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* Views expressed are those of the authors and do not necessarily reflect official positions of De Nederlandsche Bank.

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Abstract

We investigate the determinants of Dutch households' preferences for income redistribution, using survey data. Our results show that support for redistributive policies is related to self-interest, exposure to misfortune and risk-aversion. In addition, people who believe that prosperity is primarily due to luck rather than hard work tend to favour redistribution, indicating that equal opportunities are considered important. Interestingly, support for redistributive policies is positively related to education, while the impact of age is ambiguous. This is an important outcome, as it implies that globalisation and skill-biased technological progress may put less pressure on the Dutch social security system than previously assumed.

JEL Codes: D31, D63, H23, H55, P16

Keywords: Redistribution, social security

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1 Introduction

Welfare systems will be under pressure in the next decades. The dependency ratio is boosted by the ageing process, while the income distribution is likely to become more uneven due to globalization and skill-biased technological change (Berman et al., 1998; Bernanke, 2007; International Monetary Fund, 2007; Jacobs, 2004; Dupuy, 2007). At the same time, increasing individualism may reduce the willingness to support other groups. Presumably, social security arrangements are only sustainable if they remain broadly consistent with society-wide preferences. If preferences are shifting against redistribution, this may become problematic in countries with large social security and pension systems, like the Netherlands.

We investigate the determinants of Dutch individuals' attitudes towards redistributive policies, which may indicate in which direction preferences will shift in the coming years. In particular, we consider to what extent preference for redistribution is related to self-interest, social background or personal beliefs about solidarity. We use information from the DNB Household Survey, which contains detailed questions about individuals' financial situation, opinions and expectations. Our main results are based on a broad solidarity concept, which is measured by responses to the statement "*Individuals should take more care of themselves, rather than making an appeal to solidarity of others*". We also consider two more specific statements which focus on, respectively, ageing and social security.

We find that preference for redistribution is related to economic interest (income, financial prospects, employment status), exposure to misfortune (health, flexibility to deal with setbacks) and risk-aversion. In addition, people who believe that prosperity is primarily due to luck rather than hard work tend to favour redistribution, indicating that equal opportunities are considered important. Interestingly, support for redistribution is positively related to education while the role of age is ambiguous.

The paper is organized as follows. In the next section, we briefly discuss earlier studies on preference for redistribution. In Section 3, we present ordered probit estimations to explain preference for redistribution. Section 4 concludes.

2 Background literature on preference for redistribution

The most obvious reason for individuals to support income redistribution arrangements is self-interest. In general, people with low incomes or modest wealth benefit from redistribution. In a seminal paper, Meltzer and Richard (1981) present evidence that the poor are indeed the main supporters of redistributive policies. However, current income and wealth may not sufficiently take into account forward-looking behaviour. People with low incomes may expect to become better off in the future and anticipate this improvement by opposing redistributive policies even if this is not in their present interest. Bénabou and Ok (2001) give a theoretical foundation of this ‘prospect of upward mobility hypothesis’ and also provide some empirical evidence. Further empirical support is given by Alesina and La Ferrara (2005) and Fong (2006). Self-interest is not only reflected by financial factors. Individual characteristics like risk aversion may be a reason to support collective arrangements in which redistribution takes place through ex ante risk sharing, i.e. insurance. In addition, age may affect someone’s attitude towards redistribution, as retirees are important beneficiaries of pension and health care schemes.

People’s attitudes towards redistribution are also affected by factors unrelated to self-interest, such as altruism or perceptions regarding equal opportunities (Alesina and La Ferrara, 2005). Presumably, individuals who believe that prosperity is primarily the result of hard work are less likely to support redistributive policies. By contrast, if prosperity is attributed to exogenous factors—e.g. specific talents, a favourable social background or simply luck—this may be a reason to support social security arrangements to correct for ‘unfair’ advantages. A specific example of solidarity unrelated to self-interest is the so-called ‘enlightenment principle’ (Hasenfeld and Rafferty, 1989), which refers to people’s commitment to social rights and tolerance.

Some studies analyse differences in solidarity across countries. Alesina and Glaeser (2004) conclude that differences in social security between the US and Europe can be partly attributed to differences in their population’s attitudes. This is based on survey evidence showing that Americans tend to believe that poverty is largely due to a lack of effort, while many Europeans

take the view that the poor are merely unfortunate. In addition, Americans are less risk averse than Europeans, implying a lower demand for social security. Both the difference in attitude and risk aversion are consistent with the fact that the welfare state is bigger in Europe than in the United States. Comparing European Union member states, Van Oorschot et al. (2005) find an inverse relationship between domestic expenditures on social security and what they call ‘informal solidarity’, which points at crowding out of individual responsibility by state responsibility. They also find a common pattern across European countries that solidarity is highest with the unabled, followed by the unemployed and, finally, immigrants.

Van Oorschot (1998, 2002) investigates support for redistributive policies in the Netherlands, on the basis of a survey that was conducted in 1995. Van Oorschot (1998) finds that solidarity is conditional: redistribution is particularly supported towards people that are not to blame themselves for their misfortune, people that are part of the same ethnic group, and people that are prepared to give something in return (reciprocity). Van Oorschot (2002) considers a broad range of factors and concludes that self-interest is the most important motive to support social security arrangements, followed by moral incentives, age, gender and education.

3 Empirical results

3.1 Methodology and data

We investigate determinants of Dutch households’ support for redistributive policies. More specifically, we analyse to what extent preference for redistribution can be attributed to self-interest or other factors. Our approach is similar to Alesina and La Ferrara (2005) who use survey data for US households. Like these authors, we estimate ordered probit regressions for the following equation:

$$(1) \quad Y_i = f(X_i, Z_i) + \varepsilon_i$$

where Y_i reflects support for redistribution by individual i . This variable is based on responses to the statement “*Individuals should take more care for themselves, rather than making an appeal to solidarity of others*”, with answers varying from 1 (totally agree) to 7 (totally disagree).¹ In

¹In the survey, the answers ranged from ‘totally disagree’ to ‘totally agree’. In our calculations, the scale was reversed to obtain a measure that is positively related to solidarity,

other words, a higher Y_i reflects stronger support for redistribution. The dependent variable is formulated in a very general way, without references to specific arrangements such as unemployment benefits or pensions. This is important to avoid differences in attitude that are only relevant for specific cases. We also consider two alternative dependent variables, which focus on the ageing process and social security.

X_i and Z_i are vectors of explanatory variables. X_i consists of personal characteristics (age, marital status, gender, education, income, employment status) that are included in all regressions. Controlling for these variables, individual elements of Z_i are added one by one in subsequent regressions, reflecting personal opinions, perceptions and future expectations. As most of these variables are not directly observable, we use factor analysis to create the following proxies:

- *Flexibility*: the ability to deal with setbacks;
- *Environment*: the extent to which people think they are being better off than their environment;
- *Expfinsit*: the extent to which people have negative financial prospects;
- *Health*: health condition;
- *Future*: the extent to which people take future consequences of current actions into account;
- *Luck*: the extent to which people believe that financial prosperity is due to luck rather than own actions;
- *Risk*: risk aversion.

The DNB Household Survey includes many questions that are related to the possible determinants of solidarity, which are used to construct these proxies (see Appendix A for a more detailed discussion). We use cross-section data for the year 2005. Our total sample consists of 2,214 observations, which are restricted to heads of households and (un)married partners. Hence, most of the personal characteristics reflect those of the head of the household. Our income measure is the equivalised household income, calculated as the summed income of household head and partner divided by the square root of the number of household members.

in line with other studies (including Alesina and La Ferrara, 2005).

3.2 Estimation results

Table 1 presents regression results based on our general solidarity measure. The baseline equation in the first column shows that people are more supportive to redistribution if they are young, female, highly educated, have a low income and if they are unemployed. Being married or having children does not have a significant impact. For the United States, Alesina and La Ferrara (2005) find very similar results for these variables except education, which has a negative influence on solidarity in their estimations.

[Insert Table 1 about here]

In the other columns, the alternative determinants in Z_i are added. According to columns 2-8, people who support redistribution tend to have less favourable near-term prospects, be risk averse and believe that success is primarily due to luck rather than effort. Less supportive are those who are able to cope with setbacks, are better off than others in their environment and are in good health. Figure 1 presents a graphical illustration of each explanatory variable's impact on solidarity, looking at several subgroups' support for redistributive policies (i.e. age categories, income groups, men versus women, etc.).

[Insert Figure 1 about here]

Most of these results are consistent with self-interest: income, employment, and being able to deal with set-backs all point to a negative relationship between financial prosperity and support for redistribution. The positive sign of *Expfinsit* suggests that people take into account their financial prospects, in line with the prospect of upward mobility hypothesis. Non-financial factors are consistent with self-interest as well: people who are less healthy and risk averse tend to favour redistribution. Moreover, the significant impact of risk aversion may point at a preference for self-insurance rather than just solidarity with others. Perceptions about equal opportunities also play a role: people who believe that economic prosperity is largely determined by external factors rather than hard work are more in favour of redistribution.

However, the influence of age and education on peoples' attitudes seems to be inconsistent with self-interest. This is an interesting and also important result, as these two variables are directly related to major trends that

have the potential to undermine solidarity in the next decades: the ageing process and skill-biased technological progress. Our results may indicate that younger people do not oppose redistributive policies to an increasing number of elderly, while the higher educated are willing to share their wealth with less educated people.

Obviously, elements not included in our analysis may play a role as well. For instance, Van Oorschot (1998) finds that conditionality is an important determinant of solidarity, both for older and less educated people. Conditionality means that redistribution is only supported under certain criteria, e.g. that beneficiaries of redistribution are only acceptable (from a solidarity support point of view) if they are not to blame themselves for the situation they are in or if they are part of the same ethnic group. One explanation for conditionality (Van Oorschot, 1998) is that older and unskilled workers expect to benefit from a lean and mean social security system serving their specific needs as the redistribution pie can only be eaten once. For the elderly, this could mean that their lack of support for social security in general is motivated by the desire to make one specific arrangement—the pension system—more sustainable. Hence, given the increasing proportion of older people in the next decades, this may even imply a decreasing support for redistributive policies that are unrelated to ageing.

To further explore the role of age and education, we consider alternative specifications (Table 2). For age, we add a quadratic term to check for a nonlinear relationship between this variable and support for redistribution (column 2). This quadratic term is significant but makes the original term insignificant, while the resulting pattern is close to the linear relationship in our main results. We also examined different measures of our education variable—distinguishing not only high but also medium and low levels of education, and also including people who started higher education but did not get a degree—but this has virtually no effect on the regression outcomes (not reported).

We also repeat our baseline regression with alternative dependent variables that focus on ageing and social security. Although we believe that overall solidarity should be measured by a general statement like the one we used for the regressions in Table 1, these more specific statements are useful to get more insight in older people’s attitudes. Columns 3 and 4 report the outcomes based on the statement: *“The burden of the ageing process is*

shouldered to a disproportional extent by younger people”, using a reversed scale (i.e. running from ‘totally agree’ to ‘totally disagree’) to create a positive relationship with solidarity. In contrast with our general results in Table 1, age now has a positive sign. While this may partly be due to the somewhat tendentious formulation of this statement, it does suggest that young people’s support for the elderly has its limitations. The quadratic term (column 4) is significantly negative, implying that the impact of age is parabolic. Apparently, the rising support for this particular type of solidarity becomes flatter over the age spectrum and even turns negative at some point—around the age of 70 according to the outcomes.² Being highly educated again increases support for redistribution, while income and employment status are insignificant.

[Insert Table 2 about here]

In columns 5 and 6, we reports regression results based on the statement *“Social security arrangements are so extensive that discourage people to develop their talents”*, again with a reversed scale. This statement is related to the social benefit system, although it may be argued that it does not explicitly address solidarity. Like our general measure (columns 1-2), people with low incomes and unemployed tend to support redistribution. High education and gender no longer have a significant impact. In our regression with a quadratic term, the impact of age on solidarity is positive but levels off over time, and declines after the age of 50. In other words: as people approach their pension, they become more critical regarding social security, which is consistent with the hypothesis (van Oorschot, 1998) that the elderly oppose generous social security arrangements to protect their pensions.

4 Conclusion

Our results show that Dutch individuals’ preference for redistribution can in many respects be related to self-interest. In particular, redistributive policies are less supported by people with higher incomes, good financial prospects, and more by people who are unemployed, less healthy and risk averse. The latter implies that self-interest is not just reflected by solidarity,

²Using the estimated coefficients in column 4 of Table 2, it can be calculated that the maximum impact of age is at $\frac{0.1013}{2*0.0007} = 72.4$ years.

but also includes an insurance element. Other factors are also important: women and people who believe that success is due to luck rather than hard work tend to support income redistribution. These results are broadly in line with similar research for the United States, which is interesting given the more generous Dutch social security system. Note, however, that our results are only an indication of the attitudes of Dutch individuals relative to each other and not vis-à-vis other societies.

Interestingly, people with higher education tend to be more supportive to social security arrangements than people with lower education. This suggests that skill-biased technological change may only have a modest impact on the social sustainability for redistributive policies. There are also indications that solidarity decreases with age, although this is no longer the case if the dependent variable is replaced by a proxy that focuses on solidarity regarding the ageing process. A possible explanation is that older people oppose generous social security arrangements to protect their pensions. A relevant issue is whether these responses will remain robust over time or whether they reflect a cohort effect. Therefore, it remains interesting to continue monitoring different age groups' attitudes towards social security in the next decades.

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A Factor Analysis

Factor analysis can be used to quantify phenomena that are difficult to measure directly, but supposed to be correlated with a set of observable variables. This results in a proxy or a set of proxies, known as factors (see e.g. Hamilton, 2003). In our regressions, we include a number of determinants that have been constructed using factor analysis. In this appendix we briefly explain the procedure that was followed and the construction of each variable.

A.1 Procedure

Our procedure consists of the following steps:

- Selection of variables that are expected to be correlated with the unobservable variable. If necessary, variables are reformulated in such a way that they are positively related to the anticipated factor(s). In addition, ‘don’t know’ answers are reformulated, mostly into the sample average.
- The number of factors is determined using statistical tests, particularly the eigenvalues test and Akaike’s information criterion. Factors are constructed such that factor loadings, scores and the correlation matrix confirm that all variables are positively related to the corresponding factor.
- Interpretation of each variable’s contribution to the factor(s). At this stage, it may be decided to drop a variable if it does not add explanatory power to any of the factors. Especially if there are two or more factors, it is important to be able to give an economic interpretation to each of them. After rotation – a technique to ensure that factors are not correlated among themselves – each factor is usually characterized by a particular subset of variables. This helps to distinguish and interpret the factors.

A.2 Overview of factors

Factor	Explanation
Flexibility	Indicates to what extent someone can deal with setbacks
Environment	Indicates to what extent someone considers himself better off than his direct environment
Expfinsit	Indicates someone's expectation regarding his or her economic and financial position in the near future; higher value means worse prospects
Health	Indicates someone's health condition
Future1	Indicates to what extent future consequences of current actions are taken into account, reflecting <i>time preference</i>
Future2	Indicates to what extent future consequences of current actions are taken into account, reflecting <i>risk aversion</i>
Luck1	Indicates to what extent financial prosperity is due to luck, rather than your own actions, stressing <i>bad luck and fate</i>
Luck2	Indicates to what extent financial prosperity is due to luck, rather than your own actions, stressing <i>hard work</i>
Luck3	Indicates to what extent financial prosperity is due to luck, rather than your own actions, stressing <i>thrift</i>
Risk1	Indicates risk aversion regarding investment, stressing <i>prudence</i>
Risk2	Indicates risk aversion regarding investment, stressing <i>the need to take risks in order to get higher returns</i>
Risk3	Indicates risk aversion regarding investment, stressing <i>risks of stocks</i>

A.3 Construction of factors

A.3.1 Flexibility

Variables included :

FLEX1	‘If necessary, I can reduce my household’s expenditures by 5% without problems.’ 1 ... 7 (<i>totally disagree ... totally agree</i>)
FLEX2	High social class (0/1)
FLEX3	‘Are you satisfied with your current financial situation?’ 1 ... 5 (<i>not satisfied at all ... very satisfied</i>)
FLEX4	‘How difficult/easy is it for you to live on your income?’ 1 ... 5 (<i>very difficult ... very easy</i>)

All the variables are expected to say something about someone’s flexibility to deal with set-backs. Variables are included such that they should be positively related to flexibility. We conclude that there is one factor: *Flexibility*.

A.3.2 Position vis-à-vis environment

Variables included:

ENV1	‘Compared to others in my environment, I am better off’
ENV2	‘I believe that we possess more than others in my environment’
ENV3	‘Others in my environment can spend more money on things they want than I’
ENV4	‘When I compare myself to friends, in general my financial position is more favorable’
ENV5	‘I can spend more on durable consumer goods than others in my environment’

For all questions, the answers vary between 1 and 7: totally disagree ... totally agree. All these variables indicate to what extent someone is better off than people in his or her direct environment. On the basis of statistical test we retain one factor: *Environment*.

A.3.3 Expectation financial position near future

Variables included :

FP1	‘How do you expect your household’s economic position will be in five years compared to your current situation?’ 1 ... 5 (<i>much better ... much worse</i>)
FP2	‘Do you expect that your income in one year from now will be higher, the same or lower than your current income?’ <i>higher, the same, lower</i>
FP3	‘Do you expect your financial situation will improve or worsen next year?’ 1 ... 5 (<i>significantly improve ... significantly worse</i>)

All these variables indicate someone’s expectation regarding his or her economic and financial prospects in the near future. On the basis of statistical test we retain one factor: *Expfinsit*.

A.3.4 Health

Variables included:

HE1	‘In general, how is your health condition?’ 1 ... 5 (<i>very bad ... excellent</i>)
HE2	‘Do you suffer from a long illness or handicap, or the consequences of an accident?’ 1/2 (<i>yes/no</i>)
HE3	‘Could you indicate whether your health condition is better of worse than one year ago?’ 1 ... 5 (<i>much worse ... much better</i>)

All these variables provide information on someone’s health condition. On the basis of statistical test we retain one factor: *Health*.

A.3.5 Importance attached to the future

Variables included:

FU1	‘I take into account how things may develop in the future, and try to influence these issues today’
FU2	‘Often, I am concerned with issues that will have consequences several years later’
FU3	‘I am only interested in issues that are relevant today, because in the future everything will turn out well’
FU4	‘For everything I do, I only take into account the immediate consequences of my actions (with a horizon of some days or weeks)’
FU5	‘I am prepared to reduce today’s welfare in order to reach certain goals in the future’
FU6	‘I believe that it is important to take warnings on the negative consequences of my actions seriously, even if these consequences will only take place in the far future’
FU7	‘I believe it is more important to worry about issues that will have important consequences in the future than about issues that have immediate but less important consequences’
FU8	‘In general, I ignore warnings about future problems because I expect these problems will be solved’
FU9	‘I believe it is not necessary to sacrifice things now for issues that will become relevant in the future, because these can be handled later’
FU10	‘I only respond to immediate problems, assuming that I will handle future problems at the moment they arise’

For all questions, the answers vary between 1 and 7: totally disagree . . . totally agree. Hence, all variables indicate to what extent someone’s actions today are taking into account future consequences. After a first analysis the variables FU4, FU5 and FU6 were dropped because they do not add much explanatory power. For the remaining variables we distillate two factors: *Future1* and *Future2*. Our interpretation is that *Future1* primarily reflects time preference, while *Future2* reflects risk aversion.

A.3.6 Importance own actions versus luck

Variables included:

LU1	‘Saving and investing are the most important ways to get rich’
LU2	‘Whether I will become rich primarily depends on my own skills’
LU3	‘Eventually, people that are careful with their money remain rich’
LU4	‘In general, it will be my own fault if I would become poor’
LU5	‘In general, I am capable to protect my own interests’
LU6	‘When I get what I want, this usually because I worked hard for it’
LU7	‘The quality of my life is determined by my own actions’
LU8	‘There is not much someone can do to protect himself against poverty’
LU9	‘Getting rich has nothing to do with luck’
LU10	‘Regarding money, there isn’t much you can do for yourself if you are poor’
LU11	‘To me, it isn’t sensible to always save money because virtue is determined by good or bad luck’
LU12	‘Whether I will become rich or poor is primarily determined by fate’
LU13	‘The only way to become rich is by winning money or inheritance’

These variables indicate to what extent financial prosperity is due luck. For all questions, the answers vary between 1 and 7: totally disagree . . . totally agree. After a first analysis, LU9 was dropped because it hardly adds explanatory power. We retain three factors: *Luck1*, *Luck2* and *Luck3*. A higher factorloading on *Luck1* indicates a passive attitude, while *Luck2* indicates an active attitude. The factor *Luck3* stresses thrift rather than hard work as an explanation for financial prosperity.

A.3.7 Risk aversion

Variables included:

RA1	'I prefer to invest in a prudent way and receive a guaranteed return rather than to take risk in order to get the highest return'
RA2	'I do not invest in stocks because I consider that too risky'
RA3	'If I expect that an investment will be profitable, I am prepared to borrow money in order to finance it'
RA4	'I want my investments to be solid'
RA5	'I am more and more convinced that I have to take risk if I want to improve my financial position'
RA6	'I am prepared to take the risk to lose money if there is also a chance that I will win money'

These variables indicate to what extent someone is risk averse regarding his or her financial investments. For all questions, the answers vary between 1 and 7: totally disagree . . . totally agree. Statistical tests point at three factors: *Risk1*, *Risk2* and *Risk3*. *Risk1* reflects risk aversion regarding investment, stressing the need to take risks in order to get higher returns, while *Risk2* relates to the risk aversion regarding investment, stressing the need to take risks in order to get higher returns. The third factor, *Risk3*, indicates risk aversion regarding investment, stressing risks of stocks.

B Tables and Figures

Table 1 Estimation results ordered probit model

	1	2	3	4	5	6	7	8
Age (years)	-0.0096***	-0.0097***	-0.1107***	-0.0134***	-0.0106***	-0.0100**	-0.0129***	-0.0097***
Married (0=no, 1=yes)	-0.0293	-0.0243	0.0185	-0.0502	-0.0184	-0.0291	-0.0225	-0.0041
Gender (0=male, 1=female)	0.1873***	0.1956***	0.1753***	0.1721***	0.1794***	0.1853***	0.1258**	0.1641**
High education (0=no, 1=yes)	0.1600***	0.2132***	0.2409***	0.2103***	0.1694***	0.1926***	0.1498**	0.2125***
Children (0=no, 1=yes)	0.0580	0.1419*	0.1145	0.1190	0.0603	0.0824	0.1046	0.0407
Income (log)	-0.1410***	-0.1179***	-0.1222***	-0.1495***	-0.1373***	-0.1551***	-0.1062***	-0.1472***
Unemployed (0=no, 1=yes)	0.1955**	0.1517	0.1460	0.1691*	0.1795**	0.1751*	0.1462	0.1995**
Flexibility	.	-0.0988***	.	.	.	.	.	.
Environment	.	.	-0.1396***	.	.	.	.	.
Expfinsit	.	.	.	0.1665***	.	.	.	.
Health	.	.	.	.	-0.0747**	.	.	.
Future1	.	.	.	.	.	-0.0148	.	.
Future2	.	.	.	.	.	0.0771**	.	.
Luck1	.	.	.	.	.	.	0.0041	.
Luck2	.	.	.	.	.	.	0.1850***	.
Luck3	.	.	.	.	.	.	0.2067***	.
Risk1	.	.	.	.	.	.	.	0.0089
Risk2	.	.	.	.	.	.	.	0.1116***
Risk3	.	.	.	.	.	.	.	0.0191
Observations	1386	1141	1234	1141	1386	1234	1251	1155
R^2_{MZ}	0.057	0.065	0.075	0.074	0.062	0.064	0.107	0.065
R^2_{Count}	0.242	0.252	0.255	0.251	0.250	0.246	0.252	0.246

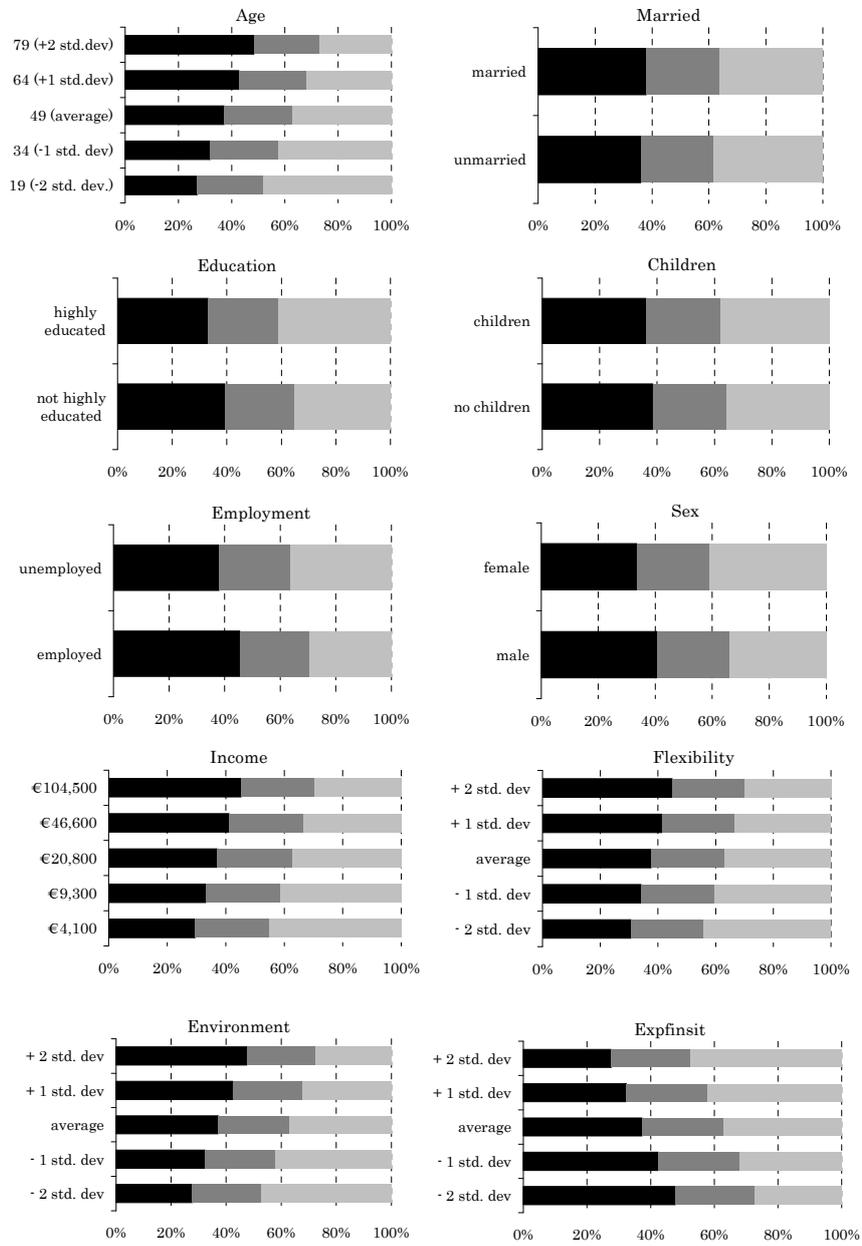
Note: *, ** and *** denotes, respectively, significance at the 10%, 5% and 1% level. R^2_{MZ} and R^2_{Count} are, respectively, McKelvey and Zavoina's R^2 and the proportion of correct predictions. The dependent variable is "Individuals should take more care of themselves, rather than making an appeal to solidarity of others", with a reversed scale so a higher response means more solidarity.

Table 2 Alternative specifications baseline equation

	Overall		Ageing		Social security	
	1	2	3	4	5	6
Age	-0.0096***	0.0168	0.0272***	0.1013***	0.0019	0.0491***
Age*Age	.	-0.0003**	.	-0.0007***	.	-0.0005***
Married	-0.0293	-0.0399	0.1340**	0.1136*	-0.1403**	-0.1585**
Gender	0.1873***	0.1872***	0.0114	0.0074	0.0880	0.0882
High education	0.1600***	0.1648***	0.1458**	0.1593***	0.0788	0.0890
Children	0.0580	0.0895	0.1128	0.2020***	0.1394**	0.1940***
Income	-0.1410***	-0.1559***	-0.0067	-0.0479	-0.1850***	-0.2134***
Unemployed	0.1955**	0.1767*	-0.0238	-0.0743	0.2943***	0.2641***
Observations	1386	1386	1370	1370	1373	1373
R^2_{MZ}	0.057	0.057	0.166	0.185	0.041	0.047
R^2_{Count}	0.242	0.242	0.255	0.264	0.221	0.224

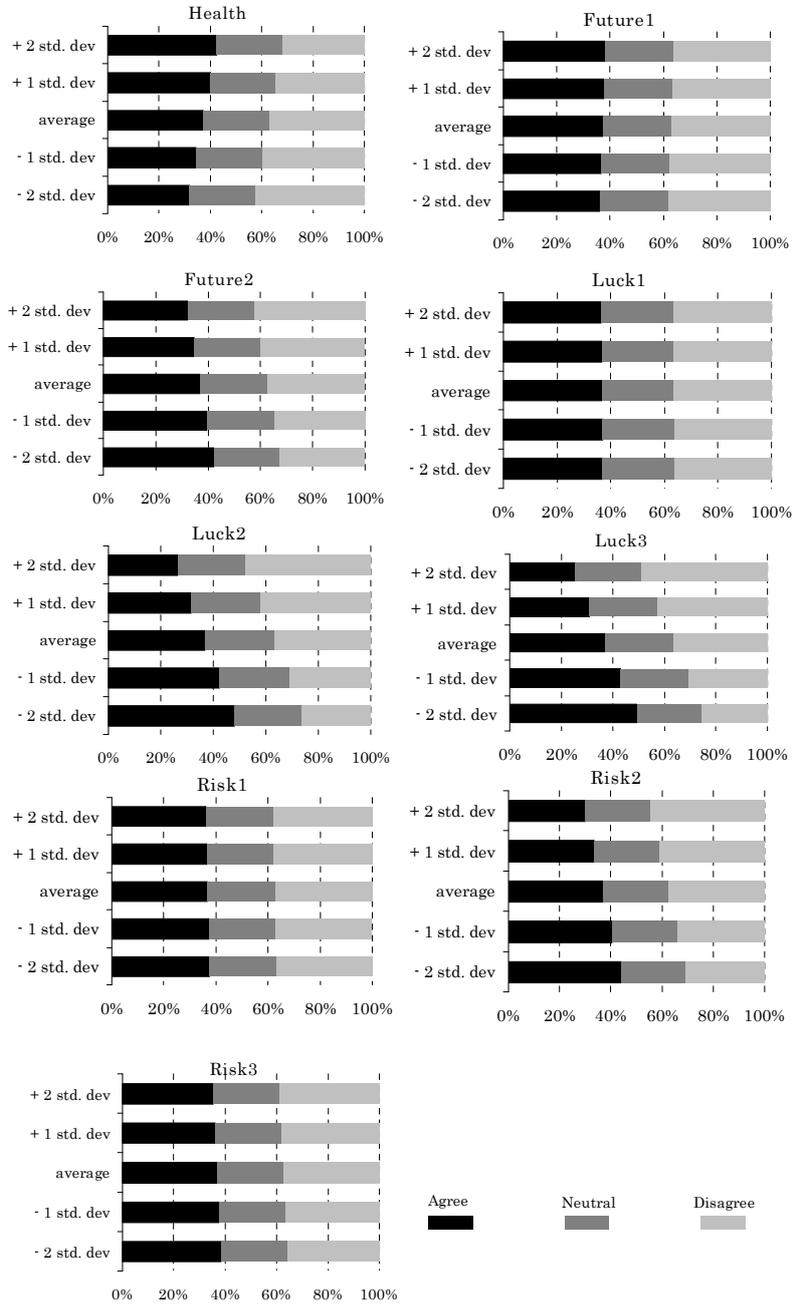
Note: *, ** and *** denote, respectively, significance at the 10%, 5% and 1% level. R^2_{MZ} and R^2_{Count} are, respectively, McKelvey and Zavoina's R^2 and the proportion of correct predictions. For columns 1-2, the dependent variable is based on the statement "Individuals should take more care of themselves, rather than making an appeal to solidarity of others"; for columns 3-4, the dependent variable is "The burden of the ageing process is shouldered to a disproportional extent by younger people"; for columns 5-6, finally, it is "Social security arrangements are so extensive that they discourage people to develop their talents". For all three dependent variables, the scale has been reversed so a higher response value means more solidarity.

Figure 1 Graphical representation probit estimation



-continued on next page-

Figure 1 (continued)



Probability that people (dis)agree with the statement “Individuals should take more care for themselves, rather than making an appeal to solidarity of others”, by subgroups of explanatory variables. The original scores, which range from 1 (totally agree) to 7 (totally disagree) have been split into “Agree” (scores 1-3), “Neutral” (score 4) and “Disagree” (scores 5-7). The first seven graphs are constructed using the baseline regression, the others on the extended regressions in Table 2. All results are based on marginal elasticities, calculated at the mean value of all explanatory variables.

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