Which welfare state reform would create the most happiness for the greatest number?

A first exploration of assessing reforms by happiness research

Thijs Weistra

0327980

Supervisor: Prof. dr. J. Plantenga

T. Y. W. Weistra - Keizerstraat 23 - 3512 EA Utrecht - +31640229334 - thijsweistra@hotmail.com

Abstract

In the search of a better dimension to assess social policy, this paper attempts to use the Greatest Happiness Principle, because it incorporates a far broader welfare assessment than usual measures. The effects of three proposed reforms for the welfare state (residual, universalist and diversified) for the Netherlands by De Mooij (2006) are assessed by their effects on happiness using the causes of happiness found by Veenhoven (1997,2007). As a first exploration, this paper links both researches and tries to predict their relative contribution to happiness of the greatest number. It is done without giving much consideration to possible refinements, to keep the argument simple.

The results are in line with current average happiness in countries that have adopted the corresponding welfare regimes: the universalist is expected to create the most happiness, due to its low risk on underclass, the residual welfare state is the second best option because of its high score on freedom and the diversified welfare state seems not to outperform the others on any significant measure.

The discussion section contains a brief assessment of this attempt with suggestions for improvement.

T. Y. W. Weistra - Keizerstraat 23 - 3512 EA Utrecht - +31640229334 - thijsweistra@hotmail.com

Content

1. Introduction

In the search of a better dimension to assess social policy than GDP, labor supply or competitiveness, this paper attempts to use the Greatest Happiness Principle. Authors such as Easterlin, Oswald, Veenhoven, Layard and many others have conducted research on what causes happiness for humans. The outcomes of one of them, Ruut Veenhoven, will be used in this first exploration on predicting the effect on happiness of social policy.

Predicting happiness of social policy is applied to possible reforms in the Netherlands. In the context of ageing, globalization and other modern trends, there is call for reforms of the welfare state. There are many different possibilities and directions for reforms. Three possible reforms can be characterized as going into the directions towards the different welfare state models described by Esping-Andersen (1990): Towards the Anglo-Saxion welfare state (less government intervention, low taxes, low benefits), towards the Universalist welfare state (universal benefits, activation policy, etc.) and towards the corporatist welfare state (sectoral negotiations, etc.). In his paper *"Reinventing the Welfare State"*, De Mooij (2006) analyzes these three possible directions for reforms of the Dutch welfare state as respectively the Residual, the Universalist and the Diversified reform.

Proposed reform	Welfare state type	Characterization
Residual	Anglo-Saxion (UK, USA, Australia, Canada, Ireland)	Individual responsibility, centralization.

Universalist	Universalist (Sweden, Norway, Denmark)	Collective responsibility, centralization.
Diversified	Corporatist (France, Germany, Austria, Italy, Belgium)	Collective responsibility, decentralization.

Table 1. Overview and characterization of the reforms.

The goal of this paper is to asses the proposed reforms of De Mooij on their contribution to the greatest happiness for the greatest number by the causes of happiness found by Veenhoven (1997,2007). The choice for one author limits the scope of this research, but it is deliberately done to show the process of predicting happiness. It would be a good suggestion to include findings of other authors to improve the results. For the sake of the argument however, this research is kept quite narrow.

Predicting happiness of these reforms is a very ambitious goal, because there are many effects of these reforms and not all of them have been researched on their effect on happiness. Next to that, a lot of De Mooij's findings are not quantitative and it is hard to give absolute numbers to most of the outcomes. Therefore this study will be a first exploration that will try to rank the three reforms based on linking the outcomes of both studies.

The data used are the results of "*Reinventing the Welfare State*" (De Mooij, 2006) and the data provided at the World Database of Happiness (Veenhoven, 2006-1d). Because De Mooij studies the Netherlands, I will also use this country. In terms of welfare state design, the Netherlands has an interesting position. Different authors have found that the Netherlands have an intermediary corporatist-social democratic position (Arts and Gelissen, 2002). It also has a relative high happiness, 7.5 out of 10, which is very close to the top countries (ranging form 7.7 to 8.2) and has a the lowest inequality of happiness (standard deviation of 1.5) (Veenhoven, 2006-1d).

This paper will start with an analysis of happiness research. This will be on the theoretical framework behind measuring happiness. After a short introduction, the causes of happiness as found by Veenhoven will be discussed. The reforms and their effects on the welfare state researched by De Mooij are the topic of the next paragraph. Because the effects of these proposals are the basis of my research, they will be described briefly. Combining the former

two sections, paragraph four relates both outcomes. Measuring the proposed reforms by the produced happiness is the scope of the most important paragraph of this paper. As already stated, many improvements can and should be made to make this approach more useful. Hence this paper will conclude with a discussion on subjects like the measurement of happiness, the possibilities for improving this approach and suggestions for continuing research.

2. Happiness research

Why use happiness as an indicator?

> *"Economic performance is not intrinsically interesting. No-one is concerned in a genuine sense about the level of gross national product last year or about next year's exchange rate. People have no innate interest in the money supply, inflation, growth, inequality, unemployment, and the rest. The stolid greyness of the business pages of our newspapers seems to mirror the fact that economic numbers matter only indirectly". (Oswald, 1997)*

Current measures of social policy do not suffice. Economists that assess these policies by their performance are usually accused of taking in account only measurable economical effects, leaving out the effects on social policy. The paradox found be Easterlin (1974), that economic growth does not lead to more happiness can be used to criticize economic growth as a measure for social policy. This result has not been undisputed however. Hagerty and Veenhoven (2003) have debated these findings, have in turn been criticized by Easterlin (2005) and Hagerty and Veenhoven (2006) replied again to him. Though many authors have argued in favor of a broader definition of welfare.

"The methodological misunderstandings arise by narrowing the welfare definition to financial or numerical figures, denying that welfare in the theoretical economy relates to the

subjective fulfilling of needs of consumers from now and in the future." (Heertje, 2006; p.13, translated)[1]

Veenhoven (2002) also explains why subjective measures, like happiness, are needed in designing and evaluating social policy. He states that objective measures fall short because not everything can be measured objectively and not all measured data are suitable for aggregation. Subjective measures should be added because social policy is never limited to merely material matters. These measures also explain more about the preferences and the wants of people. So for political marketing and assessing policy success, subjective indicators are needed.

Why would the greatest happiness for the greatest number be a good measure for deciding on social policy? First of all, it makes intuitively sense. Why should we undertake any action if it does not lead to more happiness? It seems logical to have happiness as the highest goal in life. Of course not just for one individual, but for the greatest number. A trade off between the happiness of two individuals will of course lead to arbitrary decisions on policy. A single dimension to assess social policy might be more efficient because it might leave out political discussion on priorities and thus inefficient compromises.

Next to that, happiness has also positive effects on society itself. Veenhoven (1988) has shown that happiness has a positive effect on involvement, social contacts, health and life expectancy. He also states that happy citizens are more concerned with social problems and tend to work hard. Veenhoven argues that happiness would be a good policy aim. According to Veenhoven (2005), in addition to this, policy makers could also minimize inequality in happiness. Inequality in happiness differs widely across nations and the differences appear to be strongly linked to institutional conditions that can be changed by policy interventions. *"Since there is broad support for both principles, policy makers must look for options that satisfy each of the above tenets."* (Veenhoven, 2004)

The usual discussion between inequality and growth is one that can be avoided using happiness as a measure. Ott has argued that *"level and equality of happiness are not antithetical; inequality is apparently not required for achieving higher levels of happiness."*

---

[1] Although Heertje is against incorporating happiness research in Economics: "The important work of Kahneman is neither reason, as argued by B. Frey (2002), to extend the science of economics with studying happiness […]. The science of economics is no integral, social science, yet a science that analyzes just one aspect of human behavior […]" (Heertje, 2006, translated)

(Ott, 2005). He showed that there is a substantial negative correlation (-0,65) between the average happiness and the inequality of happiness.

History of happiness measurement

Happiness is becoming more popular as research topic. Comparative cross-national studies on happiness range from Cantril (1965) in 1960, the Euro-barometer since 1973, the World Value Survey since 1980 and the European Welfare Survey. Veenhoven (2006-1d) has combined the findings of all this research in the World Database of Happiness. The section on distributional findings of this database includes the results of 2702 surveys among general population samples in 116 nations and provides time-series for more than 20 years for some 15 nations. (Kalmijn et Veenhoven, 2005a) Many researchers have used this data to find relations between economic and social characteristics of countries and happiness. *"This criterion [of the greatest happiness for the greatest number of citizens] is put to practice in empirical happiness research, in particular in studies where average happiness across nations is compared and an attempt is made to identify the societal characteristics behind the observed differences ."* (Veenhoven, 2004)

Easterlin (1974) found no relation between economic growth and happiness in the United States. Di Tella et al. (2001) found that people prefer inflation over unemployment. Layard (2005) has argued a set of measures that should be implemented to improve happiness. There are many more examples. As stated in the introduction, this paper will only use the measures by Veenhoven. The reason for this is the simple and clear causes he has found between societal characteristics and happiness. Due to this simplification and narrowing of the scope, some nuance is lost. What is gained is a simple model to assess social policy. Continuing research could improve this model by implementing more findings.

Ruut Veenhoven has created the World Database of Happiness. This database includes many surveys about happiness and much more information about countries. Much of this research is based upon his book *"Conditions of Happiness"* (Veenhoven, 1984) His findings will be used in this paper, especially the ones presented in his paper of 1997 (Veenhoven, 1997) and a presentation held in 2007 (Veenhoven, 2007). Veenhoven's statistics quantify the effects of different characteristics and are thus a measure to evaluate possible reforms.

What is happiness?

Veenhoven (2007) suggests that there are different ways to evaluate social policy by the happiness they produce. Veenhoven starts from Bentham's Rule-Utilitarianism, which says that rules should be evaluated by how much they will add to the happiness of the greater number. He defines happiness as life satisfaction, being the enduring satisfaction from life as a whole. It is measured by asking individuals how happy they are with their lives. Veenhoven (2007) defines happiness as 'lasting satisfaction with one's life-as-a-whole'. This means it is enduring, is considers satisfaction over one's life-as-a-whole and it consists of the subjective enjoyment of life. This makes this measure different from things like pleasure, the livability of environment. For more information about the definition of happiness, please consider Veenhoven (2007).

Measurement of happiness

Usually, happiness is measured by self-report. Cross-national studies on happiness mostly used single questions. For example: ''Taking all together, how satisfied or dissatisfied are you currently with your life as a whole?'' Possibilities for responses vary from survey to survey. It can be rated on a 10-step numerical scale, by verbal rating scales (for example 'very happy', 'fairly happy', 'not too happy' and 'unhappy'.), etc. The respondent always has to select one of a limited number of discrete ratings. This defines people that give the same answer as equally happy. People that give different answers are defined as unequally happy. (Kalmijn and Veenhoven, 2005a). This of course calls for criticism, because it is not immediately obvious that answers of people are unbiased and/or comparable. Veenhoven (1984) has spent much effort on proofing that these statistics are useful. Some discussion will be presented in the discussion of this paper. For now we will use these statistics as being valid, because they are the best statistics available right now. Oswald argues likewise: *"There are limitations to such statistics, but, if the aim is to learn about what makes people tick, listening to what they say seems likely to be a natural first step."* (Oswald, 1997).

Average happiness

Average happiness is simply computed as the sum of all respondents reported happiness divided by the number of respondents.

Inequality of Happiness

The measure of inequality of happiness consists of two elements:

(1) the relative numbers of subjects that select a different happiness rating

(2) the magnitude of each of these differences. (Kalmijn and Veenhoven, 2005a).

Happiness inequality is measured by the standard deviation. Kalmijn and Veenhoven (2005a) have argued that this instrument should be preferred above different instruments, like the Theil-coefficient.

Inequality-Adjusted Happiness

Inequality-adjusted happiness is a measure for policy makers that attribute value to a high level of happiness and a low level of inequality. It is a linear combination of the mean happiness value and the standard deviation and it is expressed as a number on a 0–100 scale. (Kalmijn and Veenhoven, 2005b)

Happy Life Years

To incorporate better the enduring characteristic of happiness, the happy life years measure has been created by multiplying the life-expectancy at birth times the average happiness, divided by 10. (Veenhoven, 2007)

What causes happiness?

In table 2, Veenhoven (2007) has displayed the correlations between social conditions and the four happiness measures. He claims that these six societal qualities explain 83% of the differences in average happiness between nations. Policy makers can influence these qualities, hence it would be good to measure their policy plans in how much happiness they produce. The social conditions will be described here briefly. More on this can be found in Veenhoven (2007). Table 2 is actually an abbreviated version of the table displayed in the appendix. By contrast, the table in the appendix only includes average happiness. For some measures I will refer to the table in the appendix. The measures of Happy Life Years, Inequality of Happiness and Inequality-Adjusted Happiness will be discussed when they show unexpected results. Average Happiness, Happy Life Years and Inequality-Adjusted Happiness are expected to show similar results and Inequality of Happiness is expected to have a inverse effect.

Condition in nation	Correlation with			
	Average happiness	Inequality of happiness	Inequality Adjusted Happiness	Happy Life Years
Wealth				
• Purchasing power per head	+.67	−.64	+.68	+.78
Security				
• Lethal accidents	-.51	+.37	−.51	−.50
• Social security	+.31	−.51	+.32	+.55
Freedom				
• Economic freedom	+.59	−.48	+.61	+.64
• Political freedom	+.46	−.34	+.43	+.59
• Personal freedom	+.44	−.74	+.51	+.48
Inequality				
• Disparity in incomes	+.06	−.33	+.02	−.17
• Discrimination of women	−.45	+.38	-.48	−.76
Brotherhood				
• Tolerance	+.50	−.33	+.50	+.49
• Trust in people	+.37	−.50	+.54	+.39
• Voluntary work	+.04	+.22	−.00	−.11
Justice				
• Rule of law	+.53	−.57	+.56	+.68
• Respect of civil rights	+.56	−.44	+.54	+.61
• Corruption	−.60	+.65	−.63	−.74
Explained variance: Adjusted R^2	83%	71%	85%	87%

Table 2. Happiness and Society (Veenhoven, 2007)

Wealth

Above in table 2 we see that Average Happiness is quite strongly correlated with purchasing power per head. Of all the conditions, it has the highest correlation with happiness. This also holds for Happy Life Years and Inequality-Adjusted Happiness. It has a similar strong negative correlation with Inequality of Happiness, so higher wealth will lead to less inequality of happiness in a country. Veenhoven (2007) has found that these relationships are curvi-linear. This means that in poor nations the relationship is stronger than in rich countries.

When the $20,000 point is passed, the regression line is almost flat, which suggests that the law of diminishing returns applies. The effect of wealth on happiness of more than prevalence of absolute poverty (see appendix). Malnutrition and no access to safe water together have a strong negative effect on happiness, but purchasing power per head has a much stronger effect on happiness (Veenhoven, 2007).

Security

Safety and happiness are also positively correlated. Physical safety is expressed as lethal accidents. This does not change when corrected for wealth. State provided social security does disappear when wealth is controlled for (Veenhoven, 2000a). See also the table in the appendix. The effects on Happy Lifer Years and Inequality-Adjusted Happiness are similar and Inequality of Happiness has the expected negative effect on happiness.

Freedom

People are also happier in the nations that allow most autonomy. Table 2 displays the strong correlations with indicators of political and personal freedom. When controlled for economic affluence, the correlations remain almost identical (see appendix). Correlations with indicators of personal freedom are less strong, but all positive (Veenhoven 2000b). The different reforms might affect personal freedom and then mostly self-perceived freedom in work and life. These correlations are not very strong, but significant even after being controlled for material affluence. Inequality of Happiness, Happy Life Years and Inequality-Adjusted Happiness have the expected effects.

Inequality

Gender inequality seems to have a positive effect on happiness, but becomes very small when controlled for wealth. Class inequality decreases happiness in a nation (see appendix). Inequality of Happiness, Happy Life Years and Inequality-Adjusted Happiness have the expected effects for gender inequality and class inequality.

Income inequality needs some more attention. In contrast to intuition, people in egalitarian countries are not happier. Income inequality is essentially unrelated to the average happiness of citizens and only modestly related to dispersion of happiness among them. Possible explanations for this counterintuitive result have been discussed different authors. Berg (2007) gives reasons why income inequality is not harmful to happiness in society. One explanation could be that happiness is caused by the relative position of people. Because there is always some inequality in income and the unhappiness of the poor is compensated with the

rich, the amount of income inequality does not matter for the average happiness in a country. Explanations of why it might have a positive effect are not given (Berg, 2007). It should be noted that income inequality has a small negative effect on Happy Life Years. Unfortunately, there is no information available to explain this result and we have to conclude that income inequality does not harm happiness.

Brotherhood

Tolerance and trust in people are, as expected, positively correlated with Average Happiness. Surprisingly, there is no correlation with 'voluntary work'. Inequality of Happiness, Happy Life Years and Inequality-Adjusted Happiness have the expected effects for tolerance and trust in people.

Justice

Correlations for rule of law and respect of civil rights are positive and strong. Corruption has the expected negative effect on happiness. Inequality of Happiness, Happy Life Years and Inequality-Adjusted Happiness have the expected effects.

Explained variance

Together, these six societal qualities explain 83% of the differences in Average happiness, 71% of the differences in Inequality of happiness and no less than 87% of the differences in Happy Life Years (Veenhoven, 2007). This underlines the importance of assessing possible reforms by happiness research.

3. Reforms of the Dutch welfare state

In his paper reinventing the welfare state, De Mooij (2006) analyzes three possible directions for reforms of the Dutch welfare state. He describes the goals, the trade offs and the threats and opportunities of the welfare state. He defines three possible types of reforms:

- the residual welfare state: characterized by centralization, individualization, flexible labor market, emphasis on private responsibility, only provisions for people with large needs.

- The universal welfare state: characterized by centralization, collectivism, flexible labor market, generous social provisions with uniform character, intensive and mandatory activation and public expenditures that are complementary to labor.

- The diversified welfare state: characterized by decentralization, collectivism, rigid labour market, commitment, long-term relations and decentralized solidarity, a safety net for the low-skilled provided by the government.

De Mooij predicts the effects on the Dutch economy by using the MIMIC model. The outcomes are as follows (De Mooij, 2006)

The residual welfare state improves the labor market by raising incentives for labor supply, integration of entrants into the labor market and reduced wage costs for low skilled workers.

This will raise inequality and insecurity within society. The residual welfare state has the highest increase in production, about 7%. The residual welfare state will lead to low job and income security, because the flexibility of the labor market is a central theme in this type of reform. Moreover, the decrease in spending on the welfare state as percentage of GDP will be the highest among the types of reforms. This can be concluded by the highest decline in the marginal tax rate, -7¾% and the highest growth of production. The residual welfare state leaves a lot of freedom for its citizens. It scores well on privacy and choice variables. The government will not interfere with their decisions to work or not. The residual welfare state increases income-inequality the most. The Theil-coefficient increases by 14½%. As de Mooij argues, this introduces a serious risk on a underclass. Participation of women will increase somewhat. The residual welfare state increases hours worked and the participation rate of people. Commitment will decrease because of flexibility of the labor market.

The universal welfare state improves labor market performance as well, though not as much. It will increase female participation, moderately decrease the long term unemployment and create a bit more equality. This comes at the cost of less privacy and a costly welfare state which is not very capable of absorbing immigrants. The universalist welfare state has a moderate increase in production, namely 3%. The universalist welfare state allows little insecurity. It takes care of all its citizens by a strong activation policy and high benefits for people that are unemployed. This makes the universalist welfare state expensive. It will decrease the marginal tax rate only by 1¼% and with the moderate increase in production, it will lead to a small decline in state spending on the welfare state as percentage of GDP. The universalist welfare state interferes the most with people's lives. It scores negative on choice and privacy. The high activation programs need a lot of information about people's lives and leaves people with little choice. The universalist welfare state is the only proposed reform that will in fact decrease income-inequality, by 1¾. The participation rate of women increases by 14½%. The universalist welfare state also increases participation and hours worked, though a little less than the residual welfare state. Commitment will also decrease because of flexibility of the labor market.

The diversified welfare state improves the labor supply, mostly by stimulating people that are already in the workforce. It comes at the cost of a moderate increase in inequality and less decrease in unemployment. Commitment between employer and employee is a non-quantified advantage of this type. The diversified welfare state only increases production by 2¼%. The

15

decline in marginal tax rate will be moderate, -3½%, making its spending on the welfare state in between the previously mentioned reforms. The diversified welfare state has ambiguous effects on choice and privacy. There are many subgroups between which they could choose, but within these groups they have little choice. The government does not break into the privacy of its citizens, but the subgroups might. This makes the diversified welfare state in between the residual and the universalist welfare state with respect to privacy and choice. The diversified welfare state increases inequality by 9¾%, so less than the residual. The participation rate of women will drop. The diversified welfare state also moderately increases hours worked an the participation rate. It differs from the other two types of reforms by its rigid labor market which increases commitment.

The results are summarized in table 3.

Institutions	RESIDUAL	UNIVERSAL	DIVERSIFIED
Inequality index for working singles (Theil)	14½	− 1¼	9¾
Marginal tax burden (absolute change)	− 7¾	− 1¼	− 3½
Replacement rate (absolute change)	− 9¼	− 1	− 4½
Income tax rate (absolute changes)	.	− ¼%	.
Income tax rate (level)	27%	.	33½%, 45%
Labour market performance			
Labour supply in hours	3	1½	2
primary earners	2	− ¼	1¾
secondary earners	6¼	8¾	¾
Share of high-skilled labour supply (absolute change)	1¾	¼	½
Female participation rate	9	14½	− 3½
Total employment	6¼	3	2½
Unemployment rate (absolute changes)	− 2½	− 1¼	− ½
low skilled	− 8¼	− 4¼	− 1¾
high skilled	− ¾	− ¼	0
Share of long-term unemployment (absolute change)	− 25½	− 12	− 3¾
Miscellaneous			
Production	7	3	2¼
Commitment	−	−	+
Privacy	+	−	− /+
Fertility	−/+	+	−
Choice	+	−	− /+
Elderly participation	+	+	+

[a] All figures reflect ex post effects. They are expressed in relative changes, unless indicated otherwise. The government budget is balanced ex-post by adjusting income taxes.

Source: MIMIC simulations & complementary analysis

Table 3. Long-term effects of three comprehensive reform packages (De Mooij, 2006)

De Mooij (2006) finishes with suggesting that society needs to make choices, depending on social preferences and future developments. Because of the trade offs, there is no gain without pain. The next paragraph will attempt to find if there is an optimal reform it terms of increasing happiness.

4. Relating the outcomes

This section relates the qualities of Veenhoven (1997, 2007) to the effects of the reforms studied by De Mooij (2006). This will cause some overlap with previous sections, because it links those sections together.

Wealth

The effect on wealth of the three reforms can be measured by the rise in production, because purchasing power per household is related to the gross domestic product, which is quite a strong relation. Though, as described before, the effect of wealth on happiness is almost non-existing after a GDP per capita of $20.000. The Netherlands had an approximate GDP per capita of $38.500 in 2006, so the growth of GDP will not add to a greater happiness of the Dutch. (Veenhoven, 2007)

Security

The measures of security exist of physical security and state provided social security. The

reforms are not likely to have an effect on lethal accidents. The murder rate is not likely to change either, though higher class inequality might increase crime. This however, will be dealt with in the section on indirect effects. State provided social security does change with the different welfare state reforms, but is said not to have an effect after having controlled for economic affluence. So security is not an important factor in assessing policy reforms. Of course state provided security could also be measured by different instruments, like entitlements. This will be discussed in the discussion section. The different welfare state reforms will be assessed by there welfare state expenditures as percentage of GDP. The government budget is balanced for all the reforms, so less spending on the welfare state is always results in less taxes. Information on GDP and the marginal tax rates taken together give a good prediction of relative higher spending on social security. For example, as GDP rises and marginal tax rate declines, percentage GDP spent on welfare state decreases.

Freedom

The different welfare state reforms will most probably not affect political freedom. Again, more class-inequality might distort the democracy, but this will be discussed under indirect effects. The different reforms might affect personal freedom and then mostly self-perceived freedom in work and life. The related measures are privacy and choice. This relation might not be extremely strong, because people might perceive little freedom if they get low unemployment benefits when they decide not to work, although the government does not directly urges them to work. This will be dealt with in the discussion section.

Inequality

One thing welfare states do put emphasis on, is decreasing inequality. The measures of inequality related to happiness are all influenced by the welfare state. The income-inequality index by de Mooij is a measure strongly related to income inequality. Gender-inequality is related with female participation rate. Although the measure of gender-inequality includes more than income-inequality between men and women, income-inequality between men and women is an important part of gender-inequality, so the relation is fairly strong. Class-inequality is something that is mitigated by governments by improving equal chances for all citizens. Class-inequality is not directly measured by de Mooij, but he is very clear that the residual welfare state has a great risk of creating an underclass. (De Mooij 2006, p.165) He states that the Universalist welfare state takes care of the lowest skilled in society by offering them public jobs and that the diversified welfare state uses targeted measures to support the lowest class in society. Based on these statements, a preliminary assessment can be made.

Brotherhood

The quality ´brotherhood´ contains trust in people, voluntary work and tolerance. Tolerance is not likely to change due to the reforms, although social unrest might decrease tolerance. This will be dealt with under indirect effects. Voluntary work might decrease when the participation rate and hours worked go up, but does not significantly increase happiness. Trust in people might be related to commitment. People that are less committed will probably trust their coworkers less. This relation, however, should be used with caution.

Justice

There are no expected changes in the measures of justice due to the proposed reforms.

Remarks about indirect effects

Next to the direct relations between the qualities and the measures by de Mooij, one could also expect indirect relations. The most important ones will be discussed here, but they will be left out of the ranking until the conclusion. First, the freedom of choice that welfare states leave the citizens on the choice whether or not to work might, by not pressuring them via activation policies might only be superficial. If the unemployment benefits are very low, they might perceive it as not being a real choice. Second, increasing class-inequality might have a strong effect on factors like crime, justice, trust in people, etc. The negative effect might thus be bigger if it works out on other factors. The last indirect effect might stem from the generosity of a welfare state. A generous welfare state might be more vulnerable to corruption than welfare states in which benefits are low. In the latter case, corruption will have a lesser pay-of.

5. Assessment of the performance of the welfare states

Table 4 combines the results of the previous sections. The left column displays the qualities that explain happiness according to Veenhoven(1997, 2007). In brackets after each quality are the related measures studied by de Mooij (2006). The second column displays strength of the effect of each quality on happiness. The last three columns display the effects on happiness of the three scenarios. The changes of the related measure are in brackets.

	Performance on average happiness (performance on related measure)			
Cause of Happiness (related measure)	**correlation**	**Residual**	**Universalist**	**Diversified**
Wealth Purchasing power per head (Production)	+0.67*	**0** (+7)	**0** (+3)	**0** (+2¼)
Security Physical health → Lethal accidents (none) → Murder rate (none) State provide social security (Production,Marginal Tax rate)	-0.49 -0,17 -0.03	**0** (n/a) **0** (n/a) **0** (+7,-7¾)	**0** (n/a) **0** (n/a) **0** (+3, -1¼)	**0** (n/a) **0** (n/a) **0** (+2¼ ,-3½)

Freedom				
Political freedom (none)	+0.44	**0** (n/a)	**0** (n/a)	**0** (n/a)
Personal freedom				
→ perceived freedom in live (privacy, choice)	+.24	**++** (+,+)	**--** (-,-)	**0** (-/+, -/+)
→ perceived freedom in work (privacy, choice)	+.47	**++** (+,+)	**--** (-,-)	**0** (-/+, -/+)
Economic freedom (privacy,choice)	+0.59*	**++** (+,+)	**--** (-,-)	**0** (-/+, -/+)
Brotherhood				
Tolerance				
→ absence of prejudice (none)	+0.01	**0** (n/a)	**0** (n/a)	**0** (n/a)
Trust in compatriots (commitment)	+0.10	**-** (-)	**-** (-)	**+** (+)
Voluntary work (participation rate, hours worked)	+0.04*	**0** (+6¼ ,+3)	**0** (+3,+1½)	**0 -** (+2½ ,+2)
Inequality				
Gender-inequality (Female participation)	- 0.07	**+** (+9)	**++** (+14½)	**-** (-3½)
Income-inequality (Inequality index)	+0.07 (HLY -0,17)	**0** (+14½)	**0** (- 1¼)	**0** (+9¾)
Class- inequality (remarks by de Mooij)	- 0.58	**--** (--)	**++** (+)	**-** (-)
Justice				
Rule of law (none)	+0.53*	**0** (n/a)	**0** (n/a)	**0** (n/a)
Respect of civil rights (none)	+0.56*	**0** (n/a)	**0** (n/a)	**0** (n/a)
Corruption (none)	- 0,50	**0** (n/a)	**0** (n/a)	**0** (n/a)

Table 4. Change in average happiness (++ improving happiness a lot to - - decreasing happiness a lot, correlations define;   *=not corrected for material affluence; source: tables 2,3 and 5)

As shown, the welfare state has only little direct effect on the happiness of people. The small influence of the welfare state on happiness is in line with Veenhovens findings (Veenhoven, 2000a). There are a few dimensions on which the scenario's score differently.

Economic and personal freedom

On this quality, the residual welfare state scores the best for both: it has by far the most economic and material affluence and would thus create the most happiness. The universalist welfare state has very low indicators on freedom. The diversified is in between the previous two types of reforms.

Gender-inequality and class-inequality

With gender-inequality, the universalist welfare state creates the most happiness. The residual welfare state increases happiness much less in this respect and the diversified welfare state actually decreases happiness by increasing gender-inequality. The last inequality measure is class-inequality. Here the welfare states performs completely opposite from the income-inequality measure. The universalist welfare state has the smallest risk of creating a underclass and the residual welfare state has serious risk of creating an underclass. The diversified welfare state is in between these extremes.

Trust in people

On the aspect of trust in people, the diversified welfare state performs the best, creating commitment within sectors. The universalist and residual welfare state both have a flexible labor market, hence decreasing commitment between employer and employee.

6. Conclusions

Based on the performance on the evaluated qualities, one could form hypotheses about which welfare state would create the greatest happiness for the greatest number. The diversified welfare state only outperforms the other two with trust in people, but this contributes only marginally to someone's happiness and the relation between commitment and trust in people is weak. This leads to believe that this reform would create the smallest increase in happiness. The difference between the residual welfare state and the universalist welfare state is less clear. The residual welfare state scores well on important issues like economic and personal freedom. A smaller effect on happiness is created by the increase in income-inequality by the residual welfare state, but his effect does not hold in the long run as income inequality has a negative effect on happy life years. The universalist welfare state scores high on the important issue of avoiding class-inequality which would make people a lot less unhappy. It also performs well on decreasing gender-inequality, but this has only a small effect on happiness.

It is of course not possible to just add up the correlations to see which one should be preferred. Though I think that the risk of a society with an underclass should be avoided. As explained in the remarks on indirect effects, it may have side effects on all kinds of different

factors strongly influencing happiness. It might cause social unrest, less political freedom through populist governments, less tolerance, more crime, less well-functioning justice systems, etc. Veenhoven (1997, 2007) has shown that these factors have a lot more influence on happiness than the direct influence of the welfare state. The negative preference for class-inequality might however already have taken in account these side effects, so further research is needed.

A comparison with other countries makes the hypothesis stronger. The average of the Scandinavian countries (Denmark, Norway and Sweden) with Universalist welfare state have an average of 7,8. The countries with a Residual Welfare state (USA, Canada, Ireland, UK and Australia) have 7,5 and the countries with a Diversified Welfare State (Austria, Belgium, France, Germany and Italy) have 7.2 (Veenhoven, 2006-1d). Of course one can not derive causal effects from this comparison. There might be reverse causal effects, geographical and demographical causes, etc. Next to that, there are large differences within these groups. Further research will have to test whether indeed the hypothesis that the universalist welfare state would create the greatest happiness for the greatest number can be confirmed.

7. Discussion: is happiness a good instrument to asses social policy reforms?

As stated in the introduction of this paper, this research should be considered as a first exploration of predicting the effect of reforms in happiness. This research has been kept simple to demonstrate the possibility. So after having done so, it is time for reflection on the used method.

Strong points

Happiness as a measure to assess social policy has proven to be living up to several expectations. First of all, it remains attractive because it is subjective measure which includes more than economic growth and performance of the labor market. It includes trade offs between work and leisure, choice and security, etc. in one single dimension for assessment. Second, because of the strong negative correlation between happiness and inequality of happiness, the traditional debate between inequality and growth is redundant. Both improve the efficiency of policy negotiations because politicians no longer have to debate these trade offs.

Weak points and possible solutions

There are however, quite a few weak points of using happiness. First, there is the measurement of happiness. Veenhoven (1984) has spend a lot of research on the question if

happiness can be measured by self-report and be compared across nations. While some doubts are lessened, other still remain. To me it is not very convincing that people have a notion of their own happiness and that their answers are not biased or actually measuring some unobserved variables. Especially the possible relativity of happiness is a factor that makes it hard to use it for policy assessment. Another important weakness of the use of happiness research, is the fact that the causes of happiness are given by correlations with qualities. Some are corrected for material affluence, but to establish causal effects, they should be corrected for many more variables. More complicated quantitative methods should be applied to the available data. Next to that, the poor relations between the predictions of De Mooij (2006) and the causes of happiness can cause serious errors in interpretation. For example the relation between commitment and brotherhood is very weak. An alternative option would be, to consider commitment as a form of security, because in the research of De Mooij (2006), commitment derives from the fact that employer and employee are more certain of their relationship. As noted before, the perceived freedom in work might not just stem from the lack of activation policy, but also from the height of the benefits received when someone decides not to work. Esping-Andersen (1990) has argued that decommodification should be a criteria to assess welfare states upon. This instrument might better describe the amount of choice someone has between work or unemployment. State provided security is now measured by the percentage of GDP spent on the welfare state. As Ouweneel and Veenhoven argue, an alternative measure is *"... to sum welfare entitlements, by making an inventory of current welfare-rights in nations and consider their scope."* (Ouweneel and Veenhoven., 1995). It would be sensible to look for causes of happiness that are directly predicted by current economical models. Another improvement could be, to do better research on the effects of changing certain factors in the Dutch society, given the state of happiness The Netherlands are in right now.

A possible explanation for the counterintuitive relation between income-inequality and happiness, would be that it in fact measures social mobility. If there is income-inequality within a country, people might derive happiness from the fact that they can increase there well-being by working harder and receiving more income for that. This calls for further research.

To conclude, this attempt has only made use of the predictions of one author. Many authors have also researched relations between societal characteristics and happiness, for example inflation and unemployment (Di Tella et al., 2001). Layard (2005) has given a list of policy recommendations based on happiness studies. There are many more examples that can and should be used.

T. Y. W. Weistra - Keizerstraat 23 - 3512 EA Utrecht - +31640229334 - thijsweistra@hotmail.com

List of used literature

Arts, W., and Gelissen, J. (2002) *Three worlds of Welfare Capitalism or More?* Journal of European Social Policy 12,

Berg, M (2007) *Inkomensongelijkheid en geluk in landen (Inequality in income and happiness in nations)* Mens en maatschappij, vol.82, pp.28-50

CBS, *www.cbs.nl*

Di Tella, R., MacCulloch R.J., and Oswald, A.J. (2001) *Preferences over Inflation and Unemployment: Evidence from Surveys of Happiness,* The American Economic Review, Vol. 91, No. 1, pp. 335-341

Easterlin (1974) *Does economic growth improve the human lot? Some empirical evidence* New York: Academic Press

Easterlin (2005) *Feeding the Illusion of Growth and Happiness: A Reply to Hagerty and Veenhoven* Social indicators research, Volume: 74 Issue: 3 pp: 429-443

Esping-Andersen, G. (1990) *Three worlds of welfare capitalism,* Polity and Princeton University Press

Hagerty, M. and Veenhoven, R. (2003) *Wealth and happiness revisited: Growing national income does go with greater happiness,* Social Indicators Research 64, 1–27

Hagerty, M. and Veenhoven, R. (2006) Rising Happiness in Nations 1946–2004: A Reply to Easterlin

Heertje, A. (2006) *Het was Niet De Bedoeling : Algemeen Evenwicht, Banach-Ruimten En Europees Mededingingsbeleid*, Amsterdam: Vossiuspers.

Kalmijn, W. and Veenhoven, R. (2005a) *MEASURING INEQUALITY OF HAPPINESS IN NATIONS: In Search for Proper Statistics* Journal of Happiness Studies 6:357–396

Kalmijn, W. and Veenhoven, R. (2005b) *INEQUALITY-ADJUSTED HAPPINESS IN NATIONS Egalitarianism and Utilitarianism Married in a New Index of Societal Performance,* Journal of Happiness Studies 6:421–455

Layard, R. (2005) *Happiness lessons from a new science,* The Penguin Press, New York

Mooy, R. de, (2006) *Reinventing the Welfare State*, CPB

Oswald, A.J., (1997) *HAPPINESS AND ECONOMIC PERFORMANCE* The Economic Journal, 107 (November), I8I5-I83I. Published by Blackwell Publishers, Io8 Cowley Road, Oxford

Ott, J. (2005) *Level and equality of happiness in nations: Does greater happiness for a greater number imply greater inequality in happiness?* Journal of Happiness Studies, vol. 6, pp. 397-420

Ouweneel, P. and Veenhoven R. (1995) *LIVABILITY OF THE WELFARE-STATE Appreciation-of-life and length-of-life in nations varying instate-welfare-effort* Social Indicators Research 36: 1-48

Veenhoven, R. (1984) *Conditions of Happiness* Kluwer Academic Dordrecht/Boston

Veenhoven, R. (1988) *Utility of Happiness,* Social indicators research, Volume: 20, Issue: 4 (August 1, 1988), pp: 333-354

Veenhoven, R. (1997) *ADVANCES IN UNDERSTANDING HAPPINESS,* Revue Québécoise de Psychologie, vol 18, pp 29-74

Veenhoven, R. (2000a) *Wellbeing in the welfare state: Level not higher, distribution not more equitable* Journal of Comparative Policy Analysis, vol. 2, pp 91-125

Veenhoven, R. (2000b) *Freedom and happiness: a comparative study in 44 nations in the early 1990's* Published in: Diener, E. & Suh, E.M. (eds) 'Culture and subjective wellbeing', MIT press, Cambridge, MA USA, pp. 257-288

Veenhoven, R., (2002) *Why social policy needs subjective indicators,* Social indicators research, Volume: 58, Issue: 1/3 (June 2002), pp: 33-46

Veenhoven, R. (2004) *Happiness as a public policy aim; The greatest happiness principle*, in A. Linley and S. Joseph (eds), Positive Psychology in Practice Wiley, USA, pp. 658–678.

Veenhoven, R (2005) *Inequality of happiness in Nations*, Journal of Happiness Studies (2005) 6:351–355

Veenhoven, R., (2006-1d) *Average happiness in 95 nations 1995-2005*, World Database of Happiness, RankReport 2006-1d, Internet: worlddatabaseofhappiness.eur.nl

Veenhoven, R. (2007) *Measures of Gross National happiness*, Presentation at OECD Statistics, Knowlegde and Policy, Roundtable on 'measuring happiness and making policy' Istanbul, Turkey, June 27-30, 2007

Appendix

Correlates of average happiness in nations
48 nations 1990

nation characteristics	correlation with happiness		N
	zero order	affluence controlled	
Material affluence			
Income per head: purchasing power 1989[ii]	+.64**	---	43
Incidence of absolute poverty:			
* malnutrition: % < 2500 calories[iii]	—.16	+.12	42
* % without safe water[iv]	—.35	+.24	38
Security			
Physical safety[v]			
* murder rate	—.39**	—.17	39
* lethal accidents	—.67**	—.49**	39
Legal security: incidence of corruption[vi]	—.73**	—.50*	37
Social security: state expenditures in % GDP[vii]	+.38	—.03	34
Freedom			
Political freedom[viii]			
* respect of political rights	+.35*	+.34	47
* respect of civil rights	+.41*	+.34	47
Personal freedom			
* freedom of marriage: acceptance divorce[ix]	+.18	+.02	42
* freedom of procreation:			
* abortion available[x]	+.13	—.12	37
* sterilization available[xi]	+.18	+.27	34
* freedom of sexuality[xii]:			
* acceptance of homosexuality	+.62**	+.20	42
* acceptance of prostitution	+.35	—.10	42
* freedom to dispose of own life[xiii]:			
* acceptance suicide	+.29	+.03	42
* acceptance of euthanasia	+.28	—.01	40
Self-perceived freedom[xiv]:			
* in life	+.50**	+.24	42
* at work	+.74**	+.47*	41
Social equality			
Income-inequality: ratio lowest to highest 20%[xv]	—.11	+.07	28
Gender-equality: woman empowerment index[xvi]	+.51**	+.07	35
Class-inequality: educational homogamy[xvii]	—.52*	—.58*	27
Cultural climate			
Education			
* % literate[xviii]	+.19	—.11	47

* school enrolment ratio[xix]	+.51**	+.26	36
* average years in school[xx]	—.07	—.06	40
Information[xxi]			
* newspapers pc	+.36*	—.07	32
* TV receivers pc	+.39**	—.23	42
Religion[xxii]			
* belief in God	+.38*	+.40*	37
* religious identification	+.24	+.20	41
* religious participation	+.15	+.28	38
Value orientation: Hofstede dimensions[xxiii]			
* individualism	+.69**	+.04	32
* power distance	—.50**	—.05	32
* masculinity	—.20	—.15	32
* uncertainty avoidance	—.53**	—.30	32
Social climate			
Tolerance			
* absence of prejudice[xxiv]	+.58**	+.01	38
Trust[xxv]			
* trust in people:			
* in family	+.26	+.07	30
* in compatriots	+.02	+.10	40
* trust in institutions	+.26	+.41	30
Social participation			
* in work: unemployment[xxvi]	+.42**	+.34*	42
* in voluntary associations: memberships[xxvii]	+.52**	+.28	34
Peacefulness[xxviii]			
* military dominance: soldier/civilian ratio	—.38*	—.46*	41
* military expenditure in % GDP	—.25	—.26	41
Population pressure[xxix]			
Population density: persons per km^2	+.01	+.00	42
Population growth: population doubling time	+.06	—.13	39
Modernity			
Urbanization: % urban population[xxx]	+.48**	+.28	40
Industrialization: non-agricultural share GDP[xxxi]	+.49**	+.03	32
Informatization: telephones pc[xxxii]	+.64**	+.32	42
Individualization: expert rating[xxxiii]	+.55**	+.21	39

Table 5. Correlates of average happiness in nations (Veenhoven, 1997)

NOTES

i.   I my view this last item is not appropriate. One can be quite satisfied with life, but still be open for the opportunity to try something else.

ii.   UN Human Development Report 1992, table 1. Missing values estimated: Northern Ireland between Great Britain and Ireland ($ 10,600), Czecho-Slovakia average of neighboring East European nations ($ 7,420).

iii.   Kurian 1992, table 192. The minimally required amount of daily categories is about 2500. In this dataset only four countries score below that level: India, China, Nigeria and the Philippines.

iv.   Kurian 1992, table 194. Data 1980. Some scores seem implausible (Finland 84%, Spain 78%, Hungary 44%)

v.   Medical registration. UN Demographic Yearbook 1993, table 21.

vi.   Polls among business men and journalists. Transparency International 1995.

vii.   ILO 1996, table 3

viii.   Expert ratings. Karantnycky et al 1995.

ix.   Public opinion. Item 310 in World Value Survey 2.

x.   Expert rating of restrictive policies. PAI 1995.

xi.   Expert rating of limitations and services, IPPF 1995.

xii.   Public opinion. Survey items 307 and 308 in World Values Survey 2.

xiii.   Public opinion. Items 312 and 313 in World Values Survey 2.

xiv.   Public opinion. Items 95 and 117 in World Values Survey 2.

xv.   UN Human Development Report 1995, table 12.

xvi.   UN Human Development Report 1995, table 3.5.

xvii.   Smits et al 1996: 48

xviii.   World Bank, World Development Report, 1995, table 1.

xix.   World bank, World Development Report 1995, table 3.1.

xx.   Average self estimates. Item 356 in World Values survey 2.

xxi.   Kurian 1992, tables 218 and 214.

xxii.   Average self reports. Items 175, 151 and 147 in World Values Survey 2.

xxiii.   Opinions IBM employees. Hofstede 1990

xxiv.   Public opinion. Items 69-82 in World Vlues Survey 2.

xxv.   Public opinion. Items 272-285, 340 and 341 in World Vlues Survey 2.

xxvi.   Labor force surveys and registrations. ILO 1995, table 9.

xxvii.   Average self reports. Item 23 in World values Survey 2.

xxviii.   Kurian 1992, tables 41 and 43.

xxix.   Kurian 1992, tables 17 and 28.

xxx.   Kurian 1992, table 18.

xxxi.   Kurian 1992, table 84.

xxxii.   Kurian 1992, table 167 .

xxxiii.   Diener et al 1994, table 1.

Notes to table 5. (Veenhoven, 1997)