3]

Against that loss at the material level I hoped to set the gain in psychological wellbeing.[4] The result was not what I had expected, however. There proved not to be any wellbeing surplus[5].I resisted the temptation to ignore that result. Instead, I have tested it further. This paper reports on the findings.

2 WELLBEING

In order to assess wellbeing in the welfare state, we must first specify what `wellbeing' itself is and how that wellbeing can be measured.

Concept of wellbeing

The term wellbeing usually refers to the degree to which an individual is well. In this sense it is synonymous with `quality of life'. Sometimes, however, the word is also used to indicate the quality of supra-individual phenomena, such as the family, a sector of industry or society as a whole. Wellbeing means then that the social system is functioning well. In order to keep these meanings separate a distinction is made between `individual wellbeing' and `social wellbeing'.

Individual wellbeing

In the discussion on wellbeing and the welfare state, individual and collective meanings tend to become rather mixed up. Both are implied in the term `social welfare': the notion that a strong welfare state is good for society (for example because it strengthens `social cohesion') and the idea that people who live in a welfare state `fare well'. It is commonly assumed that what is good for society will also be good for its members.

The question addressed here requires a sharp distinction between social and individual well-being. It is not the condition of the social system which is at issue, but the wellness of its inhabitants. The question is whether the welfare state offers citizens a better life and whether the welfare state offers citizens a better life and whether it reduces the differences between the quality of life. Individual wellbeing is thus the relevant factor, but what kind of individual wellbeing?

Outcomes of life

In addition to this difference in the object of assessment, there is also a difference in the thing which is `being' more or less `well'. In using the term wellbeing for individuals, three such things can be distinguished: 1) living conditions, 2) living skills and 3) life's outcomes. Analogous concepts in biology are respectively `biotope', `adaptation' and `survival'. A parallel distinction in systems theory is between `input', `throughput' and `output'. This conceptual distinction is discussed in more detail in Veenhoven (1998 and 2000b).

Living conditions In the first meaning the term wellbeing denotes the quality of the living environment. Wellbeing is then the degree to which the living situation resembles Paradise. Sociologists often employ this definition of wellbeing.

This meaning is not appropriate in this context. The question is not whether the welfare state resembles conceptions of earthly Paradise, but whether people live better in that kind of society. In other words, the question is not whether the welfare state succeeds in providing the living conditions it promises (instrumental effectiveness[6]), but whether these conditions yield better *outcomes* (final effectiveness).

Living skills In the second meaning word wellbeing is used to indicate the capacity to deal with the environment. This comprises such things as `coping', adequate `awareness' and `actualizing' capacities. Wellbeing is the degree to which a person is master of his own fate. This is the favorite definition used by psychologists.

That second meaning is not appropriate in this context either. The question is not whether the welfare state produces more competent citizens, but whether these citizens thrive better. Again, this must ultimately be measured against the effect on the *outcomes* of life.

Outcomes of life In the third definition the word wellbeing denotes the outcome of the foregoing, the final quality of life that result from the configuration of living conditions and living skills. That outcome manifests in the first place in survival and in absence of impairment, in other words: in long and healthy living. It also appears in happy living[7]. That latter conceptualization

fits well with the thinking of biologists. In this study we the question is whether these final 'outcomes' of life tend to be better in welfare states.

Balance of outcomes

In the meanings discussed here, wellbeing is an umbrella term. In the first case an umbrella term for favorable living conditions and in the second case a catch word for relevant competencies and in the third case the balance of outcomes of life. In discussions about wellfare and wellbeing the word is also used for more specific matters, for instance for mere 'financial security'. The use of the word then suggests more than it really means.

The bulk of the research into wellbeing in the welfare state is aimed at such partial wellbeing. This research is typically conducted to test effects of specific welfare programs. In the present case the system itself is under discussion. In this context the question of whether welfare states generate a surplus of *total* wellbeing is at issue. Current research is also focussed on documenting the envisioned blessings of welfare, and has little attention for unexpected disadvantages. This study is about the *balance* of effects..

Indicators of wellbeing in nations

Wellbeing, in the chosen meaning, thus manifests itself in the degree to which people live long, healthy and happy lives. These outcomes can be measured at individual level and subsequently aggregated to the national level.

The level of wellbeing in each country can then be estimated in terms of averages: average length of life, average health and average happiness. Inequality in wellbeing between individuals can be subsequently assessed in terms of the dispersion around those averages, i.e the extent to which disparities occur in the age people reach and in how healthy and happy they are.

A long life

In nearly every country these days a record is kept of a person's date of birth and date of death. On the basis of this registers it is possible to ascertain how long people live on average in a particular country at a particular time. The result can be expressed is in terms of `life expectancy' at birth. The disparities in life expectancy between countries these days are considerable[8]. Reliable data is available on life expectancy in most countries. We now know what the life expectancy is for nearly all the countries in the world and for many of these countries we also know how it has developed over the last decades. Data about the 42 countries which were compared within the framework of this study. Sources are enumerated in appendix 1.

It is also possible to calculate the dispersion around average life expectancy. This possibility has been tested by LeGrand (1987). On the basis of mortality tables he calculated the Gini coefficients per country. The higher the number the greater the difference in years lived between citizens. Using a variant of this methods differences were calculated for 32 countries around 1980 (Veenhoven 1993: 134[9]). Here again there are considerable differences: in India, for example, the Gini coefficient is 4 times higher than in the Netherlands. As regards changes in

inequality in the number of years lived no data is as yet available. The demographic data on the 1990s lends itself less readily to this method of calculation. In the absence of more recent data we must use what we have for the time being.

Healthy life

Health is defined here in the limited sense of absence of physical defects (the broader WHO definition includes everything ever called wellbeing). The degree to which this exists in a population can be estimated in a number of ways. The best available data are self-reports of general health in representative surveys [10]. In this study we use an item from the World Value Survey: "Taken all in all, how is your health at present? Would you say: very good, good, reasonable, poor, very poor or don't know?" (item 83). In 1980 this question was asked in 22 countries, in 1990 in 42 countries.

In this study, the average of the responses to this question is used to indicate the degree to which individuals lead healthy lives in a country. The standard deviation is used to show the degree to which individuals differ in health.

Happy life

Happiness is an internal state of mind. From the outside we cannot see whether someone is satisfied with his or her life. This is why we can only measure happiness by asking people about it.

It took some time before the scientific community came to terms with that fact. Initially, all manner of attempts were made to assess happiness 'objectively' in terms of the incidence of *desperate behavior* such as suicide, self-intoxication (drugs, alcohol) and seeking high-risk kicks. The theory was that the less satisfaction people find in their lives, the more such behaviors will occur. In the same way an attempt was made to estimate happiness in terms of *migration:* the less satisfaction with life in a particular country, the more people would emigrate. *Political protest* is also seen as an indicator of happiness. Dissatisfaction with life is alleged to manifest itself through taking part in riots and support for extremist political parties.

There is of course a certain amount of truth in all this, but on closer inspection it appears that the relationship between inner happiness and overt behavior is far more complex. One complication is for example that suicide is more accepted in the happiest countries. Elsewhere I have listed the pitfalls of this approach (Veenhoven 1996a). Suffice it to note the conclusion that it does not work.

Self-rating Happiness can thus only be measured by asking people about it. Various methods of questioning have been developed for this purpose, a number of which have proved very useful. The most common way is asking how satisfied one is with one's life as a whole. Another method is to ask how often one is in a good mood.

Initially there were a lot of reservations about the validity of the answers to these type of questions. This instigated several validity checks, which panned out positively. Review can be

found with: Veenhoven (1984: chapters 3 and 4) and Headey & Wearing (1992: chapter 3). As a result, questions about happiness form now a regular part of large-scale questionnaires in various countries. On the basis of this we now have data on about sixty countries.

Initially the were also reservations about the comparability of responses across borders. Is the answer that a Frenchman gives to a question about `bonheur' of the same order as an American answering one about `happiness'? Is there no difference in desirability distortion between countries. Is the concept a familiar one outside the western hemisphere? Research has since removed many doubts. It appeared, for example, that differently phrased questions still produced the same ranking of national averages. Various tests on desirability distortion did not reveal any systematic differences. The concept also appears to be well known everywhere, answers were promptly given and the number of `don't know' answers was minimal. Furthermore, it is reassuring to find that happiness does not appear to be separate from `hard' national characteristics: more than 70% of the differences found can be explained in this way (Veenhoven 1993: ch 5). The available evidence suggests that comparing happiness between countries is fairly responsible (Veenhoven 1996b, 1996c).

For this study use is made of data from the World Value Surveys. In the context of that survey representative samples from the population of countries were questioned in an identical way. The first survey took place around 1980 and comprised 22 countries. This was followed ten years later by a second round in which 42 countries were involved. Each time, the questionnaire comprised three indicators of happiness: 1) a question about `satisfaction with life', 2) a series of questions about the `mood' of the last weeks, and 3) a broad question about `happiness'. These items are presented in appendix 1.

In the following analyses the average scores from these happiness questions are used to measure national levels of wellbeing. The standard deviations are used to quantify the inequality in wellbeing.

3 WELFARE STATE

Now what exactly do we mean by a `welfare state' and how can this phenomenon be measured? This question is more easily answered. The concept is less problematic and there are less reservations about the indicators.

Concept of the welfare state

The term `welfare state' is used for modern societies in which a great deal of welfare services is produced and distributed under state control. The word does not indicate the kind of services that is being provided.

Usually, it is financial services that are meant: in particular insurance for illness, unemployment and disability. The concept is also used in a broader sense and comprises collective provisions surrounding education and culture. In the English-language literature the

narrower sense is often called `social insurance' and the broader sense `social policy'. In this contribution the word is used in its narrower sense. When I use the term welfare state, therefore, I mean a system of collective insurance. Restricting it to social insurance facilitates comparisons with other countries. It also facilitates interpretation of the results. We know what welfare we are talking about.

Almost all modern states involve themselves to some extent with social insurance and for that reason can be called `welfare states'. The 'night watchman' state only exists in books these days. This contribution concerns the scale of social insurance covered by the state.

Indicators of the size of state welfare

In the literature we find three methods for measuring the scale of social insurance in countries: the `age' of the system, the `social entitlements' it guarantees and the financial `expenditure' which is involved. All these methods have their respective advantages and disadvantages. For a detailed discussion see: Veenhoven & Ouweneel (1995).

In this study state welfare is measured by the size of the welfare budget. We use the most recent inventory by the International Labour Organization (ILO 1996). The information from this survey extends as far as 1989 and comprises almost every country in the world. For 40 of those countries we also have happiness data for around that time (1990).

4 STATE WELFARE AND LEVEL OF WELLBEING

We now return to our original questions. The first question was whether more state welfare produces more wellbeing. If that is so, the average wellbeing in countries providing more social insurance must be higher than in similar countries which provide less. The average wellbeing should also have increased in those countries where social insurance has been expanded and wellbeing should have decreased in countries where it has been reduced. We can now determine whether this is in fact the case.

4.1 Size of the state welfare budget and degree of well-being

Table 2 shows the correlations between expenditure on social insurance per country and averages for health and happiness. The first column shows the rough (zero-order) correlations. The second column shows partial correlations, from which the effect of wealth of the nation is removed.

Results

The rough correlations are positive: in two cases significant (life expectancy and mood level) and in two cases not quite (subjective health and satisfaction with life). In figure 1 the link with life satisfaction is shown in more detail.

The picture as a whole seems to confirm the prevailing opinion. In the least happy countries the expenditure on collective insurance is comparatively low. See Romania (ro), Russia (su) and Bulgaria (bg)[11]. At the bottom we also find those Third World countries which have virtually no collective insurance, i.e. Nigeria (wan) and India (ind).

We anticipate that in the top right hand corner there will be high satisfaction in a number of countries with a generous welfare state such as Denmark (dk), the Netherlands (nl) and Sweden (s). What we see, however, middle top, is that satisfaction is slightly higher in Iceland (is) and Switzerland (ch) where the social insurance expenditure is only about a third of these (about 10% compared to 30%). The `American social jungle' also appears to have been exaggerated. Lifesatisfaction in the United States (usa) and Canada (cdn) is only very slightly lower.

The size of the state welfare budget is of course not entirely independent of wealth of the nation. Rich countries can more easily afford higher expenditure on social insurance. So the rough correlations might be based on a spurious relationship. This is why it has also been calculated how much correlation remains if the level of wealth is kept constant. Wealth is measured in terms of the real per capita purchasing power in the same year. The revised correlations are shown in the second column of Table 2.

The correlations are now considerably less and none of them are significant. In three cases the correlation is now even slightly negative. This result could be found to some extent in figure 1. The countries at the bottom left are without exception poor countries. The low level of wellbeing in these countries apparently has more to do with the living standards than with the state welfare.

Thus on closer inspection the prevailing opinion is not confirmed.

Correspondences with earlier research

The same picture emerged from earlier research: at first there was an apparent link but after controlling wealth the link disappeared.

Veenhoven (1990) and Veenhoven & Ouweneel (1995) carried out a virtually identical analysis of data from ten years earlier. The countries in that study were predominantly OECD members. The size of the state welfare budget was measured not only in terms of social insurance expenditure but also in terms of the age of the system, social entitlements and public spending in a broad sense. These other indicators too, however, displayed no correlation with lifesatisfaction and length of life.

The relationship between social insurance spending and length of life has also been separately researched in a set of 97 countries including many developing countries. Once again, the rough correlation was positive ($r = +.66$ $p<.01$) but after control of wealth no correlation remained ($r_p = +.13$ ns). See Veenhoven & Ouweneel (1995: 19-20).

Still there is a problem of multi-colleniarity in this cross-sectional analysis: welfare

expenditures are systematically higher in rich nations (r=+.64). Therefore, the statistical control of income per head may be too severe, and wipe out effects of welfare on wellbeing that happen to coincide with wealth. Therefore a cross-temporal analysis is required as well.

4.2 Reduction/expansion in state welfare and change in level of wellbeing

There is still another reason to compare nation trough time. It is not inconceivable that the scale of social insurance might have a positive effect on wellbeing, but that cross-sectional analysis does not adequately reveal this effect. This is possible e.g. if the level of wellbeing in the generous welfare states of today used to be relatively low. The development of a welfare state may have been stimulated by former hardship. In that case, state welfare has at the very least brought those countries up to the same level as those of neighboring countries where life was better to start with, and the call for state welfare accordingly less intense. If that is so, there must be a correlation between *change* in the size of the state welfare budget and *change* in the level of wellbeing: expanding state welfare must then be accompanied by an increase in wellbeing, reducing it must result in a decrease in wellbeing.

Results

Table 3 shows the link in changes for the period between 1980 and 1990. No relationship is apparent. The rough correlations are low and not significant Figure 2 shows the relationship with changes in average life satisfaction. The horizontal axis of the scattergram shows how the expenditure for social insurance in most countries has increased, in Italy (i) by over 5%. Only in Argentina (ra) is there a clear downward tendency. There is, however, no relationship with change in lifesatisfaction: the Argentines have made as little progress as the Italians in that regard. Along the horizontal axis we see that lifesatisfaction has risen in two countries, i.e. in India (ind) and Brazil (br) while lifesatisfaction has fallen in Mexico (mex). Both in India and in Mexico the social insurance expenditure has remained at virtually the same level. In short, no relationship.

A source of distortion might be found in the starting level of wellbeing. The step from a low level to a middle level is made more easily than the step from middle to high. That is certainly true of life expectancy. Less care is needed to jack up your life expectancy from 50 to 60 years than to boost it from 70 to 80. In view of this possibility a control was carried out on the level of wellbeing in 1980. See Table 3, second column. This does not alter the picture, however. There is still no trace of a correlation.

Once again we must take account of the wealth factor. It is possible that changes in wealth disguise a positive correlation. This is the case e.g. if economic decline has boosted social

insurance expenditure. An increase in the size of state welfare expenditure has thus prevented a decrease in wellbeing. Control of changes in wealth, however, does not alter the picture at all. See Table 3, third column. Partial correlations also fluctuate around zero, there is even a negative tendency.

If both control variables are kept constant at the same time, then once again no correlation is found (data not shown).

Correspondences with earlier research

These outcomes confirm the results of the earlier study conducted by Veenhoven & Ouweneel (1995). That study concerned longer periods of between twenty to thirty years. The relationship between changes in social insurance and happiness were examined for the period 1960-1980 and the relationship between social insurance and length of life for the periods 1965-85 and 1950-80. The number of countries in these analyses was rather larger (37 to 22). In that study once again no significant correlation was found.

The result meshes with a recent study by DiTella et al. (1997) in 11 EU countries over the period 1975-1991, which restricted itself to a certain type of social insurance, i.e. collective unemployment insurance. Increases or decreases in social security benefits proved to have had no effect on the average lifesatisfaction in those countries.

5 STATE WELFARE AND EQUALITY IN WELLBEING

The next question is whether the welfare state brings about greater equality in wellbeing. The answer to this second question is unrelated to the answer to the first. Even if the welfare state does not generate a higher average wellbeing, it is still quite possible that it tends to lessen variations around that average. Since we are now concentrating on equality in wellbeing, dispersion measurements are used instead of averages.

Inequality between citizens of a country in the number of years lived is expressed in a Gini coefficient (LeGrand method, see § 2). Inequality in subjective wellbeing (perceived health and happiness) is measured using standard deviations. The use of standard deviations for this purpose assumes that there is a considerable breadth of variation and that the answers are not too unevenly distributed. This is the case with the mood level measurement used here: the scale varies from 0 to 10 and the distribution is fairly symmetrical. For life satisfaction the variation is also 0 to 10 but the distribution is rather uneven. Overall happiness is measured on a scale of 1-4 and the scores are very unevenly distributed. This makes the latter indicator rather less useful. For the sake of completeness, however, the results are given.

5.1 Size of state welfare budget and dispersion of wellbeing

We begin once more with a cross-sectional comparison of countries around 1990. See Table 4. The horizontal axis once again shows the same measurement for the size of the state welfare

budget as in Table 2, i.e. per capita expenditure for social insurance. The vertical axis shows indicators of inequality in wellbeing.

Results

The first column shows the rough correlations again. In this case they are all negative. This means that the dispersion of wellbeing is inversely proportional to the size of the state welfare budget. Apart from that, only two of the five correlations are significant, namely the correlations with length of life and overall happiness. These results comply with the prevailing opinion.

Figure 3 shows the relationship with lifesatisfaction again. In the bottom right section we see a number of countries where high expenditure on social insurance is accompanied by minor differences in satisfaction between citizens. See Denmark (dk), the Netherlands (nl) and Sweden (s). However, once again we see that Iceland (is), which has far less social insurance, produces the same result. On the other hand we see that Austria (a) and Norway (n) spend about the same on social insurance but that the inequality in satisfaction differs sharply between the two countries. Despite all this variation there is nevertheless some correlation.

The correlation diminishes, however, after control for wealth of nations. The partial correlations in the second column of Table 4 are virtually nil. Countries with a generous welfare state do not show greater equality than equally rich countries with a modest welfare state. Only in the case of overall happiness do we see a substantial correlation. Although the correlation is statistically significant ($p<.05$), the discrepancy with the other four correlations makes it likely that this is an outlier. As we have already observed, the value of this standard deviation is dubious because the variation breadth of the happiness scale is small and the distribution of the answers is very uneven. The more reliable standard deviations on the 10 point scale of lifesatisfaction display no correlation.

Correspondences with previous research

A previous analysis of data from the 1980s also produced a negative result (Veenhoven 1990, 1992). That analysis comprised 23 1st world countries. The correlation between social insurance expenditure and dispersion of overall happiness was +.18 (ns) and the correlation with inequality in length of life -.14 (ns). In that study the size of the state welfare budget was also measured in another way, i.e. the total collective costs minus defence spending. The result was the same, however: no correlation.

Other research also shows that strong welfare states do not stand out for their greater equality in length of life. Kunst (1997) compared a number of countries for differences in mortality according to class. In all the countries studied by him people situated higher up the social ladder

live significantly longer than those lower down. The disparity was no smaller in countries with a strong welfare state. The smallest variations were even found in countries with a modest welfare state, i.e. Switzerland, Italy and Spain. In the `American jungle' no great disparity was found. The difference in mortality according to class is similar to western Europe. In the former Eastern bloc countries decades of egalitarian welfare policy proved not to have led to smaller differences in mortality between classes.

5.2 Reduction/expansion in state welfare and changes in equality in wellbeing

In this case, too, a cross-section is inadequate and a comparison through time must also be made. The results of this are shown in Table 5. This overview does not include the change in inequality in length of life as data on inequality in length of life for 1990 is not available.

Results

None of the rough correlations in Table 5 are significant. The trend is variable. In short: no correlation again. Note that the number of cases is now very small. This explains the sometimes high, yet not significant, correlations.

In Figure 4 we see, just as in Figure 2, that the greatest decrease in social insurance expenditure has been in Argentina (ra) and the greatest increase in Italy. We see no correspondence with changes in dispersion of lifesatisfaction. The spread of lifesatisfaction has in fact only changed significantly in Mexico. The differences between Mexicans have decreased dramatically. This can have little to do with social insurance, because expenditure for this remained unchanged in Mexico.

After control of initial inequality in wellbeing, a number of links appear in the direction predicted: a rise in social insurance expenditure is accompanied by a reduction in the dispersion of subjective health and mood. These correlations are not statistically significant either, however. When change in wealth is controlled the correlations remain insignificant. Given the limited number of countries it is not technically possible to keep both control variables constant at the same time.

Correspondences with results from previous study

This last result also meshes with the outcomes of Veenhoven's (1992) previous study. The change in inequality in happiness between 1950 and 1980 was calculated for six 1st world countries. This change proved unrelated to the change in expenditure for social insurance in that period ($r = +.04$ ns). This is all the more remarkable because in that period expenditure for social insurance was greatly increased.

In Veenhoven's (1992) earlier study, changes in inequality in length of life were also measured, although in a different way. Data was available on 17 countries in the period 1960-1980. In all those countries the inequality in years lived had decreased, although not to the same extent everywhere. The degree of leveling out of length of life proved once again to be unrelated to rise in expenditure for social insurance. In this study initial inequality in longevity was controlled. Change in wealth was not controlled.

This picture was also confirmed in the previously mentioned study conducted by DiTella et al. (1997). That study mapped the effect of changes in entitlement to unemployment benefit on lifesatisfaction for 11 EU countries in the years 1975-1991. As already mentioned in § 4.2 this had no effect on the average lifesatisfaction. The researchers also looked at whether changes affect the difference in lifesatisfaction between employed and unemployed per country. In every country the unemployed are significantly less satisfied with their lives. Improvements in social security benefits tended to accentuate rather than reduce the difference (p 14).

6 DISCUSSION

The results are summarized in Table 6. The conclusion is clear: the scale of social insurance in a country makes no difference to the length, health and happiness of people's lives in it. Life is just as good in a state at arm's length as in a state which cares for you from the cradle to the grave.

This conclusion raises at least five questions: 1) Is it really true? 2) If so, how is it possible? 3) Why is this so difficult to believe? 4) What does this mean for social policy? and 5) What can further study teach us? These questions are discussed below.

6.1 Does the amount of state welfare really not matter?

Until now, this conclusion has been received with incredulity. The reaction is usually: `that can't be true'. It is often assumed that there is something wrong with the measurements. There now follows an overview of the objections and my comments in response to them.

Measuring of wellbeing adequate?

The majority of the objections are directed towards using `happiness' as outcome measurement. A first objection is that happiness can hardly be measured and is certainly not comparable between countries. The indicators used are seen as measuring mainly error and therefore cannot demonstrate correlations. Correlation with random fluctuation is always zero. A second objection is that although questions about happiness do measure something, it is not happiness. Instead of true satisfaction, adaptation or resignation is presumed to be measured. In this interpretation, the zero correlations mean that the welfare state does not lull its citizens to sleep. A third objection

assumes that happiness is relative, since it is a judgement which is dependent on culturally variable standards of assessment. Due to the good conditions prevailing in welfare states it is alleged that the standards of comparison are higher there. Hence the people are not more satisfied though they are in fact far better off. A fourth objection is that happiness is a virtually unchangeable trait, so that any improvements in the quality of society would barely be reflected in it. These objections may sound plausible, yet they are easily refuted.

The assertion that happiness indicators only measure noise is not compatible e.g. with the fact that happiness does correlate strongly with other social characteristic, such as living standards, freedom and tolerance (Veenhoven 1993, 1995, 1997). As already mentioned, about 75% of the variance in happiness can be explained by societal characteristics. It is therefore not possible to maintain that happiness is an insensitive measurement. It is simply that happiness does not correlate with social insurance. To put it in Marshall's (1963) terms: happiness is related to `civil' and `political' rights, but not to `social' rights[12]. More specific doubts about the validity of happiness measurements have also not withstood the test of further study. This has already been discussed in § 2.

The hypothesis that questions about happiness do not measure actual happiness but only adaptation and resignation has proved to be equally untenable. If that were the case, we would frequently find symptoms of depression in people who claimed to be happy and it would be typical for assertive people to be unhappy. This is not the case (Veenhoven 1984).

The objection that happiness is relative does not hold water, either. One of the real surprises of the empirical study into happiness is that this classical theory does not fit the data (Veenhoven 1991, Diener & Fujita 1996)[13]. If it were a matter of adaptation of standards of comparison, then the effect would chiefly show up in the correlation with lifesatisfaction. It is less obvious that the cognitive adaptation also expresses itself in the mood level. Consequently, the correlation between the size of the state welfare budget and mood should be meaningful. As we have seen, however, this is not the case.

Recent research has also made it clear that happiness is not an unchangeable trait. Follow-up studies at an individual level have shown that happiness tends to fluctuate during a person's lifetime. Happiness decreases, for example, in times of serious adversity, such as unemployment or loss of loved ones. Comparison with national averages through time also shows variations, particularly after war and revolution (Veenhoven 1994). So happiness is definitely sensitive to variation in the quality of living conditions, though not to variations in the size of the state welfare budget.

Even if something were wrong with using happiness as an outcome measure, it nevertheless remains that using health produces the same result. There proved to be no correlation between the size of the state welfare budget and citizens' subjective health, neither was there a correlation with length of life.

It is sometimes asserted that perceived health is also a subjective matter. This may be true but a number of objections which are raised against happiness just do not hold water in this case. We

do not measure our sense of health, for instance, against health in poor countries; a headache does not feel any better or worse after watching shocking scenes on the TV news. The objections neither hold water at all as far as length of life is concerned. Length of life is a rock-hard outcome criterion. The meaning is evident, the measuring virtually faultless. Yet there is no correlation between average length of life and size of the state welfare budget.

It would also be difficult to argue that length of life is an unchangeable national `trait'. Major changes have taken place over the last decades. In most western countries, life-expectancy has risen by several years, while the former Eastern bloc countries have shown a drastic decline. The lack of correlation with state welfare cannot be attributed to the insensitivity of this indicator of wellbeing either.

Measuring state-welfare adequate?

An objection could be made to the estimate of state welfare. As already stated, the level of the social insurance expenditure depends not only on the generosity of schemes but also on the applications made to them. Unemployment and an increase in the ageing population can drive the costs way up, while the social entitlements remain meager. This objection is justified but does not negate the result.

First of all this does not mean that the level of expenditure tells us nothing about the size of the services package. At the very most, the estimate becomes slightly more uncertain, making the statistical correlation with wellbeing a little lower (attenuation of correlation). It is implausible, however, that this could make a robust correlation entirely invisible. Furthermore, we must consider that the number of applications for social insurance in the countries studied do not vary greatly. The increase in the ageing population and unemployment occur in approximately the same proportions, at least in the first world countries. This considerably limits the effect of this distortion.

In the second place, other measures of social insurance do not produce a different result. In other studies on data from the 1980s, the size of state welfare was also measured using the age of the system (Estes index) and summed social entitlements (Esping-Andersen's `de-commodification score'). These measures are not sensitive to increases in the ageing population or unemployment. Yet these indicators did not reveal any correlation either with lifesatisfaction or with length of life (Veenhoven & Ouweneel 1995 : 14-19).

Time-span too short?

One final objection is that what we are dealing with here are considerably delayed reactions. When there are changes in social insurance it often takes some time before a significant number of citizens feel the impact in their pockets and even longer before these financial mutations are expressed in changes in health and happiness. Likewise, health and happiness do not change overnight. The predicted effects of social insurance on wellbeing should thus become visible over the longer term only.

It could be said that the time span of the present analysis of changes in social insurance

expenditure (Tables 3 and 5) is indeed on the short side. Ten years may be too short to produce a notable effect on health, but would seem adequate for changes to occur in subjective lifesatisfaction. The previous studies into the consequences of changes in social insurance expenditure covered periods of 25 and 30 years. This is certainly long enough. Yet over this period no effect on wellbeing was found either: neither on the length of people's lives nor on how happily they live their lives (Veenhoven & Ouweneel, 1995)

In the second place, in the cross-sectional analyses (Tables 2 and 4) long-term effects are certainly involved. Social insurance expenditure prioritization for 1990 differs very little from that in 1960. The differences in social insurance have thus been operative for at least 30 years, which is long enough to affect wellbeing.

In this context it is useful to note that there is also no correlation between wellbeing for 1980 and the age of the social insurance system of a country, as measured by the year the first social security laws were introduced (Estes Welfare Index). In some countries this was a century ago, in other countries more than 50 years. Over such a period an effect certainly ought to be visible. At first glance strong correlations do indeed appear: both with happiness ($r = +.55$, $p<.01$) and with length of life ($r = +.70$, $p<.01$). If national wealth is kept constant, however, this completely disappears: r_p is respectively +.23 (ns) and +.05 (ns). See Veenhoven & Ouweneel (1995: 14-19).

6.2 Why does the size of state welfare not matter?

All in all the question is not so much *whether* the size of social insurance matters, but *why not*. Why doesn't it neither raise the level of wellbeing nor equalize its distribution? Unequivocal answers are not available as yet. Below an exploration of some explanations.

Why no effect on the level of wellbeing?

One answer is that greater supply by the state does not imply greater size of the total provision in society, state monopoly could even reduce the supply of welfare services. A second answer is that state services are not better than the products of other welfare producers, the state could even perform worse. The third answer is that there is nothing wrong with the welfare services the state produces, but that this very success brings citizens out of the frying pan into the fire. A last answer denies that negative effect, but claims that the benefits of state-welfare are counterbalanced by unintended side effects such as reduced economic growth.

Doesn't the state deliver more quantity?

Welfare services existed before the advent of the welfare state. Services such as health care and income supplement were provided by different institutions, initially mostly the family, the church and guilds, later also by business corporations and local authorities. In the course of time many of these arrangements were taken over by higher level institutions, among other things for spreading risk. VanderVeen (1998) refers to this historical trend as 'collectivization'. This development concluded in the 'statenization' of much welfare services, in particular of income insurance. See also DeSwaan (1988). This change of supplier is undisputed, the implications for

the size of the service supply is less clear.

Some believe that state-supply implies greater supply. The state can enforce more contributions than any other institution. It can also press more to the consumption of its services. This creates a greater market, on which economies of scale can be made. The state can further carry risks which are too high for smaller institutions, such as insurance for unemployment.

Yet things could work out the other way as well. Firstly, monopolism of the state could drive out other service providers. If growth of the welfare state does not entirely compensate this, the total size of service-supply in society is reduced. Secondly, the concentration of production with the state may lead to overcharge and overload, in particular of the fiscal system. This may press to drastic cuts in the long run, for which alternative supply is than not available anymore. Thirdly, the driving out of other purveyors could also reduce the supply of particular welfare services which are not so well delivered by the state. In this context Popenoe (1988) claims that state insurance schemes have marginalized the role of the church and the family, and has thus diminished intimate support and moral guidance.

It is possible that these effects balance out more or less, and that the quantity of service supply is about the same in nations with an active welfare state and countries were the state keeps at bay. An example: though the size of the social security budget is relatively low in the USA, Americans are not less insured. When private arrangements are included, the security share appears about equally big as in the acknowledged welfare states.

Doesn't the state deliver better quality?

It is often assumed that the welfare state gives more value for insurance money than the market or charity do. There are good grounds for that assumption, but also reasons for doubt.

Compared to other welfare providers, the state is in a good position to deliver high quality. By means of laws and subsidies it can enforce quality standards. Development and delivery of services can be planned on the basis of scientific study. In principle such coordinated 'social engineering' could yield better products than one could expect from churches or commercial firms. Moreover, the state can guarantee more continuity of its supply. The state does not get broke so easily. State services also cover the population more completely. Unlike church and family the state supports people irrespective of their beliefs and behavior. Unlike commercial firms the state also supports citizens who cannot pay premium. By providing a financial 'safety-net' for everybody, the welfare state precludes the occurrence of irrevocable damage, such as chronic illness due to lack of medical treatment in years of economic recession (e.g. Bartley et all 1997).

Yet again state provision can pan out negatively as well. The good intended effects can be overshadowed by bad unintended effects. One such effect could be that monopoly perverts the system, another that welfare supply becomes a toy of politicians. This may result in poor quality of services and bad allocation, much in the same way as consumer products in communist economies. In effect much complaint is heard about the deliveries of the welfare state: the money would not reach the people most in need, adjunction of benefits would take too long, procedures

would be too bureaucratic, etc. New Right critics in particular claim that the state is ineffective in this trade. The welfare states would not even meet their prime objectives, such as the obliteration of poverty. The market is seen to do a better job. For a good summary of the discussion see: Pierson (1992: 40-48).

The more, the better?

Even if the state does provides welfare services in greater quantity and quality, it is still questionable whether that adds to the wellbeing of citizens. Possibly we can live as well with less.

It is even possible that welfare may do harm at some point. Various negative effects of 'overprovision' have been mentioned. Excessive welfare is seen to discourage responsibility and working spirit and to give rise to hedonistic and demanding attitudes. Much of this criticism has been voiced by Murray (1984). In this view, wellbeing can better be advanced by stimulating people to take their lot in their own hands.

Some New Right critics go even further and see lavish welfare services as an assault to freedom and privacy. In their opinion the medicine is worse than the disease, the yields in wellbeing due to income security would not balance the losses that results from inherent repression. This view finds some support in results of empirical studies on happiness. In rich nations at least, freedom appears to affect happiness more than income (Veenhoven 1996a, 2000a).

Possibly the balance of effects is more positive in poor third world nations. The present study includes too few cases to be sure. Yet the earlier study did consider 69 third world nations, but did not observe an effect on life-expectancy in that subset either. A comparison over time of 14 poor nations showed neither a greater rise of life-expectancy in nations where the welfare budget had grown (Veenhoven & Ouweneel 1995: 22-25).

Benefits counterbalanced?

Still it is possible that state-welfare as such works out positively on the wellbeing of citizens, but that these benefits are offset by unintended side effects. One such countervailing effect could be reduced economic growth. We have seen that wellbeing is clearly higher in the most affluent nations and in the public debate we hear a lot of economists say that welfare expenditures ruin the economy. Together this suggests that the yields of state welfare are offset by losses in wealth. This explanation sounds most acceptable for supporters of the welfare-state, because it acknowledges the intended effects. Still it is a cold consolation.

Though plausible at first sight, this explanation does not seem to apply. In spite of strong opinions, empirical studies do not show lower economic growth in welfare states (remember note 3). Moreover economic growth or decline does little to average happiness in rich nations (Hagerty & Veenhoven, 1999). There may be other countervailing effects. Possibly domination of welfare issues on the political agenda makes governments less responsive to issues such as public safety, that may have more impact on the wellbeing of citizens.

Why no effect on equality in wellbeing?

One reason could be that the state does not distribute more evenhanded. A second reason can be that its income-corrections do not really affect wellbeing. Possibly the size of the welfare budget affects the distribution of wellbeing only below a certain minimum level.

Distribution by state not more equitable?

There are good reasons to assume that welfare provision by the state is more even handed. The sheer quantity of its service supply makes it more likely that stragglers will be served. Also the state allots on the basis of universalistic rules. Other service providers are more choosy, the family limit its benefits to kin, charity mostly to co-religionists and the market to people who pay. Furthermore, equality is an explicit political aim in most welfare states. Welfare arrangements are often used to reduce the gap between have's and have not's.

Yet once more there are possible counter effects. Marxist criticism on the welfare state holds that it preserves fundamental class differences. The welfare state would not really have abolished deprivation of the underclass, but would rather have ended the resistance against that. For a review see: Pierson (1992 49-68). Feminists and advocates of various minorities also hold the welfare state responsible for continuation of their disadvantaged position in society (Pierson 1992: 73-92). Another thing is that state welfare may unintentionally create new inequalities by leading people into a 'poverty trap'.

These contradictory speculations have inspired much empirical research about income-inequality in nations that differ in state welfare. These studies leave no doubt that state welfare does reduce income differences; possibly less than some would expect, but still. See Headey et al (1997) for a recent and sophisticated comparison.

Insurance not so relevant for wellbeing?

If state welfare does produce greater equality in income but no greater equality in wellbeing, one could conclude that its income-corrections do not affect the wellbeing of citizens.

That interpretation fits the results of empirical studies on the relation between income and happiness. Money-income appears to be subject to the law of diminishing utility. As a result, the difference in happiness between rich and poor became smaller when countries grew richer. In present day affluent countries hardly any difference is observed. Typically, income explains less than 5% of the variation in happiness, and part of that common variation must be attributed to effects of happiness on purchasing power. See e.g. Diener et al (1993), Veenhoven (1996b) and Hagerty & Veenhoven 1999)

Minimum met?

Still one could imagine that modern society requires at least a minimum level of income insurance for everybody. In that view, the results of this study suggest that this minimum is pretty much achieved everywhere. At least in all the first world nations, the welfare budget is

quite substantial. In the case of the 'American social jungle' it is still 12% of the national income. Apparently that is sufficient to avert observable differences in wellbeing among citizens.

Effects balancing out?

This exploration suggests that the size of state welfare can effect wellbeing in various ways. On the basis of this study we cannot say to what extent these effects actually occur. What we can say is that they apparently neutralize each other. It is in fact quite possible that all the parties in this discussion are right to some extent, but that the total effect thus differs from what each of them had envisaged.

If there is indeed a balance of effects, this does not mean that the advantages and disadvantages of social insurance always balance each other out. The data presented here relate to a period in which the state interference with social insurance was of a historically unprecedented size. It is quite possible that the first welfare schemes in the beginning of this century have had a greater impact on wellbeing. For the future we also cannot exclude the possibility of a net effect on wellbeing. The fact that these days it is irrelevant tends to temper expectations, however.

The balance of positive and negative effects will also not be the same for all sections of the population. The fact that the size of the state welfare budget does not matter to the average citizen does not mean that there are no categories to which it does matter. It is quite possible that an increase or decrease in collective social insurance has some effect on the wellbeing of specific sections of the population. As long as the groups affected are small enough, substantial losses in wellbeing can occur without these becoming visible in averages or standard deviations. This is not the case, however, with large groups such as the elderly, the disabled and those claiming child benefit. These groups form by far the largest clientele of the welfare state. Furthermore, one must not lose sight of the fact that any gains in wellbeing in these groups are apparently compensated for elsewhere. If the average remains the same then there must also be losers to balance out the winners.

6.3 Why is this so difficult to believe?

As we have already commented, these results have until now mainly prompted incredulity. Previous reports on this phenomenon (Veenhoven 1990, 1992, Veenhoven & Ouweneel 1995) have not been followed up on. Why will people not accept this?

The simplest answer is that there are very few people who want to hear this result. The great majority of western publics is well-disposed towards the welfare state and thus would rather see a study which confirms this attitude. The majority of the experts in this area earn their living conducting research in the service of the welfare state. They are unlikely to be enthusiastic, either.

A rather more difficult question is why it is also so difficult to imagine that the size of the state welfare budget does not matter. I have some personal experience in this area. It was some time

before I realized that it was possible to view the unexpected result as something other than an inexplicable measuring error. If I reconstruct my struggle, what strikes me is that the standard terminology initially played tricks on me. Terms such as `welfare state' and `social security' made it difficult for me to imagine a neutral relationship with wellbeing. The term `insurance state' coined by VanMaarseveen (1990) was an eye-opener. This term denotes the same phenomenon but without the positive connotation. It was easier to imagine that there might also be negative aspects involved. The same thing happens if I replace appealing terms like 'social rights',`social security' and `social entitlements' with `compulsory income insurance'. The suggestive power of words remains considerable, possibly even more so for those who introduced this terminology.

A second reason why it is so difficult to imagine might be because we have a far clearer picture of state welfare schemes than of non-state welfare services. State arrangements are regularly brought to our attention due to the continual political discussion and the endless stream of studies which this entails. Non-state services remain systematically underexposed. What do we actually know about the size and quality of care in families, companies and religious communities? Because we have no clear picture of non-state alternatives, the impression is easily created that the retreat of the state means a reduction in service supply. This misperception perhaps occurs most noticeably among experts on the welfare state.

Third, it is also not easy to imagine how people will be able to live comfortably with less financial insurance. We hear constant complaints about poverty and social insecurity. Again, the danger of distorted perception occurs here. Complaints make more noise than the sounds of satisfaction, both among the people themselves as well as in the press. The picture is even more distorted by the fact that interest groups tend to make the most of the troubles of their clients. It is then easy to lose sight of the fact that the vast majority of people live long and happy lives.

The standard image of mankind makes it also difficult to imagine that we could live just as well with less compulsory insurance. Politicians tend to foster the image of people anxious to avoid risks. In that portrayal the emphasis lies on what Maslow (1970) calls `deficiency motivation'. Maslow saw deficiency motivation as a passing phase of development. In a favorable developmental climate, it would make way for broader efforts towards self-actualization. If deficiency motivation predominates, then people might well be better off with a substantial compulsory insurance package. If the drive to 'self-actualization' is dominant, however, then they might well thrive on more challenge and responsibility. That might be the case here.

In this context we must remember that the human race did not evolve in Paradise. Our ancestors lived in fairly harsh circumstances without government care from the cradle to the grave. Natural selection has ensured the survival only of those able to cope with tough challenges. This suggests that we can cope with a degree of uncertainty and that it might even do us good. It also explains why people sometimes go looking for risks and why adversity frequently brings out the best in people, even if they would rather have avoided it. Seen like this, it is not strange that a little more or less compulsory insurance makes no difference to happiness and health.

6.4 Implications for social policy

If it is true that we can live just as well with rather less care from the cradle to the grave, then it follows that the welfare state does not need to be kept intact at all costs. It can all be slimmed down a bit, especially if other considerations make this necessary.

Just because it *can* be scaled down a bit does not mean that this *must* happen. The welfare states do not provide more wellbeing but neither do they provide less. This makes the choice of social system a neutral one as far as wellbeing is concerned. There is thus scope for having an ideological preference. If two coats are equally warm, you can then choose the one you most like the look of. Political parties can then safely make the welfare state theme a central plank of their ideology. A case can be made to retain it on the grounds of `solidarity' and `justice' or a reduction in state interference can be advocated on the basis of `personal responsibility'. The knowledge that this makes no ultimate difference to wellbeing rather takes the edge off these arguments, however.

Neither does this result mean that we can reduce West-European welfare states in one fell swoop to American proportions. Since so much of the welfare production has fallen under state control, non-state care arrangements have become somewhat marginalized. A possible change-over thus requires time and a policy of phased development. In fact such a policy has recently been launched in many welfare states.

6.5 Implications for further study

In this study we had to manage without data on inequality in length of life around 1990, since that would have required a time-consuming analysis of mortality statistics. This meant that the effect of changes in inequality in length of life could not be shown. This is a first priority for further study.

In addition it would also be useful to replicate the whole study. As long as these results continue to be met with incredulity, it must be shown that they are still occurring. In a replication the number of countries could be expanded, among other things using the results of the third round of the World Values Study. More countries would also give us a better idea of possible contingencies. We now have a fairly clear picture of the effect of state care in 1st world countries. This might turn out differently in 3rd world countries. Further study will create larger timescales over which the effect of changes in size of the state welfare budget will gradually become clearer.

In replicating this research other indicators of collective insurance could also be tried. This would be quite possible if Esping-Anderson's measure for social security entitlements (`decommodification score') were also to be calculated for the nineties. That would be a project in itself. In any case the measure for social insurance expenditure used here can be refined by taking account of the difference in claims for social security benefits across e.g. the age structure of the country.

It would also be useful to explore to what extent the result varies for specific sections of the

population. For that purpose separate analyses could be made for, e.g., those over 65, parents with young children and the disabled. Yet, first explorations showed no effect among the poor and unemployed (Ouweneel 1999).

Furthermore, separate social provisions could also be examined as long as these are sufficiently comprehensive to show up in the overall wellbeing. Provisions for old age serve as an example. The study conducted by DiTella et al. (1997) into the effects of unemployment regulations provides a good model.

Finally, the study can also be extended to state welfare in a broader sense. This study only concerned the size of social insurance. Further study could consider other social policy expenditures as well, in particular housing subsidies.

The best thing of course would be if the total care production in countries could be mapped and if the state's share in it could be compared. Among other things, this would require quantifying care production in the private sphere. For the time being that remains a bridge too far.

7 CONCLUSION

There appears to be no link between the size of the state welfare budget and the average *level of wellbeing*. In countries with generous social insurance people do not live longer, healthier or happier than in equally affluent countries with more meager schemes. Increases or decreases in the collective insurance expenditure also appear unrelated to a rise or fall in the level of longevity, health and happiness.

There is no link either between the size of the state welfare budget and *equality in wellbeing* being citizens. In countries with generous social insurance the dispersion of health and happiness is not smaller than in equally affluent countries with more limited collective insurance. Nor are increases or retrenchments in the social insurance expenditure linked with a rise or fall in inequality in health and happiness between citizens.

These non-differences cannot be attributed to the insensitivity of the indicators used. Nor can they be imputed to coincidences in the data set. Similar analyses of other countries and periods show the same results. The explanation for this outcome should be sought in the content. Advantages and disadvantages of the system of compulsory income insurance apparently balance one another out.

This result means that the welfare state does not have to be kept intact at all costs. We can live just as well with a little less care from the cradle to the grave. This does not mean that the welfare state should be written off altogether. The system may not produce more wellbeing but neither does it produce less. Generous or meager collective insurance is therefore a question of (political) taste.

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Figure 1
Size of the state welfare budget and average lifesatisfaction
32 countries around 1990

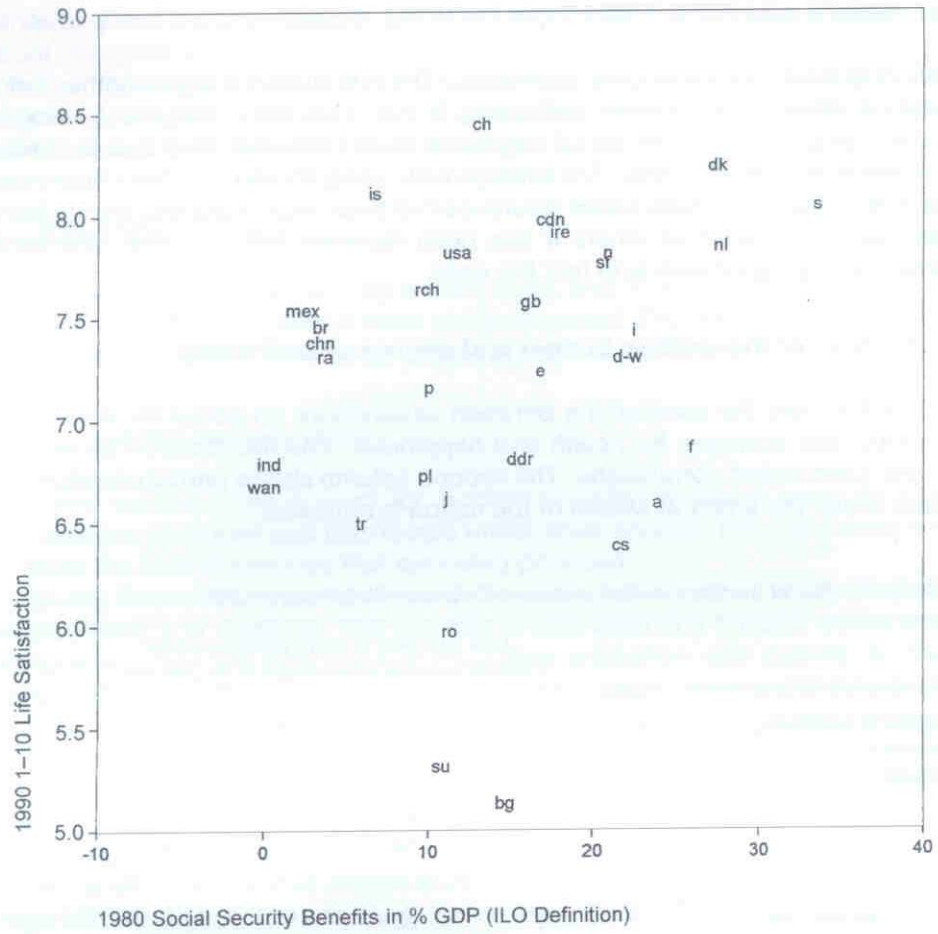

Figure 1. Size of the state welfare budget and average life satisfaction around 1990. See Appendix 2 for country codes.

Figure 2
Increase/decrease of state welfare and rise/fall in average lifesatisfaction
31 countries 1980-1990

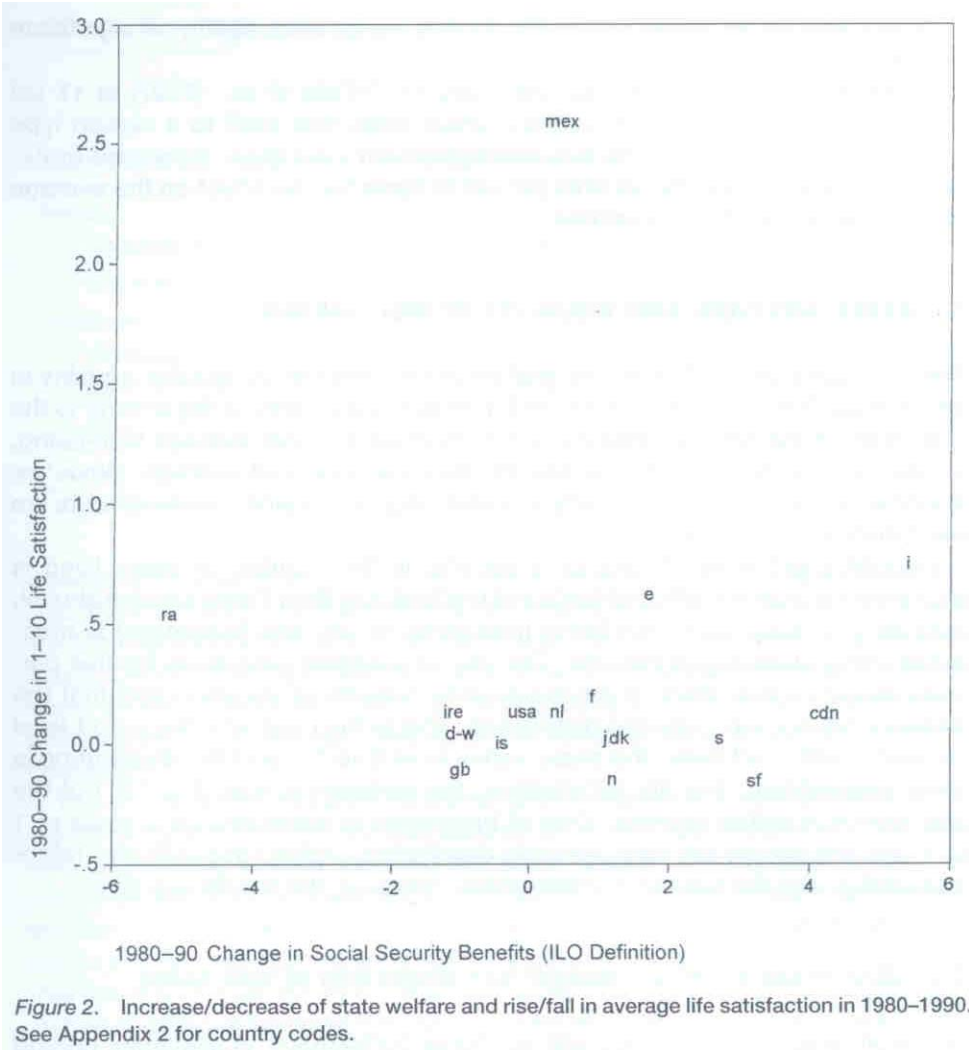

Figure 2. Increase/decrease of state welfare and rise/fall in average life satisfaction in 1980–1990. See Appendix 2 for country codes.

Figure 3
Size of state welfare budget and dispersion of lifesatisfaction within countries. 32 countries around 1990

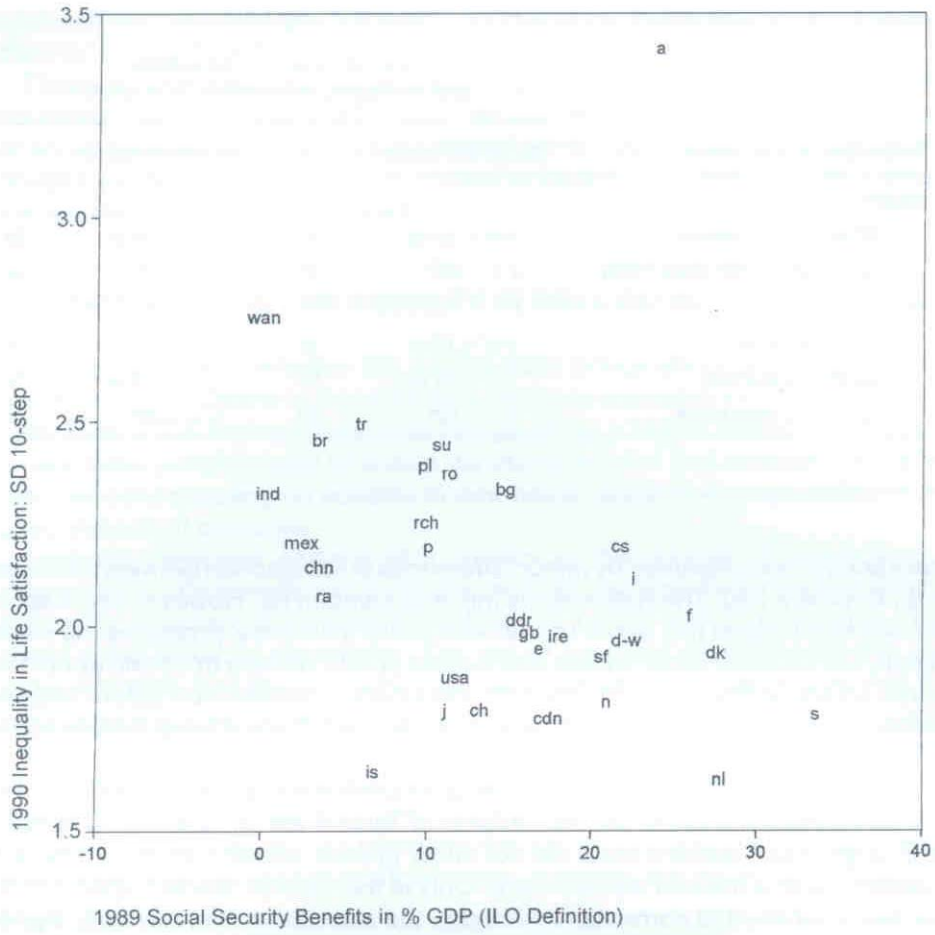

Figure 3. Size of state welfare budget and dispersion of life satisfaction within countries around 1990. See Appendix 2 for country codes.

Figure 4
Increase/decrease of state welfare budget and rise/fall in dispersion of life satisfaction in 19 countries 1980-1990

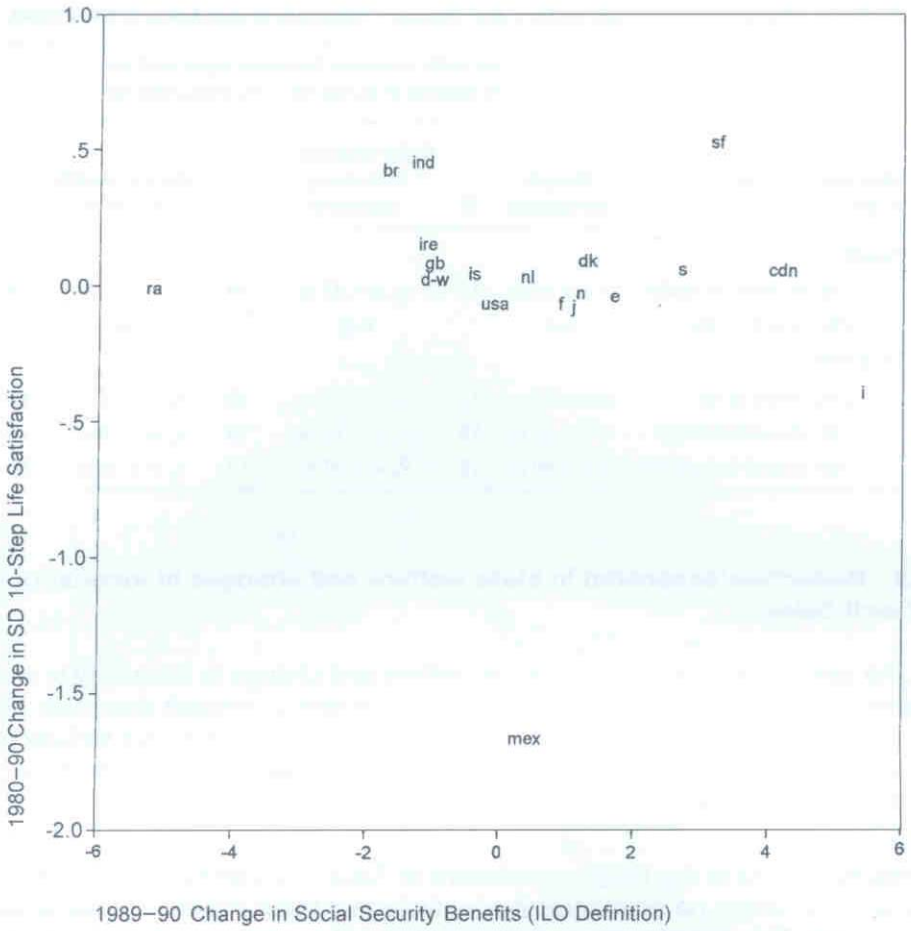

Figure 4. Increase/decrease of state welfare budget and rise/fall in dispersion of life satisfaction in 1980–1990. See Appendix 2 for country codes.

Table 1
Questions and approach

QUESTIONS	METHODS	
	Comparison between *situation* in countries at one point in time	Comparison between *change* in countries through time
More generous welfare state, higher *level* of wellbeing?	§ 4.1	§ 4.2
More generous welfare state, greater *equality* in wellbeing?	§ 5.1	§ 5.2

Table 2

Size of the state welfare and level degree of wellbeing: in 38 to 27 countries 1990

Level of wellbeing	**Link with size of state welfare budget** social security expenditure in % GNP pc			
	rough correlation	*N*	*wealth of nation constant*	*N*
Health				
ϕ subjective health	r = +.23 ns	31	r_p = —.16 ns	28
ϕ length of life	r = +.64 **	38	r_p = +.25 ns	35
Happiness				
ϕ mood level	r = +.37 *	30	r_p = +.06 ns	27
ϕ lifesatisfaction	r = +.28 ns	32	r_p = —.24 ns	29
ϕ overall happiness	r = +.33 ns	38	r_p = —.20 ns	35

Table 3

Change in size of state welfare and change in level of wellbeing: 37 to 13 countries 1980-1990

Error! No bookmark name given.Rise/fall in wellbeing	**Link with increase/decrease in state welfare** **% rise/fall social security expenditure**					
	rough correlation	*N*	*T1 wellbeing constant*	*N*	*T1-T2 increase in wealth constant*	*N*
Health						
▲ϕ subjective health	r = +.08 ns	30	r_p = +.03 ns	14	r_p = +.01 ns	14
▲ϕ length of life	r = +.23 ns	37	r_p = +.17 ns	34	r_p = —.03 ns	34
Happiness						
▲ϕ mood level	r = +.10 ns	29	r_p = —.08 ns	13	r_p = —.10 ns	13
▲ϕ lifesatisfaction	r = —.03 ns	37	r_p = +.08 ns	18	r_p = +.35 ns	18
▲ϕ overall happiness	r = —.19 ns	37	r_p = —.45 ns	14	r_p = —.33 ns	14

Table 4

Size of state welfare and inequality in wellbeing: 31 to 20 countries around 1990

Error! No bookmark name given.Dispersion of wellbeing	**Link with size of state welfare** **social security expenditure in % GNP**			
	rough correlation	*N*	*wealth of nation*	
Health				
SD subjective health	r = —.03 ns	31	r_p = —.06 ns	20
Gini length of life (data 1980)	r = —.65 **	26	r_p = —.37 ns	22
Happiness				
SD mood level	r = —.15 ns	31	r_p = +.07 ns	28
SD life satisfaction	r = —.29 ns	32	r_p = +.20 ns	29
SD overall happiness	r = —.62 **	32	r_p = —.39 *	29

Table 5

Change in size of state welfare and change in inequality in wellbeing: 19 to 10 countries 1980-90

Rise/fall in dispersion of wellbeing	**Link with increase/decrease state welfare** **% rise/fall in social security expenditure**					
	rough correlation	*N*	*initial dispersion wellbeing constant*	N	*change wealth constant*	*N*
Health						
⮙SD subjective health	r = +.28 ns	17	r_p = —.43 ns	14	r_p = —.23 ns	14
⮙SD length of life	n.a.		n.a.		n.a.	
Happiness						
⮙SD mood level	r = —.46 ns	13	r_p = —.51 ns	10	r_p = —.40 ns	10
⮙SD lifesatisfaction	r = —.10 ns	19	r_p = —.16 ns	16	r_p = —.10 ns	16
⮙SD overall happiness	r = +.09 ns	18	r_p = +.07 ns	15	r_p = +.14 ns	15

Table 6

Summary of results

QUESTIONS	METHODS	
	Comparison between *situation* in countries at one point in time	Comparison between *change* in countries through time
More generous state welfare, higher *level* of wellbeing?	Answer: `No'	Answer: `No'
More generous state welfare, greater *equality* in wellbeing?	Answer: `No'	Answer: `No'

Appendix 1 Data sources

Variable	Measurement	Source
Wellbeing		
Health		
* Subjective health	Single survey question: "All in all, how is your health at present?" Very poor (1) .....very good (5)	World Value Surveys, item 83 WVS 1994
* national level	* average	
* inequality between citizens	* standard deviation	
* Length of life		
* national level	estimate based on age-specific mortality (life expectancy)	UNDP 1996
* inequality between citizens	dispersion in mortality tables, expressed in Gini-coefficients	Veenhoven 1993 p. 134
Happiness		World Values Surveys
* Mood	10 survey questions about occurrence of feelings in recent weeks: 5 positive and 5 negative feelings, answers (yes/no) summarized in Affect Balance Scale (-5 tot +5)	items 83-93 WVS 1994
* national level	* average	
* inequality between citizens	* standard deviation	
* Satisfaction with life	Single survey question: "All in all, how satisfied are you with your life as a whole? Indicate on a scale from 10 (satisfied) to 1 (dissatisfied)".	World Values Surveys item 96
* national level	* average	WVS 1994
* inequality between citizens	* standard deviation	
* Overall happiness	Single survey question: "All in all, are you: Very happy (4), fairly happy (3), not very happy (2) or not happy at all (1)?"	World Values Surveys item 18
* national level	* average	WVS 1994
* inequality between citizens	* standard deviation	
State welfare	Expenditure on compulsory insurance for: illness, disablement, old age, unemployment,	ILO 1996
* size of state welfare budget	inability to work and child benefit	
wealth of nation	Amount of goods/services which average citizen can buy.	UNDP 1996
* purchasing power per capita	Income parities determined using standard package.	

The full data-matrix is available on the author's website: http://www.eur.nl/fsw/personeel/soc/veenhoven/work-wel.htm

Appendix 2: Country codes

RA	Argentina
AUS	Australia
A	Austria
B	Belgium
BR	Brazil
BG	Bulgaria
CDN	Canada
RCH	Chili
CHN	China
CS	Czechoslovakia (former)
DK	Denmark
DDR	East Germany (former)
SF	Finland
F	France
GR	Greece
H	Hungary

IS	Iceland
IND	India
IRE	Ireland
IL	Israel
J	Japan
L	Luxembourg
MAL	Malaysia
MEX	Mexico
NZ	New Zealand
NL	Netherlands
WAN	Nigeria
N	Norway
RP	Philippines
PL	Poland
P	Portugal
RO	Romania

SU	Russia
SGP	Singapore
E	Spain
S	Sweden
CH	Switzerland
GB	Great Britain
USA	United States of America
D-w	West Germany

1.. Question about the consequences of the present system of social security for individuals. When asked whether people live happier, 26% responds 'yes', 44% 'to some degree' and only 30% 'no'. In Czechia (where the system is less generous) responses are more reserved.

2.. In Dutch language the word 'welzijn' (wellbeing) is also used in this double sense.

3.. Later research into the relationship between economic growth and state welfare, though, has produced a different outcome. In a comparison between OECD countries in the period between 1950 and 1990,countries with high expenditure on social insurance did not show a smaller economic growth. See e.g., Pfaller et al., (1991) and Fowler & Richards (1995).

4.. As will become clear, the contradistinction of `wealth' versus `well-being' is not a use full framework for discussion of the welfare state. A higher or lower level of social insurance makes no difference to wealth (note 1) nor to well-being (conclusion of this study).

5.. The very first analyses initially showed some differences in the anticipated direction. Although there were no differences in the level of happiness there were differences in its dispersion. An article to this effect was offered to Social Indicators Research and accepted for publication. Shortly afterwards, however, new data became available which altered the picture. The article was withdrawn. Some years later an article was published in Social Indicators Research but this time with an entirely different argument (Veenhoven & Ouweneel 1995).

6.. There is much research on the degree to which welfare states succeed in providing living conditions. This provides broad confirmation that the welfare state lives up to its own objectives to a certain extent. Housing is slightly better, there is greater equality of income and there is significantly less poverty. There is still discussion about the scale of the success and about the costs in the short and long term. This line of approach offers little additional information.

7.. In plants living outcomes appear only in system maintenance, that is: survival. In humans outcomes manifest in happiness as well. Just as with the other higher mammals, the human species undergoes pleasant and unpleasant experiences which function as a sort of biological compass. What is more, humans are also able to reflect on that experience. Human wellbeing thus manifests itself not only in living a long life, but also in living happy life. This view is discussed in more detail in Veenhoven 1996.

8..Life-expectancy is 30 years in Upper Volta and 79 years in Japan. Over the last decades considerable changes in life expectancy have also occurred. Between 1960 and 1990 the life expectancy in South Africa rose by more than 20 years. On the other hand, the life expectancy in the former Eastern bloc countries dropped; notably in Russia (UNDP 1996).

9.. Gini is a measure of the degree of inequality in populations. This measure is frequently used for income inequality and shows the extent to which the share of income groups differs in the total incomes. Applied to life expectancy the measure shows the extent to which the share of a survival group differs from the total number of years lived. If everyone lives approximately the same number of years, the share of the 10% shortest lived is about 10%, the share of the 20% shortest lived is approximately 20%. This shows on a scatter plot as a straight line. Gini calculates the deviation from this straight line.

10..Traditionally, medical registration was used. This provides a treasure trove of data about the prevalence of specific diseases in countries and medical consumption. This data tells us little, however, about the general health of the population. By no means all ailments are to be found in the statistics and increased medical consumption does not imply poorer health. The general health of the population can be better estimated using medical screenings, whereby a doctor examines people using a standardized checklist. Sometimes this relates to the whole population, more usually a sample. Much of this research, however, concentrates too much on specific ailments. Furthermore, the research is expensive and therefore seldom conducted on general population samples. A comparison of a large number of countries is thus not possible. Another way is to ask people about their health. In medical screenings this is also an important source of information. This method has been systematized in what are known as 'health surveys'. A widely-used method is to give people a list of physical ailments and to ask them whether they suffer from any of them and if so, how badly. On the basis of their answers a health score is then worked out. Problems with using this method include the fact that such a list can never be exhaustive and that in the calculations all ailments are given the same weight. Nevertheless, this method would be useful for our purposes were it not that different ailments lists are used everywhere. Comparisons between a large number of countries are thus once more not possible. In health questionnaires the general health of the population is also measured by asking people how healthy they feel in general. This is referred to as `subjective health'. These subjective estimates mesh well with the health scores which emerge from ailments lists. From follow-up research it appears that subjective health is also a good predictor of sickness and length of life (Appels et al. 1996, Idler & Denyamini 1997). So this would appear to be valid.

11.. The former Eastern bloc countries went through an important transition in 1990. This may have had an adverse effect on the level of life satisfaction. If we omit those countries the link becomes lightly stronger although the conclusions do not change.

12.. Marshall sees the development of the welfare state as the third phase in an evolution of rights. First civil rights were won (constitutional state), then political rights (democracy) and final.

13.. Satisfaction with some aspects of life does seem to depend on social and temporal comparisons. This is the case for example with income satisfaction. Yet, this is not the case with satisfaction with life as a whole, the formation of which occurs in a different way. Happiness is not `calculated' on the basis of perceived success in achieving aspirations but is rather `derived from' the mood level, which in turn reflects the degree of need gratification (Veenhoven 1991). Happiness is thus not insensitive to circumstances which actually affect the satisfaction of basic needs. As we have said, happiness correlates strongly with national wealth and freedom. Hunger and oppression are not things you become inured to.